Displacement and Tribal Livelihood in Mining Areas of Keonjhar District in Odisha

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Abstract—Land is not only a tangible asset but is the mainstay of most of the rural folks as they are dependent on agriculture and allied activities. The tribal economy is also primarily agro-based and they have emotional attachment to land. But, with the opening of the tribal areas, the tribal land is being alienated to the non-tribals. Consequently, a large number of tribal cultivators have been rendered landless labourers. Decrease in the number of cultivators and increase in the number of landless labourers indicates the disturbing trend of land alienation. Shifting cultivation as the earliest form of agriculture continues to be predominantly practiced by the tribals. Though it has its own merits and demerits, it has become a way of life with them. The Constitution of India provides certain provisions to protect the interests of the Scheduled Tribes, which will also be discussed in this unit. The present study reveals the overall scenario of tribal belt with mining affected areas in Keonjhar district of Odisha and its present livelihoods in the displacement process due to land alienation.

Keywords—Land, Labourers, Tribals, Keonjhar, Alienation.

I. INTRODUCTION

The incidence of land alienation varies from state to state. Laws have been enacted in all the states to deal with the problem of land alienation to the tribals. In the past, an average tribal family had a fair size of landholding which supported it even with primitive methods of cultivation. The increasing pressure of population on land particularly from the advanced section of society has forced the tribals to leave their land. The present study reveals the overall scenario of tribal belt with mining affected areas in Keonjhar district of Odisha and its present livelihoods in the displacement process due to land alienation.

Causes of Land Alienation

A sizeable area of the tribal land has been alienated. The causes are:

- Indebtedness
- Lacunae in the land laws
- Acquisition of land for public purposes by the Government and other institutions
- Encroachment and forcible eviction of tribals from their land.

Methods of Land Alienation

The general methods of land alienation have been through

- Sale
- Mortgage
- Lease
- Benami Transfers
- Collusive decrees
- Fraudulent methods and land grabbing

Apart from alienation of land to private persons, the Government has acquired substantial tribal land for various developmental projects such as irrigation, power, industrial and other projects.
II. REVIEW OF LITERATURE

L.P. Vidyarthi (Vidyarthi, 1970) examined the impact of urbanization on tribal culture. He studied the impact of the emergence of a heavy engineering complex in a tribal belt of Chotanagpur, and by analyzing the pattern of socio-economic changes that occurred in this region owing to large scale industrialization.

Dean Joros (1973), in his study, presents his views on the relation between political socialization of the tribals and integration process or the effect of tribal welfare programmes on their political socialization. He reveals that by analyzing the political socialization process of tribals, a more complete evaluation of tribal welfare programmes would be ensured. This view is also explained by P.R.G. Mathur (1977). He points out that induction into political culture and integration into the mainstream of national life are part of one and the same process and without political socialization being achieved, tribals integration into the national life is impossible. Political socialization must precede their integration into national life. Motivation and objective underlying the tribal welfare programmes and political socialization are common.

Das Gupta (1970) examined the socio-economic conditions of the Santal tribal of Naxalbari and Sawaras of Srikakulam that forced them to revolt against the exploitative social system that prevailed in these areas. This study also throws light on the emerging contradiction in tribal areas and between different tribal and non-tribal classes. Sethu Madhava Rao explains how the Gonds of Adilabad have been appropriated from their resources especially from their cultivable lands. He also discusses the phase-wise transformation of tribal lands from ‘their community cultivation’ the chieftains system, to Mokasadar to Deshmukh system of land holdings and the ruination of Gonds life.

Ray B.C. (2009) written a book on “Tribals of Orissa: The Changing Socio Economic Profile” states that Orissa is the home of 62 scheduled tribes but comparatively very little research has been done on the socio-economic life of the tribals. His attempt is related to combine the studies and analyses by historians, anthropologists, psychologists, economists and literally critics on the changing society of the tribals. The modern processes put up before the tribals by western-urban-industrial-democratic model, heralding unprecedented change in tribal lifestyle have come in for academic scrutiny.

Sakararama Somayaji and Smrithi Talwar (2011) elicit ideas about compulsory land acquisition and involuntary displacement of communities for a larger public purpose captures the tension of development in the modern state, with protecting the rights of the minority and tribals. In India, informal estimates of involuntary resettlement are estimated to be around 50 million people over the last five decades, and three-fourths of those displaced still face an uncertain future. Growing public concern over the long-term consequences of this has led to greater scrutiny of the rehabilitation and resettlement process, particularly for large development projects.

Meher Rajkishore (2003) in his book, “The Social and Ecological effects of industrialization in a tribal region: The case of the Rourkela Steel Plant.” examined that extensive mining activities in areas such as Panposh and Bonai sub-division of Sundergarh have destroyed dense forest and fertile agricultural lands, and the tribal are now dependent upon the unsustainable mining economy by employing themselves as daily wage workers, when they fail to get work they migrate to the nearby Rourkela city as turnover and seasonal migrants.

Oroan Vijay (2012) in his study said that agriculture and allied activities support the livelihood of nearly 70% of Indian rural population. However, in recent years, land based livelihoods of small and marginal farmers are increasingly becoming unsustainable as their land has failed to support their livelihoods. The rapid changes at the macro level that India witnessed since the early nineties has contributed to the instability of the livelihood system of the proper section of rural and tribal households. The emergence of industry and market economy has disturbed the age old tribal and nature relationship. While the benefits of the globalization process have largely accrued to the urban sector growth and the rural sector left behind.

Mohanty Rajashree (2011) in her study, “Impact of Development Project on the Displaced Tribals: A case study of a Development Project in Eastern India.” discussed the effect of displacement especially on tribal’s, it is necessary to identify the risk involves in each development project and also to draw attention on the benefits over and above of compensation and rehabilitation. Due to displacement, many villages gradually get included in cities and urban people also migrate to villages transforming them in towns and shows the impact in village people how they suffers and what problems they are going to face. Adivasi today realised that the reserved army of labour created by this destruction has not gainfully employed by these regimes only a few get employment and the large majority between providing cheap labour and unemployment. The majority of them have been struggling for the past decades for proper resettlement, compensation and even basic amenities in the places to which they have been relocated.
Freudenberg and Wilson (2002) in a review of case studies on local socio-economic impacts of mining in United States challenge the belief that mining leads to rural poverty and unemployment in the mining areas. Mining projects around the world have come under severe criticism under counts of land expropriation and environmental degradation that harm the livelihoods and health of local communities. Mining projects involve huge investments accompanied with strong political influence, and local communities could bear substantial environmental, economic, and social costs unless local governments enforce strong regulatory systems to ensure equitable sharing of benefits.

The fulcrum of rural livelihood rests on land. Land is the major economic resource in any agricultural society and the tribes of Keonjhar district are no exception. Land is not only a source of livelihood for the tribals, it is also connected with their sense of history and is a symbol of social prestige. The ownership of land or the assured possession of a few acres is not only the means of economic subsistence but is also a symbol of status and dignity.

Since tribal-inhabited regions of Keonjhar district are rich in mineral, forest and water resources, large-scale development projects (such as dams, irrigations, power plants, roads, railways) invariably came to be located in tribal areas. Tribal economies in Keonjhar district are mostly subsistence economies whose survival is closely linked to and natural resources, including forest products. More so in Keonjhar district, tribal areas are coterminous with mineral deposits and have thus attracted considerable attention by the private sector in recent years, both for extraction and industrial development. All this together with the increasing threat of naxalite violence in these areas has made focus on tribal development a policy imperative. Studies estimate that more than 50 per cent of tribal land in Odisha has been lost to non-tribals over a period of 25-30 years through indebtedness, mortgage and forcible possession. Worse, the process of tribal alienation, i.e. STs gradually losing their access to traditional commons has accelerated in recent years. While studies vary with regard to the impact of displacement in Odisha and Jharkhand, mostly on account of setting up of mineral-based industries, all agree that of those displaced a disproportionate number are tribals. These states also have a controversial track record of resettlement and rehabilitation. Most activists and academics working on tribal issues think that it is alienation from these communal resources which forms the fulcrum of tribal angst and revolt. Alienation together with reduced income from NTFPs (Non-Timber Forest Products), stagnant agriculture and limited opportunities for non-farm self-employment, push tribal households into a cycle of high interest debt from private moneylenders resulting in food insecurity and forced migration.

**OBJECTIVES OF THE STUDY**

i) To examine the social-economic status of tribal people and their present source of livelihoods in the sample study areas of Keonjhar district of Odisha.

ii) To examine the land compensated amount after land alienation by the govt. to the tribal people in the sample study areas of the district.

iii) To examine the present source of livelihood after land alienation of the tribal people in the sample study areas of the district.

**III. METHODOLOGY ADOPTED FOR THE STUDY**

The methodology adopted for the study is based on the primary data collection. For this, simple random sampling is used for selecting households and purposive sampling is used for selecting areas. Five villages viz., Gumura, Basudevpur, Duduposi, Uparjagard, and Talakainsari of three blocks viz., Jhumpura, Joda and Banspal of Keonjhar district of Odisha are taken for the research study and statistical tools like bar charts, correlation in SPSS and MS-Excel are used for the study.
From the above table 1, in Gumura village of jhumpura block in Keonjhar district 10 people of the concerned areas belongs to tribal community in mining affected areas all are male category. Out of which, Laxman Nayak and Singha Nayak had land alienated to an extent of 1.04 acres respectively. These lands are fertile in nature and due to the nature of the land, they got highest amount of compensation of Rs. 3,72,000 and after land alienation, their livelihood sources are cultivation, cattle farming.

It is also interesting fact from the above table that the respondents who have inferior quality of land they have got lesser amount of compensation after land alienation than the respondents who have superior quality of land.

### Table No.1

| Sl. No | Name of the Household | Age | Sex | No. of Family Members (M-male, F-female) | Land Alienated (in acres) | Type of Land | Compensaton amount (INR) | Present source of Livelihood after Land Alienation |
|--------|------------------------|-----|-----|-----------------------------------------|---------------------------|--------------|--------------------------|------------------------------------------|
| 1      | Laxman Nayak           | 55  | Male | 6(3M,3F)                                | 1.04                      | A            | 3,72,000                 | Cultivation, Cattle Farming              |
| 2      | Singha Nayak           | 57  | Male | 9(5M,4F)                                | 1.04                      | A            | 3,72,000                 | Cultivation, Cattle Farming              |
| 3      | Srikanta Nayak         | 45  | Male | 10(6M, 4F)                               | 0.50                      | B            | 1,08,000                 | Cultivation                              |
| 4      | Dasaru Nayak           | 50  | Male | 7(4M,3F)                                | 0.75                      | A            | 3,40,000                 | Cultivation, Cattle Farming              |
| 5      | Narottam Nayak         | 52  | Male | 7(3M,4F)                                | 0.05                      | C            | 27,000                   | Bonded Labourers                         |
| 6      | Laxman Munda           | 58  | Male | 8(4M,4F)                                | 0.25                      | B            | 1,50,000                 | Cultivation                              |
| 7      | Ananda Sardar          | 59  | Male | 6(3M,3F)                                | 0.50                      | C            | 75,000                   | Daily Wagers                             |
| 8      | Bugulu Sardar          | 54  | Male | 8(3M,5F)                                | 0.45                      | B            | 90,000                   | Bonded Labourers                         |
| 9      | Dussan Munda           | 55  | Male | 8(4M,4F)                                | 0.52                      | C            | 80,000                   | Bonded Labourers                         |
| 10     | Japani Nayak           | 49  | Male | 7(3M,4F)                                | 0.49                      | C            | 60,000                   | Daily Wagers                             |

From the above table 1, in Gumura village of jhumpura block in Keonjhar district 10 people of the concerned areas belongs to tribal community in mining affected areas all are male category. Out of which, Laxman Nayak and Singha Nayak had land alienated to an extent of 1.04 acres respectively. These lands are fertile in nature and due to the nature of the land, they got highest amount of compensation of Rs.3,72,000 and after land alienation, their livelihood sources are cultivation, cattle farming. It is also interesting fact from the above table that the respondents who have inferior quality of land they have got lesser amount of compensation after land alienation than the respondents who have superior quality of land.

### Table No.2

| Sl. No | Name of the Household | Age | Sex | No. of Family Members (M-male, F-female) | Land Alienated (in acres) | Type of Land | Compensaton amount (INR) | Present source of Livelihood after Land Alienation |
|--------|------------------------|-----|-----|-----------------------------------------|---------------------------|--------------|--------------------------|------------------------------------------|
| 1      | Duryodhan Nayak        | 38  | Male | 8(5M,3F)                                | 0.52                      | A            | 1,04,000                 | Daily Wagers                             |
From the above table no.2, in mining affected areas of Basudevpur village of Joda block of Keonjhar district of Odisha all the respondents are male. As all the above respondents resides in Baudevpur village in the Kanpur canal irrigation project area, all the respondents have same land alienated to an extent of 0.52 acres of land, their lands are also same i.e., fertile type, their compensation amount remains at Rs. 1,04,000 fixed for all the respondents. But their source of livelihood differs from person to person suitable to their productivity.

Table No.3

| Sl.No | Name of the Household | Age | Sex | No. of Family Members (M-male, F-female) | Land Alienated (in acres) | Type of Land A-Fertile, B-Semi Fertile, C-Barren | Compensation amount (INR) | Present source of Livelihood after Land Alienation |
|-------|-----------------------|-----|-----|-----------------------------------------|---------------------------|-------------------------------------------------|--------------------------|-----------------------------------------------------|
| 1     | Bairagi Patra         | 53  | Male| 7(4M,3F)                                | 0.10                      | A                                               | 70,000                   | Daily Wager & Cultivation                           |
| 2     | Ghasina th Patra      | 52  | Male| 9(5M,4F)                                | 0.99                      | A                                               | 6,30,000                 | Daily Wager & Cultivation                           |
| 3     | Urman Patra           | 62  | Male| 5(3M, 2F)                               | 0.10                      | A                                               | 70,000                   | Daily Wager & Cultivation                           |
| 4     | Kanduru Patra         | 48  | Male| 7(4M,3F)                                | 0.99                      | A                                               | 6,30,000                 | Daily Wager & Cultivation                           |
| 5     | Lata Patra            | 50  | Female| 5(3M,2F)                               | 0.10                      | A                                               | 70,000                   | Daily Wager & Cultivation                           |
| 6     | Tubulu Patra          | 57  | Male| 9(5M,4F)                                | 0.12                      | A                                               | 75,000                   | Daily Wager                                         |
From the above table no.3, in mining affected areas of Duduposi village of Banspal block in Keonjhar district of Odisha out of 10 respondents 9 are male and 1 is female. Ghasinath Patra and Kanduru Patra got the highest land alienated i.e., 0.99 acres of land. Similarly, they get a compensation to an amount of Rs.6,30,000. Most of the respondents have source of livelihood is daily wage & cultivation.

**Table No.4**

| Sl.No | Name of the Househol d | Age | Sex | No. of Family Members (M-male, F-female) | Land Alienated (in acres) | Type of Land A- Fertile B-Semi Fertile C-Barren | Compensati on amount (INR) | Present source of Livelihood after Land Alienation |
|-------|-------------------------|-----|-----|----------------------------------------|---------------------------|--------------------------------------------------|-----------------------------|--------------------------------------------------|
| 1     | Kainti Naik             | 53  | Female | 6(3M,3F)                                | 0.10                      | A                                                | 70,000                      | Collection of Mahuli seeds & Sal leaves           |
| 2     | Mitrabhan u Dehuri     | 52  | Male  | 6(2M,4F)                                | 0.25                      | A                                                | 1,75,000                     | Collection of Mahuli seeds & Sal leaves           |
| 3     | Mukta Naik             | 62  | Female | 7(3M, 4F)                               | 0.22                      | A                                                | 1,54,000                     | Collection of Mahuli seeds & Sal leaves           |
| 4     | Radhamani Naik         | 52  | Female | 7(4M,3F)                                | 0.30                      | A                                                | 2,10,000                     | Collection of Mahuli seeds & Sal leaves           |
| 5     | Ramani Naik            | 54  | Female | 6(3M,3F)                                | 0.15                      | A                                                | 1,05,000                     | Collection of Mahuli seeds & Sal leaves           |

From the above table no.4, in mining affected areas of Uparjagar village in Banspal block in Keonjhar district of Odisha, all the 5 respondents are female. Radhamani Naik of the village got highest 0.30 acres of land alienated and that’s why got an amount of compensation to Rs.2,10,000. All the respondents in the concerned village got common have source of livelihood i.e., collection of mahuli seeds & sal leaves.
| Sl.No | Name of the Household | Age | Sex | No. of Family Members (M-male, F-female) | Land Alienated (in acres) | Type of Land A-Fertile B-Semi Fertile C-Barren | Compensation amount (INR) | Present source of Livelihood after Land Alienation |
|-------|-----------------------|-----|-----|-----------------------------------------|---------------------------|-----------------------------------------------|--------------------------|-------------------------------------------------|
| 1     | Parsu Soren           | 58  | Male| 8(4M,4F)                                | 0.12                      | A                                             | 80,000                   | Collection of Sal leafs                          |
| 2     | Rama Patra            | 65  | Male| 7(3M,4F)                                | 0.30                      | A                                             | 1,85,000                 | Collection of Sal leafs                          |
| 3     | Manohar Munda         | 62  | Male| 8(4M, 4F)                               | 0.25                      | A                                             | 1,60,000                 | Collection of Sal leafs                          |
| 4     | Dibakara Naik         | 52  | Male| 6(3M,3F)                                | 0.35                      | A                                             | 2,20,000                 | Collection of Sal leafs                          |
| 5     | Laxman Munda          | 54  | Male| 6(3M,3F)                                | 0.20                      | A                                             | 1,15,000                 | Collection of Sal leafs                          |

SOURCE: PRIMARY DATA COLLECTION AND FIELD SURVEY

From the above table no.5, in the mining affected areas of Talakainsari village of Banspal block in Keonjhar district of Odisha all the respondents are male. Dibakara Naik has got highest land alienation of 0.35 acres of land and got an amount of compensation of Rs.2,20,000. All the respondents have got source of livelihood of collection of sal leafs.

IV. DATA METHODOLOGY AND INTERPRETATION

Chart No.1: GUMURA VILLAGE, BLOCK-JHUMPURA, DIST-KEONJHAR
From the above chart no.1, it clearly shows that in the X-axis no. of household and in the corresponding Y-axis, land alienated (in acres) is being taken and in secondary Y-axis, compensation amount is being taken to show the respective household land alienated and compensation amount they got after the land alienation in the Gumura village of Jhumpura block in Keonjhar district. It also revealed from the tables earlier that the households got compensation in accordance with the type of land they had, whether it is fertile, semi-fertile or barren land. From the above chart it is clearly seen that Laxman Naik and Sigha Nayak land alienated at 1.04 acres of land and compensation amount is Rs. 3,72,000 to both the households. From the above chart, it is also clear that Narottam Naik has land alienated to only 0.05 acres which is very less. Corresponding to his land being alienated he got a compensation of Rs. 27000 as his land is barren or not fertile. The blue colour and brown colour in the above chart indicates the compensation and land alienated respectively.

Chart No.2: BASUDEVPUR VILLAGE, BLOCK-JODA, DIST-KEONJHAR

The above chart no.2 depicts that in the X-axis Name of the household is being taken and in Y-axis Land alienated (in acres) is being taken and in the secondary Y-axis Compensation amount is being taken to know which households got how much of land alienated and what amount of compensation they got and what type of land belongs to the households. From the chart, it is clearly seen that in the Basudevpur village of Joda block in Keonjhar district, all the households land alienated remains same as 0.52 acres and compensation amount also same at 1,04,000 and type of land is fertile.
The above chart no.3 depicts that in the X- axis, Name of the household is being taken and in Y- axis Land alienated (in acres) is being taken and in the secondary Y- axis Compensation amount is being taken to know which households got how much of land alienated and what amount of compensation they got and what type of land belongs to the households. From the chart, it is clearly seen that in the Duduposi village of Banspal block in Keonjhar district, Ghasinath Patra and Kanduru Patra, land alienated same at 0.99 acres which are the highest and compensation amount also same at 6,30,000 as land alienated is same. Their land is fertile. And it is also seen from the chart that Lata Patra and Govind Patra, land alienated same at 0.10 acres which are the lowest and compensation amount also same at 70,000.
The above chart no.4 depicts that in the X-axis, Name of the household is being taken and in Y-axis Land alienated (in acres) is being taken and in the secondary Y-axis Compensation amount is being taken to know which households got how much of land alienated and what amount of compensation they got and what type of land belongs to the households. From the chart, it is clearly seen that in the Uparjagar village of Banspal block in Keonjhar district, all the households are having fertile land since the land alienated and compensation amount goes on positively. It is clear from the chart that Radhamani Naik has got compensation amounts to Rs. 210000 and her land alienated to 0.30 acres, it’s also seen from the chart that Mitrabhanu Naik compensation amounts Rs. 175000 and his land alienated at 0.25 acres and Kainti Naik has got compensation amounts to Rs. 70000 as her land alienated at 0.10 acres.

The above chart no.5 depicts that in the X-axis, Name of the household is being taken and in Y-axis Land alienated (in acres) is being taken and in the secondary Y-axis Compensation amount is being taken to know which households got how much of land alienated and what amount of compensation they got and what type of land belongs to the households. From the chart, it is clearly seen that in the Talakainsari village of Banspal block in Keonjhar district, all the households having fertile land and Dibakara Naik has the maximum land alienation at 0.35 acres and the compensation amounts to Rs. 220000 and Parsu Soren land alienated the lowest at 0.12 acres and the compensation amounts to Rs. 80000.

**Correlation Outcome of Gumura Village, Block-Jhumpura, Dist-Keonjhar**

| Correlations | land | Comp |
|--------------|------|------|
| Land         | Pearson Correlation | 1 | .864** |
|              | Sig. (2-tailed)     | .001 |
|              | N                  | 10  |
| Compensation | Pearson Correlation | .864** | 1 |
|              | Sig. (2-tailed)     | .001 |
|              | N                  | 10  |
Correlations

|             | land  | Comp  |
|-------------|-------|-------|
| Land        | Pearson Correlation | 1 | .864** |
|             | Sig. (2-tailed)     |    | .001  |
|             | N                 | 10 | 10    |
| Compensation| Pearson Correlation | .864** | 1 |
|             | Sig. (2-tailed)     | .001 |       |
|             | N                 | 10 | 10    |

**. Correlation is significant at the 0.01 level (2-tailed).

In the above correlation outcome of Gumura village of Jhumpura block in Keonjhar district using SPSS software, it is seen that the correlation between land alienation and compensation amount is 0.864 i.e., the high degree of positive correlation.

Correlation Outcome of Duduposi Village, Block- Banspal, Dist- Keonjhar

Correlations

|             | land  | Compens  |
|-------------|-------|----------|
| Land        | Pearson Correlation | 1 | .998** |
|             | Sig. (2-tailed)     |    | .000  |
|             | N                 | 10 | 10    |
| Compensation| Pearson Correlation | .998** | 1 |
|             | Sig. (2-tailed)     | .000 |       |
|             | N                 | 10 | 10    |

In the above correlation outcome of Duduposi village of Banspal block in Keonjhar district using SPSS software, it is seen that the correlation between land alienation and compensation amount is 0.998 i.e., the high degree of positive correlation.

Correlation Outcome of Uparjagar Village, Block- Banspal, Dist- Keonjhar

Correlations

|             | land  | Compen  |
|-------------|-------|---------|
| Land        | Pearson Correlation | 1 | 1.000** |
|             | Sig. (2-tailed)     |    | .000  |
|             | N                 | 5 | 5     |
| Compensation| Pearson Correlation | 1.000** | 1 |

**. Correlation is significant at the 0.01 level (2-tailed).
In the above correlation outcome of Uparjagar village of Banspal block in Keonjhar district using SPSS software, it is seen that the correlation between land alienation and compensation amount is 1.000 i.e., perfect degree of positive correlation.

**Correlation Outcome of Talakainsari Village, Block- Banspal, Dist- Keonjhar**

| Correlations          | land       | Compens     |
|-----------------------|------------|-------------|
| Land                  | Pearson Correlation | .994**      |
|                       | Sig. (2-tailed)   | .001        |
|                       | N           | 5           | 5           |
| Compensation          | Pearson Correlation | .994**      |
|                       | Sig. (2-tailed)   | .001        |
|                       | N           | 5           | 5           |

**. Correlation is significant at the 0.01 level (2-tailed).**

In the above correlation outcome of Talakainsari village of Banspal block in Keonjhar district using SPSS software, it is seen that the correlation between land alienation and compensation amount is 0.994 i.e., high degree of positive correlation.

V. SUGGESTIONS

1- Adoption of community rights and governance on land should be adopted in the sample study areas.

2- Acceptance of right over shifting cultivation land should be adopted in the sample study areas.

3- Minimum land ownership principle should be adopted in the sample study areas.

4- Effective land administration and land reforms as a core development strategy is suggested in the sample study areas.

5- Pucca houses of the land less people in the sample study areas should be provided after land alienation.

6- The land less people in sample study areas should be provided employment in nearby industries after land alienation.

VI. CONCLUSION

Mining to extract non-renewable resources played a crucial role in economic development of any country. Though Keonjhar is playing a significant role in fulfilling the iron ore demand of both domestic & world markets, it has remained as poor as it previously use to be. Rather, the vast forest, water resources has been completely affected due to this process. Mining activities for last 3 decades has resulted in to affecting the economic condition of tribal. Prerequisite to environmentally sustainable development of iron ore resources, there is a requirement of integration of environmental issues in decision-making process both at the project approval stage and operational stage. It is essential to use economic instruments to reduce subjectivity in decision-making. This can be only achieved by integration of damage costs and benefits to private cost – benefit analysis of a project. There is an urgent need to make shifts in polices and priorities to ensure sustainable development of virgin areas through promotion of agriculture use of NTFP not by leasing the remaining mineral resource. The economic pattern of common people in mines prone area like Joda has shown that the gap between poor and rich has increased multifold. The poor are at receiving end due to this developmental process. The policies should aim at reduction of damage cost.
REFERENCES

[1] Agarwal, D. 1998. Preventing Impoverishment from Displacement: The NTPC Experience. In: Development Projects and Impoverishment Risks: Resettling Project-Affected People in India. H. Mohan Mathur, and D. Marsden (eds). New Delhi: Oxford University Press.

[2] Asian Development Bank. 1998a. Handbook on Resettlement: A Guide to Good Practice. Asian Development Bank. Manila, Philippines. 1998 b. Summary of the Handbook on Resettlement. A Guide to Good Practice. Asian Development Bank. Manila, Philippines.

[3] Center of Environmental Studies (undated), “Chromite Mines in Orissa”, retrieved from http://www.cesoridda.org.

[4] Chatterji, A. (2005), “Who benefits? At what cost? - State tyranny in Orissa, India”, Sikh Spectrum Quarterly Issue No. 19, retrieved from http://www.sikhspectrum.com/022005/orissa.htm.

[5] Council of Professional Social Workers or CPSW (1994), State of Orissa’s Environment, CPSW (2001), Odisha Paribesh Vols. I and II, CPSW: Bhubaneswar.

[6] Das, V. (2001), “Orissa: Mining Bauxite, Maiming People” retrieved from http://www.saanet.org/kashipur/articles/vidhyadas.htm.

[7] Dash, J. (2005), “Mining Threatens Orissa’s Environment”, Indo-Asian News Service, 05 November 2005, retrieved from http://www.indiaresource.org/news/2004/1048.html. State of Environment Report, Orissa, prepared by state pollution control board, Orissa. Overview of mining and mineral industry in india, Tata Energy institute, New Delhi, December, 2001, No 185 Human development report, 2004, prepared by government of Orissa.

[8] Development Policies and Rural Poverty in Orissa: Macro Analysis and Case Studies, prepared by Vasundhara, March 2005 Ecological debt, a case study from Orissa, prepared by Sanjay khatua & William Stanley.

[9] Government of Orissa (various years), Statistical Abstract of Orissa, Bureau of Statistics & Economics: Bhubaneswar.

[10] Government of Orissa (various years), District Statistical Handbooks – Keonjhar, Sundargarh, Angul, Jharsuguda, Koraput and Jajpur, Bureau of Statistics and Economics: Bhubaneswar.

[11] Government of Orissa (various years), Climatological Data of Orissa, Bureau of Statistics and Economics: Bhubaneswar.

[12] Government of Orissa (undated), “Development of Mineral Sector”, retrieved from http://orissagov.nic.in/industries/index.htm.

[13] Resettlement Policy and Practice in Southeast Asia and the Pacific. Manila. Available Free on line at www.adb.org.