

Derailed Development: Review of Development and Rehabilitation Models for Tribal India

Shalina Mehta

INTRODUCTION

In a constantly changing world order, the issues of development, rehabilitation and Displacement vis-à-vis Tribal has come to acquire special significance. A country like India with approximately 8% of its population categorized, as tribals cannot afford to push these issues under the carpet. The terms development, displacement and rehabilitation are pregnant with political, economic and social implications. The socio-political and economic connotations underlying these conceptualizations have become volcanic in content. They have transcended their academic boundaries to acquire global significance and statutory recognition.

The post-colonial model of development adopted by most of the third world nations had its foundations in economic development and technological revolution. The relative deprivation as experienced by certain segments of population vis-à-vis others was recognized as the prolema-tique. The segments of population particularly identified for accruing economic advantages were differently labeled in sociological categories like: 'lower classes', 'proletariat', 'depressed classes', economically deprived populations, peasant, tribes', 'indigenous people', and in the specific context of India, 'the scheduled castes'. The state, whether it was a 'Democracy' in principle or a socialist commune, evolved measures for providing what was commonly dubbed as 'social welfare', 'special advantages or a programme of 'protective discrimination' for this class of people.

The context of development was never questioned though opinions on text did differ from one 'Messiah' to another. The messengers of development while analyzing the complexities of various theoretical propositions, resulting in what were then termed as radical models for social change aimed at evolving an egalitarian order in the society. Sociological endeavors found expression in political processes, which consequently determined the economic direction, which various polities or 'territorial states' followed. The political manifestos of early forties

and fifties talked about Modernization and Industrialization as essential components of a party's political programme.

Even when the concepts of capitalism and open competitive market economy were evenly balanced against the notion of 'state ownership' and closed markets', the ideas of 'modernization' and 'Industrialization' were unequivocally accepted. It was only with the rising importance of 'Dependency school' that these universally accepted goals of development were challenged¹.

Some of the observations made by the dependency theorists are empirically verifiable in the context of India. Dube writes, 'Even in India, which proudly claims to be the tenth most industrialized nation of the world, number of those living in absolute poverty has remained stationary. (According to some it has actually increased).² The official statistics on poverty confirm these enumerations. The programme of industrialization that India witnessed since its first Five-year plan has many dark chapters. What was envisaged as a plan of dramatic social change led to alienation and deprivation of large sections of population, which it was supposed to uplift? Various Anthropological reports³ and studies have clearly demonstrated that some of the post-independence programmes of Tribal development have barely succeeded in pushing certain sub-sections of the Tribal population from their native homeland to urban slums. For those, for whom, change is a unilateral and unidirectional process from traditional or 'pre-capitalist' to modern or 'dependent capitalist', or seen as coming from and/or occurring in urban, modern developed, or capitalist sector⁴; these patterns of migration from tribal land-scape to urban slums may be rated as very high on the development index.

The myopic vision of such perceptions haunts many of us who have followed the steady degeneration of various Tribal populations of India with deep concern. For majority of displaced Tribals, development has become a 'Frankenstein-type dream'. It means losing homes, native land and property rights, loss of cultural traditions

and an identity crisis. Accompanying these harrowing experiences is their perpetual poverty ridden state and a newly acquired sense of relative deprivation. While living in tribal heartlands the concept of poverty as understood in terms of relative deprivation was alien to them. If they were poor, all of them were poor, the degree of variance in terms of accumulated goods or wealth was significantly low since their sustenance was entirely dependent on the ecosystem and their cumulative communal ability to exploit it. They shared a sense of comradeship. The imposed economic model of development perforce withdrew this advantage from them. It enforced a concept of individual ownership and a sense of competitiveness which encashed advantages of others. In the opinion of Majid Rahnema and many other contemporary Development scholars⁶, the project homo Economics has damaged perhaps irreparably in many cases, the immune system of many Third World countries, namely their local cultures and local subsystems, thus producing a development related type of AIDS (Rahnema, 1988: 117-118).

The AID syndrome now inflicting the majority of the so-called developing societies has crippled a sizeable number of them. They are aware of the epidemic but are unable to do anything about its prevention or menace. While diagnosing the causes of this malaise Vijay Kumar⁷ has identified some fundamental factors as:

- The development model adopted by the state and planners was both indifferent and inimical to rural development.
- Central planning and co-ordination minimized the importance of local worldview and its importance in mobilizing the response of development programmes.⁸
- Dependency on the west for both ideological guidance and financial support. The critics of this dependency school often pointed out that west is not aware of alternative forms of rationality because of its success in destroying other cultures.⁹

The indigenous planner who is a product of western system of thinking and a fundamentalist of 'Nova du'juan' variety is fanatical in his approach and in the process shuns both logic and reasoning as well as the necessity of empirical considerations.

HUMAN DISPLACEMENT AND DEVELOPMENT

An objective enquiry, into the prevailing trends of development demonstrate that a fall

out of the existing process of development is dislocation of human settlement. It also prompts migration, which on occasions may be voluntary but is generally enforced by declining resources at the native place and occurs under compulsions of subsistence and survival. Development theory in the past has often argued that the migration and displacement is for the betterment of living conditions; that mobility promotes change and it is a monolithic progressive process. The empirical panorama on the other hand suggests that displacement of communities led to increase in the levels of distress experienced by the individual members of the commune and also dampens the *esprit-de-corps* shared by the community inhabitants at their native places. For years it was argued by development planners that temporary migration promotes economic prosperity and return migrants became the most potent agents of change.

It was argued that these return migrants bring with them new perspectives and are instrumental in changing the existing value perception of the individuals. Recent studies on return migrants, however argue that the impact of return migrants is negligible. Frances Rothstein, while dwelling on this issue points out:

- The productive capacity of a rural community is not increased by return migration but in some cases it has actually decreased.
- New employment opportunities are not generated locally.
- Migrants return without having learnt new or appropriate skills.
- It is also argued that migrants spend their earnings on purchases that benefit individual rather than the entire community and on consumption goods rather than productive investment.

The voluntary seasonal migration for income generation from rural belts to green rural zones is common in India. Labour migration from Bihar and Uttar Pradesh to Panjab has been a salient feature of our developing economy.

Senior Planners¹¹ of our country have often reasoned that this practice of voluntary seasonal migration has created pre-conditions for large scale shifting of people from their original habitats to greener pastures. This is a myth that is being perpetuated since the beginning of post-independence era of development planning. Rothstein sums it up succinctly when he writes, "Migrants are cheap labour not Horation Algers" and we must get rid of ourselves of the myth that migration is the answer to uneven development".

Social Scientists have often argued about the anomies that appear in the personal and social life of the individual. Social distance created by the migration of invariably the male members of the family results in distortions of various kinds. Families became single unit households. There is gradual dilution of intimacy and authority. Couples often drift apart, bigamy becomes a way of life, often resulting in marital discord, family tensions increase and family size tends to be larger. The idea of voluntary in voluntary migration is to generate additional resources. But the circumstances governing migration minimize advantages that may accrue thereof. Temporary displacement caused by migration is essentially not remunerative in the favour of development objectives.

MASS DISPLACEMENT AND DEVELOPMENT

Nehruvian interpretation of model of western liberal democracy accompanied by so-called scientific technological revolution with an emphasis on economic prosperity was primarily responsible for the exploitation of the tribal heartland. Rich in flora and fauna, minerals and an abundance of natural wealth, these isolated habitat of the shy native became national properties to be protected, by the politician, along with his band of bureaucrat planner and politically motivated intelligentsia. Each of them presumed that the goals they were aspiring for were above self, they were national objectives, their aim being to bring about egalitarian and just order. Their argument was that natural wealth is the property of the Nation and not that of the individuals therefore; if for their exploitation or what was deemed as their proper utilization, settled communities were shifted out with what they believed were generous compensations, then this process of Mass Displacement was perfectly legitimate, in order and in the national interest. The patriotism inherent in these ideological reconstructions was that every developing nation calls for sacrifice and individuals can be sacrificed in the larger interests of the nation.

Working with these convictions, the development planner, national and local politician and even local level bureaucracy and development workers had no qualms about the price the uprooted native was paying for his so-called development. It goes with the assumption that such large scale, almost cumulative planned displacement is desirable: It is argued that the

material gain would outweigh the overall loss (including mental trauma) to the concerned people, and the displaced people can be properly rehabilitated in a way that they can reconstruct their past social space and develop further.¹² Misnomers like this have been the building blocks of our development policy for the past forty years.

Numerous studies conducted by indigenous, Indian and foreign scholars have time and again challenged the notions of industrialization, dam-construction, displacement and rehabilitation of tribals as positive steps towards poverty alleviation, better living standards of people, removal of illiteracy and ignorance, evolving a rational society devoid of the bondages of suppressions and rituals. Even those scholars who have been influenced by the patterns of development identifies for the British society of pre-industrial era to industrial era are not at ease with the Indian situation. Moore¹³, who regards Modernization as 'total transformation of pre-industrial society into a type of technology and associated organization that characterize the advanced, economically prosperous and relatively politically stable Nations of western world (1963) as the ultimate objective of all developing and industrializing societies is disappointed to note that the traditional features of Indian society form great obstacles in the development of Indian Industry.¹⁴ Das and Banerjee¹⁵ reflecting upon the behavioral responses of tribals in an industrial belt of west Bengal comment: "that since they were accustomed to village life, the instances of inconsistent behavior on their part indicates tensions in their mind and lack of adaptability to the industrial economy. Amongst the social scientists, one may say that there are optimists and pessimists. Optimists like Milton Singer (1972)¹⁶, David Morris (1965)¹⁷, Redfield (1947)¹⁸ and Nash (1958),¹⁹ believe that every society undergoing social change adopts an internal mechanism to integrate new values. They argue that pace of development, technological advancement are not necessarily related to traditional belief system but can be determined by the number of opportunities generated by the alternative systems, the kind of leadership that a changing society elects and the democratic functioning of the overall system. Pessimists, on the other hand would refute these notions. According to them any outside interference creates social dissension. In this context B. D. Sharma²⁰ writes; "the penetration of money economy without adequate preparation continues to weaken the Tribal com-

munity and provides an upper hand to the Industrial society.... Gradually the Tribal begins to crawl into the system at its bottom filling in the vacuum... the aura of new structure and glitter of his new possessions begin to provide him with a new value orientation which enables him to face his own community with a sense of achievement and pride. He fails to appreciate the implication of this new relationship. Thus, the wheel of history moves on mercilessly."²⁰

This school of pessimist commonly known, as isolationist school of thought is a votary of preservation of Tribal culture, heritage and worldview. They draw their inspiration from Elwin's concept of Tribal Parks.²¹ And Nehru's²² legacy; as King Tribal, to develop according to their own genius. Social Scientists of this genre are against any displacement of the Tribal groups from their Native land. They condemn Industrialization of Tribal belts. In their opinion past experiences have consistently and persistently proved that industrialization of The Tribal belts have caused grave damage to Tribal life style and culture. It has only encouraged mass-scale exploitation of the Tribals by the non-tribals. It has rendered Tribal homeless and restless. From rural peasants the Tribals have become urban slum dwellers. It has created ecological imbalances. The equation that tribals enjoyed with the fauna and flora of their regions has been extensively disturbed. These scholars denigrate industrialization as a model for development of Tribal societies. The Brahmanical model of development that assumed that brahminical settlements are functioning as centers of diffusion of technology²³ is under attack by historians. Indologists and sociologists alike, the industrial model of development is also constantly criticized with equal intensity by social scientists, voluntary workers and the indigenous scholars. Kosambi argues that technology and acculturation in the past have been transferred by peasants and artisans²⁴ and not by Brahmins. In a similar vein the anti-industrial group of scholars reason that Tribal development can only be brought about by Tribal awareness, and the necessity for re-arranging the economic structure of the society. It is therefore reasoned by them that displacement of Tribals from their native land is both unethical and unscientific.

The development, displacement, rehabilitation equation has to be examined in its various dimensions. So far, we have been examining only the theoretical aspects of the problem, while drawing inferences from the empirical studies.

Our interpretations suggest that the basic development model as is being practiced by our planners is under question. From the prime Minister of the country, Chairman of the planning commission, to the entire scientific community, the need for evolving an indigenous model of development has become paramount. But somehow we do not seem to be making much headway in that direction. Compulsions of world market economy are promoting liberalization and massive industrialization giving rise to consumer culture. Modes of transportation and means of communication are giving wider exposure and are partially responsible for the level of awareness of rural and Tribal communities.

For some years we have noticed the change in the attitudes of isolated Tribal communities and peasant societies. Easily approachable Tribal communities are demanding fruits of development. They want regular drinking water, electricity, rail and road transportation, better health facilities and protection from natural and man made calamities. Also at the same time an average Tribal is comparatively enlightened about the land and Tenancy rights, is aware of the importance of his cultural and ethnic identity and is also prepared to defend his ethnic boundaries and nativity.

It is a complex situation and challenge to every student of social change. Before I dwell further on dialectics of development process in India, a summary of some of the empirical findings may be the most appropriate interlude here.

DISPLACEMENT DUE TO INDUSTRIALIZATION

Orissa, Bihar and Madhya Pradesh, having about 73% of India's Tribal population have enacted as laboratories for industrial experiments. In the process large Tribal populations were displaced. Number of programmes for their rehabilitation were launched. Most of them have, however, have registered little success.

Let us review the case of NALCO mines established at Damanjodi, Koraput district in Orissa in the year 1981. With the help of international funding it started with bauxite mining, built up an aluminum refinery and is now producing Aluminum metal. It has a mechanized bauxite mine at Pachapatmali hilltop in Koraput district with an annual

capacity of 2,40,000 tones. An Aluminum refinery at Damanjodi, 14 km from the mines extracts 8 lakh tones of aluminum. This is supported by an aluminum smelter unit which produces 2,18,000 tones of aluminum per year and is located at Angul in Dhenka kanal district. At the same place there is a 600mw capacity power plant, which supplies firm power to the aluminum smelter²⁵

These mining activities have affected 40,760 acres of land area. Total number of villages in the vicinity of Damondoji, which were affected by NALCO mines is²⁶ spread over 5 blocks.²⁷

The figures in the tables 1, 2 demonstrate that about 30% of the Tribal population in this area had been affected. The affected villages could broadly be compartmentalized in three categories.

The first category contains villages, which have been fully displaced and rehabilitated in Analbadi resettlement colony located at a distance of 7 kms from Damanjodi. NALCO authorities on payment of Rs. 1.20 lakhs acquired Private land measuring 43.75 acres in this region. Four hundred and ninety eight 'Pacca' dwellings were constructed here for the displaced Tribals at a cost of Rs. 68 lakhs. Out of a total of 440 resettled families in this village 199 belong to the scheduled Tribes.

It is apparent from the above table that majority of the displaced households from villages like Damanjodi and Sukriguda were Tribal. The second category that comprises listed households for displacement also encompasses mostly Tribal households (Ref. Table 4).

The residents of these households have been paid compensation for the houses and for the land acquired but for some reason they have not

Table 1: Total number of villages affected = 26

S. No.	Block wise distribution of villages	Total land area affected
1	Koraput - 12	40,760 acres
2	Laxmipur -4	Cultivated area = 21,813 acres [53.5%]
3	Dasmathpur - 2	Land acquired by NALCO = 6853 acres [16.8%]
4	Surabeda - 3	Govt. land acquired = 3976 acres [58.1%]
5	Dasmanthpur-5	Tribal land acquired = 2093 acres [30.5%] Non-Tribal land acquired = 784 acres [11.5 %]

Tabled analysis displayed above provides a detailed survey of the impact that this unit had on the local populace.

Table 2: Population distribution in Koraput district

Total population of the District	2, 484,005
Scheduled caste population	349,307 [14.6%]
Scheduled Tribe population	1, 371,550[55.21%]
Total population of the affected villages	17678
Percentage of Tribal population in these villages	52.44%
Percentage of scheduled caste populations	10.84%
Percentage of Non tribal populations	36.72%
Literacy ratio before the establishment of NALCO mines: Koraput District	19.35%
Project area	22.63%

The figures in the above table demonstrate been displaced yet.

The third category consists of villages from which some land has been acquired but no displacement of households has taken place. This category consists of villages from which some land has been acquired but no displacement of households has taken place. This category covers villages of Amabagaon, Analbadi, Khantaputraghati, Charangali and seven other neighboring villages.

COMPENSATION AND REHABILITATION

A total of 591 families were identified for displacement out of which 254 were Tribal families belonging to Tribal groups namely Parajas (35-13.85%); Kandhas (22-8.23%); Gadabas (5-2.17%) and some other Tribal groups. So far only 162 Tribals- one from each family has been provided a regular job in the NALCO mining complex. Before being displaced the Tribals from this region were farmers (60%) agricultural laborers (22%) and miscellaneous workers (18%)²⁹. For a detailed scrutiny of changes in occupational pattern refer to Table 5.

Occupational changes from the pre-project period to the post project period demonstrate that setting up of this industrial complex has severally hit the employment potential of the area. Women have been most hard hit. Income generating capacity of women has declined from 94% to 84.5% in the rehabilitated area. But more significant fact in this case is that whereas 94% women were involved in agricultural production, now 71.4% were working as non-agricultural labour.

From self-employment on their fields, women have now become dependent workers and are consequently being exposed to greater exploitation. In the month of October 1990, I had the opportunity to participate in a seminar at

Table 3: Displaced households: Village wise

<i>S. No.</i>	<i>Name of village</i>	<i>No. of Households</i>	<i>% of Total Households</i>	<i>Scheduled Tribe</i>	<i>Scheduled caste</i>
1.	Damanjodi	154	3.5%	127	82.47%
2.	Goudaguda	20	4.5%	Nil	Nil
3.	Maliokemari	83	18.87%	28	33.47%
4.	Sukriguda	28	6.37%	28	100%
5.	Baranput	20	4.55%	1	5%
6.	Kantaguda	60	13.64%	1	1.67%
7.	Ambagonn	5	1.14%	Nil	Nil
8.	Potiassil	18	4.09%	14	77
9.	Godipabili	52	11.82%	Nil	Nil

Table 4: Households for displacement

<i>S. No.</i>	<i>Name of village</i>	<i>No. of Households</i>	<i>% of total households</i>	<i>Scheduled Tribes</i>	<i>% of Scheduled castes</i>
1	Sindhipur	60	38.47	43	71.67%
2.	Saniguda	6	3.85	1	16.67%
3.	Chanipadar	59	37.83	Nil	Nil
4.	Kharguda	16	10.26	Nil	Nil
5.	Chadiguda	15	9.62	11	73.34%

Table 5: Occupational changes

<i>S. No.</i>	<i>Principal occupation</i>	<i>Pre-project % Male</i>	<i>Pre-project % Female</i>	<i>Pre-project % Total</i>	<i>Post-project % Male</i>	<i>Post-project % Female</i>	<i>Post-project % Total</i>
1.	Cultivation	97	94	95.8	Nil	Nil	Nil
2.	Allied Activities	Nil	Nil	Nil	1.4	7.1	2.4
3.	Petty Business	Nil	Nil	Nil	1.4	Nil	1.2
4.	Organised services	Nil	Nil	Nil	76.8	14.3	66.3
5.	Agricultural labour	2.1	3.8	2.7	Nil	Nil	Nil
6.	Non-Agricultural labour	1.0	2.0	1.5	20.3	71.4	28.9
7.	Others	Nil	Nil	Nil	Nil	Nil	Nil
8.	Total	100	100	100	100	100	100
9.	N	67	57	124	69	14	83

Angul in which large number of Tribal women participated. Some of them had harrowing experiences to narrate. At times it was physical violence and for others it was extreme economic exploitation. Most of the time these women were underpaid and were over worked.

The uprooted Tribal men employed by NALCO on conciliatory basis had to compromise with dignity and pride on being self-employed on their own land. The Table 6 amply demonstrates the lowly paid occupations in which these resettled Tribals were engaged.

A general argument extended by the Administration of most of these Mining complexes in these Tribal areas is that the mining industry attached to it requires highly skilled labour. The uneducated, incompetent lazy Tribal has neither the mental nor physical ability to

undertake these refined and hard tasks. It is only out of a sense of moral commitment that these Tribals are employed in the lower rung of occupational hierarchies. If the norms of the industrial competitive demand-recruitment structure were to be abided, then probably not even a single Tribal would be able to find placement in the organization.

Similar stories of displacement and rehabilitation were gathered from Malajkhand in Madhya Pradesh – again a Tribal belt primarily inhabited by Baiga and Gond Tribals who have been displaced to host the largest copper mining complex in the country. In September 1989, I had an opportunity to organize a seminar in the guesthouse of the copper mining complex of Malajkhand in the district of Balaghat. The theme of the seminar was 'Nation Building Development

Table 6: Percentage distribution of tribal employees according to the jobs held by them

<i>S. No.</i>	<i>Nature of Jobs</i>	<i>Percentage of Tribals on the job</i>
1.	Mazdoor	45.6%
2.	Helper	17.45%
3.	Mechanic	6.62%
4.	Waterman	4.41%
5.	Electrician	2.94%
6.	Sweeper	3.68%
7.	Fitter	3.68%
8.	Gardner	3.68%
9.	Driver	2.94%
10.	Peon/bearer	4.41%
11.	Others	5.13%
	Total	100.00

process and communication'. We had gathered a large number of Tribals from various parts of the District. This exercise was undertaken at the behest of Center for Research in Industrial and Rural development, based at Chandigarh. It was funded by Ministry of Human Resource development. The purpose of this series seminar was to have a People's perspective of their development needs and their experiences of existing development programmes. It aimed at bridging the communication gap that existed between the State, Planner and the People.

While sitting in the luxury of that resort, which is at present showpiece of Madhya Pradesh Government and an ideal example of the development of a Tribal Zone due to mining and industrial activities, we swallowed the Administrative hand out of hundred percent rehabilitation and employment of Tribals displaced from their native homeland. We were also quoted tall figures relating to compensation offered to the Tribals and their more than willing acceptance of the same. The Malajkhanda copper Mines administrators and the collector of District assured the participants of the seminar that this complex had generated 10% job opportunities for the Tribals of this region and has virtually eliminated poverty from the surrounding area of the mining complex. The displaced Tribals and even other Tribals can now find jobs either as daily wage earners or as Domestic help in the mining complex. Some of them even qualified to act as lower grade technical workers. In addition, the administration of the sprawling open-pit mining complex has ensured compulsory and good schooling for the Tribal children, health facilities and the welfare of the association of the complex provides drought and famine relief to

the neighboring Tribal population.

One would have returned from the seminar extremely satisfied only if this seminar like the traditional seminarians had confined itself to the immediate vicinity of the seminar hall. However, on the second day of the seminar, the Participants numbering about forty minus local participants, decided to visit some of the rehabilitated as well as other villages in the area surrounding the copper mining complex.

Three kilometers away from the air-conditioned comfort of the copper mining guesthouse was a village inhabited by the Baiga group of Tribals. Dilapidated houses, children with bloated stomachs—obviously victims of malnutrition, starving families who were not even able to manage one square meal a day for themselves, deserted fields and unhygienic sanitary conditions (which was not a characteristic of an average Tribal village) marked the village. Frightened, starving and sick Tribals were far too weary of the situation and were reluctant to talk, as they feared that after we leave, officials and mining complex authorities might harass them. Some of the trainee Anthropologists amongst the seminarians later on managed to persuade the tribals of these villages to attend the proceedings of the seminar and present their viewpoint. It was concurred from their statements that their tale of woe began with the construction and displacement activities of the copper Mining complex. Their lands were taken away and the little monetary compensation offered was soon exhausted. The mining activity brought along their own brand of activities, which were totally alien to the lifestyle of the simple Tribals. The new flock of entrepreneurs cheated and appropriated their property and jewelry through fraud from the simple Tribal folk. They sustained their spirit for survival till the completion of the mining complex hoping to get permanent jobs there. But once again they were let down because highly sophisticated and totally mechanized mines required skilled labour, which, of course, the Tribals were not able to offer. Due to mining activity, the productivity of the crops had substantially declined and the mining administration made no arrangements to provide assistance in generating alternative modes of production.

The narrative appears too familiar. Whether it is Bihar, Orissa, Madhya Pradesh, Indian Explosives limited in Chota Nagpur, Rourkela or Riag, the story everywhere is almost repetitive to the minutest detail.

DISPLACEMENT DUE TO DAM CONSTRUCTION

Displacement, whenever it has occurred, whether it has been due to mining or irrigation projects, has never been a pleasant human experience. With the ensuing controversy over the Sagar Sarovar dam project, the rationale of big dams and large-scale irrigation projects involving displacement of thousands of people has been constantly under surveillance. Social scientists involved with the study of large Dams have been arguing that large dams are useful for flood control, navigation, cheap energy, perennial and assured irrigation in requisite quantity and at the right time resulting in higher gross productivity. The water is also useful for domestic and industrial use. It also has a cooling effect on the local environment and sustains particular varieties of flora and fauna. Despite these gains there are significant losses too. A dam across a river creates a huge man-made lake. As a result there is considerable loss of agricultural land, erosion of top soil, forest, wildlife and permanent construction of houses, roads, temples, schools and hospitals, archaeological sites and the like. At the same time downstream there is considerable loss of silt due to impoundment.³⁰ It is further argued that in the reservoir there is considerable loss of water due to unnatural evaporation and transpiration by the aquatic weeds and in the canals due to seepage and also overuse of the water. The change in the microclimate of the area resulting in a moist ecosystem offers ideal conditions for pest infestations and consequently huge loss of agricultural output.³¹

The Environmentalist, Social Scientists and the water management planners have differed considerably over the gains and losses of Dam construction and its related activities. The pro-Dam construction activists of the ilk of B.D. Dhawan put forward arguments like "the total forest area so far lost in India due to submergence of reservoirs created by all big dams amounts to about 5% of the total forest cover we have lost since independence³² and one of the major reasons that Dhawan lists in his inventory of causes for forest loss. It reads: authorised allotment of forest lands to Dam oustees of the landless people", probably implying that the displaced should be better off submerged along with their lands rather than being rehabilitated. Ethics of this development logic is beyond any Human comprehensions of social growth and

Development. A technical argument extended by him is that "the loss can be minimized by reducing the reservoir size via reduction in the height of the Dam" is best left to the discretion of technical experts and is beyond the purview of the social scientist.

A section of the development planners has been constantly arguing in favor of the Minor irrigation projects vis-à-vis major projects like large scale Dam construction.

The figures are generally quoted in support of their arguments are represented in Table 7.

Table 7: Net irrigated area by sources³³: 1950-79

<i>Net irrigated area by sources (million hectares)</i>			
<i>Year</i>	<i>Canals</i>	<i>Tubewells</i>	<i>Total</i>
1950-51	8.3	N.A	20.9
1960-61	10.4	0.13	24.7
1970-71	12.9	4.46	31.1
1978-79	15.0	8.2	38.0

Source: Indian Agriculture in Brief, 18th edition, quoted in CSE (1985: 112)

Most of these analysis show that while the expenditure on minor irrigation projects is very low, their irrigational potential is much more as compare to major and medium size irrigation projects. Dhawan on the contrary argues that the minor and major irrigation projects are somewhat like the two side of a coin and are equally important for a balanced development of irrigated farming. Dhawan³⁴ himself is of the opinion that the Minor irrigation schemes, in particular those based on groundwater yield much more per acre than major irrigation schemes. He also conceded that on an area to area basis the cost of irrigation from minor works is a small fraction of the corresponding cost entailed in establishing major irrigation projects and later developing their command areas. It is also suggested by him that minor irrigation schemes make utilization of their resources while there is colossal waste of resources in the case of major irrigation projects. Most important of all there is general consensus that minor irrigation projects pose no environmental losses whereas Major irrigation projects can cause seismic changes, enhance potential danger of floods and also stagnant waters spread epidemics. A very crucial element in this debate is that the minor irrigation projects lead to no human misery, a crucial factor in contemporary development debate.³⁵ There are no pangs of displacement, exhortation, corruption or exploitation, which are

Table 8: Outlay on development of irrigational potential

Plans	Outlay Expenditure (Rs. In Million)	Cumulative Irrigation Potential (MHA)		
		Major irrigation	Major & Minor irrigation	Minor irrigation
<i>Pre-plan Benefits</i>	<i>Major and Minor Benefits</i>			
1st Plan	3800	760	12.20	14.86
2 nd Plan	3800	1420	14.30	14.79
3 rd Plan	5810	3280	16.60	17.01
Annual plans 1966-69	4340	3260	18.10	19.00
4 th Plan 1969-74	12370(a)	5130	20.70	23.50
5 th plan 1974-78	24420(b)	6310	24.82	27.30
Annual plans 1978-79	9770	2370	25.86	28.00
Annual Plans 1979-80	10790	2600	26.60	30.00

offshoots of all major development projects. In the words of C. Subramanyam, integrated rural development implies:

“Systematic scientific and integrated use of all our natural resources and as part of this process enabling every person to engage himself in a productive and specially useful occupation and earn an income that would meet at least the basic needs.”³⁷

It is disheartening to record that our avowed objectives of scientific, systematic planned development are causing so much of anguish to those very people in whose interests they are being launched. According to Darangi Billorey³⁸ in India, at least one million people are displaced every year due to development projects. An indicator of the magnitude of this turmoil is the following table that suggests the composition of Dam oustees under the Narmada valley project from the State of Madhya Pradesh.³⁸

Table 9: Population affected

S. No.	Dam Sites	Total	Shceduled Tribes	Scheduled Castes
1.	Narmada Sagur	80,500	17,651	11,432
2.	Sardar Sarovar	45,000	23,240	3,650
3.	Omkareshwas	12,295	N.A	N.A
4.	Maheshwari	9,420	N.A	N.A

Industries and large-scale hydro-electricity projects are not the only causes of non-voluntary Tribal displacement. A third factor is the fashionable environmentalist, a self-appointed guardian of the mute harmless, fauna and flora, the natural habitat, a conservationist and a preserver of ecological balance. His natural enemy in this struggle is Tribal, the native dweller of the forest, who in his opinion are the greatest danger to the protection of environment. His answer and his strategy are simple. Eliminate the

Tribal from the forest, and restore the ecological balance.

FORESTS DISPLACEMENT AND TRIBALS

The social scientists, voluntary workers, environmentalist and most important of all Tribals themselves concur over the fact that the protection of the existing forest cover is essential. In the words of P.K.Biswas, Tribals and forests have a symbiotic relationship.... they live in harmony with each other, even when they live away from the mainstream. Forests play a significant role in the development and sustenance of the rural poor whose existence depends on a close and ecologically sustainable relationship with the forests they inhabit³⁹ This is the opinion of an expert in forest management and that of an Anthropologist often accused of being an isolationist and protector of his own discipline rather than that of the Tribals. Tribals have always inhabited forests and maintained the balance of nature. It is alarming to note that between 1951-1980, we have lost 4328 million hectares of land⁴⁰ due to our mis-conceived development programmes and targets. The table 10 depicts the forest area lost between 1951-1980.

Table 10: Forest area lost between 1951-80⁴⁰

S. No.	Purpose	Forest Area (in Million hectares)
1.	Agriculture Activities	2.623
2.	Irrigation & River valley Projects	0.502
3.	Industries and Townships	0.134
4.	Transmission lines, Roads et.	0.061
5.	Miscellaneous uses	1.008
6.	Total	4.328

The statistics demonstrate that more than half of the forest cover lost in the post-independence period is due to activities other than agriculture. The data available on land use patterns in the country makes it evident that only 22% of the lands covering 74.88% million hectares are effected by erosion. This is well short of the 30% of the forest area recommended for the country.⁴¹ The per capita forest area in the country has reduced from 0.6% hectares in 1960-61 to 0.14 hectares in 1970-72.

If on the one hand in the name of forest development we are promoting wasteland development programme and social forestry in which people's involvement is absolutely essential, on the other hand we are shifting Tribals out from the forest particularly from those forest that have been declared National Parks. The paradoxes involved in these contentions are beyond sociological imagination if not beyond the imagination of the development planner.

The argument extended becomes ubiquitous when one examines it in the context of Madhya Pradesh which has 29% of forests in the country, a large number of studies carried out in Basatar and our own field observations from the District Mandla brings forth the short sighted perspective of these policies and programmes. It is commonly argued in Anthropological literature on Tribal development that the forests and the country's natural wealth are national properties⁴² and for the protection of the same we need ordinances and legislation. The forest conservation act, 1980 prohibit use of forestland for purposes other than specified in the Act. For use of forestland for purposes other than forestation, clearance of Ministry of Environment and forest is required. The Government Forest Act which was promulgated for the first time by British Government in 1878 divide the forests into three categories, namely – "reserved forests which were virtually government forests, where it could settle, transfer or commute the rights of communities; where protected forests which were virtual government forests, where it could settle, transfer or commute the rights of communities; protected forests where the rights of the communities were recorded and regulated but the government could not commute them; and village forests where there were no government controls over the rights of people. In 1927, after four amendments the Act became the first Indian forest act and with minor modification here and there, it is still operational. Every successive modification of the Act has minimized the peoples

right over forests. The direct fall-out of this has been substantial increase in the offences committed in the forests. The forest dwellers have become aliens in their homeland. They are dislocated from their settlement in the name of protection of forests, without being offered any alternative occupation or means of livelihood. Hapless Tribal, homeless and without food bears the brunt of ecological protection programmes. The modifications suggested in the existing Forest Act which includes 15 chapters and 143 sections are powers by which "any land what so ever. Which the state government declares to be a forest becomes a reserved forest. Furthermore, forest settlement officers, who deal with disputed areas in reserved forests, will have powers of a civil court to settle any claim on reserved forest area".⁴⁴ Ambiguities that are an inherent part of the existing Forest Act have created numerous anomalies in the lives of the Tribals. A classic example of this is a case study narrated by Shri. A.K. Bhatt, Commissioner of Bastar in 1989 at a seminar in Raipur in 1989. According to Shri Bhatt:

Under the protection of Aboriginal tribes (interest in trees) Act, the tribal is supposed to take permission from the collector before selling his valuable timber. The intention is good as a large number of Adivasis were duped initially of their valuable timber when a sound teak tree may fetch up to Rs.30,000. This has created a set of traders who persuade the cultivators to apply to the collector for disposing off their timber. It takes anything from six months to one year to get the approval for cutting timber trees and as for nationalized timber like teak, they are to be felled and transported by the forest department only. It is a harrowing experience for the Tribal to apply to cut trees. Recently a case has come to light where a tribal Bhumiswami of Kondagoan tehsil had to dispose off the land to pay illegal gratification for the disposal of the case permitting him to cut trees. In the process he sold away trees along with the land.

The story does not end here. There are sections 240 and 241 of Madhya Pradesh land revenue code that prohibit cutting of certain trees to check erosion of soil, in public interest etc. no fruit bearing trees can be cut without the permission of the collector. And in order to prevent theft from government land Bhumiswami trees standing on adjacent lands need separate permission for cutting.⁴⁴

The practical difficulties encountered by a practicing Administrator in a tribal district having

Table 11: Statewise population, forest area and per capita forest area⁴¹

<i>S. No.</i>	<i>State/Union Territory</i>	<i>Total Population</i>	<i>Forest Area in 1980 (in 1000 hs)</i>	<i>Per capita forest Area (in hs)</i>
1.	Andhra Pradesh	53,405,119	6409.2	0.1280
2.	Assam	19,202,929	3070.7	0.1543
3.	Bihar	69,823,154	2923	0.0419
4.	Gujarat	33,906,905	1952.5	0.0575
5.	Haryana	12,850,902	1163.7	0.0127
6.	Himachal Pradesh	4,237,569	2119.0	0.5001
7.	Jammu & Kashmir	5,981,600	2183.6	0.3659
8.	Karnataka	37,043,451	3786.6	0.1022
9.	Kerala	25,403,451	1112.0	0.0438
10.	Madhya Pradesh	52,131,717	15379.0	0.2952
11.	Maharashtra	62,693,898	6407.8	0.1022
12.	Manipur	1,433,691	5515.4	1.0570
13.	Meghalaya	1,327,874	854.8	0.6437
14.	Nagaland	773,281	287.6	0.3719
15.	Orissa	26,272,054	6767.3	0.2576
16.	Punjab	16,669,755	242.8	0.0146
17.	Rajasthan	11,102,912	3491.3	0.1024
18.	Sikkim	315,682	260.0	0.8236
19.	Tamil Nadu	48,279,456	593.0	0.0451
20.	Tripura	2,060,189	5931.2	0.0484
21.	Uttar Pradesh	110,858,019	5139.2	0.0464
22.	West Bengal	54,485,560	1183.7	0.0217
23.	Andaman & Nicobar	188,254	714.5	3.7954
24.	Dadar & Nagar haveli	103,671	19.9	0.1920
25.	Arunachal Pradesh	623,650	2150.0	8.2064
26.	Delhi	6,196,414	Neg.	Neg.
27.	Goa, Daman & Deu	1,082,117	105.3	0.0973
28.	Mizoram	487,774	712.7	1.4611

156 Forest Villages are apparent in Bhatt's narrative. Once the forest dweller realizes the contradictions that the existing Forest Act or any other legislation is creating for him, he is bound to react. The scenario relating to forests and displaced Tribals is not different either.

The resettled villages of Kapot Behra and Indra Van Gram under the project Tiger covering Kanha National Park were covered in the survey in the course of my field studies in District Mandla. Indria Van Gram was one of the rehabilitated modern villages set by the forest department as a part of an exercise supposedly in the interest of tribals, whose life and property had to be protected from wild animals.

When we reached this village along with some forest personnel, the villagers told us that it was probably for the first time since their resettlement that somebody had approached them. Their living conditions were pathetic and the only source of water available to them was a pond that was used by both men and wild animals for drinking and

washing. Kapot Behra that had been resettled rather recently had shortfalls of another kind to recount. The sub-Tribes among the resettled tribals within the same territorial complex lived at varying socio-economic levels. The Baigas were the poorest of all. Barren fields and uneven land marked the Baiga Tola. The Gond settlements were partially better whereas Ahir Tolas were prosperous with spacious and comfortable homes and their animals appeared well fed. The forest department officials reasoned that it was the work out-puts each had put into their assets that were responsible for apparent differentiation. However, the Tribals felt discriminated in the allotment of land and also in terms of services rendered to them after their re-settlement by the development agencies. Their general contention was that being poor, they were neither able to play an assertive role in the village Panchayats nor could they approach forest and district authorities. It was further stated by them that due to the inevitable danger of starvation, they often left their fields and worked as laborers on other fields

and were compelled to forgo their autonomous status.

The displacement, development and rehabilitation paradigm in India today, confronts many moral and ethical questions; such as: do an individual or a set of individuals have the right to displace another individual or a group community, or a village? The social scientist under pressure of development economics weigh pros and cons of such actions and stress their intelligence to suggest rehabilitation measures like the whole group should be settled at the same place, the people should be given compensation in terms of land for land, the locale marked for rehabilitation should be adequately developed prior to resettlement, that all modern amenities like water, electricity and sanitary facilities be provided to the rehabilitated people so on and so forth. All these may appear humane answers to what strikes us as compulsory displacement. Nonetheless, they do not augur well, when one attempts to analyze emotional stress and the element of human trauma involved in it. Logically speaking, displacement at times may be absolutely necessary, though on most other occasions it can be easily avoided. What it requires is a concerted effort, wisdom and far sight. The Indian government is evolving a national policy for rehabilitation of the displaced people, inadvertently acknowledging that displacement has been an issue in the past and shall continue to be so in future.

The development agencies and both state and central government must ensure that the displacement of human populations should be allowed only if it is absolutely necessary. The philosophy of awakening after the event should be curtailed with the same zeal with which terrorism is being curbed. The dislocation of the people from their native habitats has always been recognized as one of the primary causes of violence in any society. The political implications, social delusions and economic advantages have to be adequately weighed prior to any decisions in this regard. The populations to be displaced should be taken into confidence and their approval and co-operation ought to be ensured beforehand. The demands of the populist model of ethno development,⁴⁶ and conscientization and the tribals right to envisage their own models of development on the basis of their own history and culture are keys to the understanding of the issues. Into this is the need to integrate the parameters of national development and global requisites. Since the planner and the Tribal are

not involved in the dialogical tradition, the help of local bodies in devising the patterns of communication is necessitated. This help can come from an indigenous scholar or the communities or a voluntary organization or from 'Gram Panchayats' and 'Jati Panchayats'. Social scientist have time and again pointed out that when national long term interests conflict with the immediate interests of the local group⁴⁷ project acceptance and involuntary resettlement become bones of contention. Almost 70,000 people, some of them already displaced and others to be displaced by Narmada valley development project are a case in point.

The conclusions arrived at in the aforesaid discussion and various case studies draw projections for future research and planning. Some of them are summarized as follows:

The social scientists, voluntary workers and development planners now concur that resettlement plans have to take cognizance of technical, cultural, psychological and social-organizational factors into considerations.

The financial institutions funding these projects must adopt an ethno-oriented development approach instead of encouraging mere welfare activities. It is pertinent to note in this context that the Narmada Sagar Dam in Madhya Pradesh is under critical scrutiny at the moment. It has twin projects. One for the dam and another for resettlement in which the funding bank would finance re-forestation of about 80,000 hectares to replace the 41,000 hectares of forestland⁴⁸ to be submerged. It is left to the funding agencies to ensure that before they decide to finance a project, a pilot survey is carried out by trained investigators to avoid what Cernea calls 'chronically underestimated' cost of development and its perpetual inadequate financing. The empirical investigations suggest that despite guidelines for prices to be paid for land acquisition, the disbursing agencies have often cheated the naïve tribal. Instead of providing land for land, the displaced populations are paid compensations far below the prevailing market rates. And the money that they get as compensation is not adequate for purchasing land anywhere else. Under such circumstances, it is binding on the project funding agencies to crosscheck and regulate the modalities of disbursement.

The role of Non-Government Voluntary organizations in both project formulations and resettlement programmes has been stressed in the text time and again. In Karnataka, a project to

be financed by World Bank has been largely prepared by MARYADA, a local NGO contracted by the state Government to prepare the relocation plan.⁴⁹ The participation by the voluntary sector in any rehabilitation and development programme is crucial and is likely to be beneficial to both the planner and the people.

Keeping in view the time constraints within which such projects operate, it is essential that a co-relation between time management and resource mobilization is worked out. The strategy for rehabilitation should be clearly spelt out to the people and the area where people have been rehabilitated is duly equipped with infrastructure that takes care of the immediate needs of the people. In addition to agricultural activities, the new localities must have possibilities of other kinds of employment generation. Since agriculture is linked with 'chance factor', the planners have to make arrangement for alternatives in case of crop failures to avoid starvation and further dislocation and displacement of the people. Amenities like health and education are other primary needs of the people. If the place of settlement provides these amenities and securities and does not as a precondition disturb the social and kinship networks, nor breeds contempt and inter-ethnic strife, rehabilitation programmes may be far more successful than have been in the past.

To conclude, I must add that for any conscientious student of society, involuntary displacement of human population is a tragedy. But as and when it becomes absolutely necessary, it has to be worked out with care and precision. If not done so, then the displaced people and resettlement colonies become breeding grounds for conflict generation in any society.

KEY WORDS Development. Displacement. Rehabilitation. Tribal. Socio-Economic Planning.

ABSTRACT The indigenous populations of India, who have been original inhabitants of rich natural environments, have suffered cultural and economic deprivation in our quest for prosperity. Independent India faltered, while making planned interventions. Data recorded in this paper from the Tribal belts of Madhya Pradesh and Orissa compels us to review our development strategy. We have to compensate the native populations of these regions. The Adivasi's are now enlightened to demand their rights and injustices meted out to them in the name of development. This is an attempt to provide evidence in support of tribal demands for adequate compensation for their undesired and often unwarranted displacements.

NOTES AND REFERENCES

1. The dependency school argued that the contemporary manifestation of development and underdevelopment were not different stages of evolution of mankind, but two aspects of the same historical process. Commonly referred to as Baron Frank dependency school, it argued that the overseas countries became underdeveloped in aiding the ascendancy of the west. They argued for a 'radical break' from world capitalism as a requisite for the development of the now underdeveloped countries. This school did recognize that domestic industrialization and sustained economic growth have occurred under an imperial alliance between foreign multi-national companies and the national state, they have concentrated on pairing economic success with social failures such as rising inequalities, increasing marginalization of sustenance sectors of the population, deepening class conflict and mounting repression by authoritarian regimes.
2. C.f. Macmillan Student Encyclopedia of Sociology, 1983, pp 89-90
3. Dube, S. C. 1988. *Modernization and Development: the search for Alternative Paradigms*. New Delhi: Vistar Publications.
4. Roy-Burman. 1992, B.D. Sharma, Balgobind Baboo, 1991.
5. Rothstein, Frances, 1988. What happens to the past? Development Lessons from Return Migrants in Latin America. Unpublished paper presented at the 1988 Annual meeting of the American Anthropological Association held at Phoenix, Arizona.
6. Majid Rahnema. 1988 'A new variety of AIDS and its pathogens. Homo Economics', *Development and AIDS' Alternatives*. XIII: 117-136.
7. Ibid: Esteva [1976], B.D. Sharma [1989], S.C. Dube [1988], PP117-118
8. Vijay Kumar. 1991. 'Development: A note towards a Third world view' in *Man and Development*. Dec. pp 22-33
9. Shalina Mehta [1993] Continuity and change in Tribal Societies: paradoxes in concept and context in Mrinal Miri [ed.] *Continuity and change in Tribal Societies*. Simla: Indian Institute of Advance studies. Pp 354-366
10. Henry, A Birou and P.M. Schlegel 1977 towards a re-definition of Development. Oxford: paragon Press.
11. Frances Rothstein. 1988. "What happens to the past? Development Lessons from Return migrants in Latin America". Unpublished papers, presented at 1988 Annual Meeting of the American Anthropological Association. Phoenix: Arizona.
12. Y. Alagh, Balgobind Baboo. 1992, 'Development and Displacement: A comparative study of rehabilitation of Dam oustees in two suburban villages of Orissa' in *Man in India*. Vol 72[1]: 1-14
13. Moore. 1963
14. Moore Feldman
15. Das and Banerjee. 1964, 'Impact of Industrialization in the life of Tribals in west Bengal'.
16. Milton Singer. 1972 *When a great Tradition Modernizes*.
17. David Morris. 1965. 'The emergence of Industrial Labour force in India: A study of Bombay Cotton Mills [1854-1947].
18. Redfield. 1947.

19. Nash. 1958. 'Machine Age Maya'
20. B.D.Sharma.1978. Tribal Development: The Concept and The Frame. New Delhi: Prachi Prakashan.
21. Verrier Elwin
22. Jawaharlal Nehru.
23. K.S. Singh.1985 Tribal Society in India. Delhi: Manohar Publications.
24. D.D. Kosambi. 'The culture and Civilization of Ancient India. cf.K.S.Singh.
25. NALCO- National Aluminium Limited Company
26. Jayadev Panda's unpublished M.Phil Dissertation on 'Health problems of Tribal Workers in Damanjodi NALCO Mines in Koraput District: A Socio-Cultural Analysis'. It provides a detailed survey of the impact that this unit had on the local popu-lace.
27. Table No.-1
28. Source-NALCO Administrative office, Damanjodi. Acknowledgement is due to Mr. Jaydev Panda for providing the information.
29. occupational frequency distribution is according to 1981 Census.
30. Balgobind Baboo.1991.ibid
31. Edward Goldsmith and N Hildyward 1984 'The social and Environmental Effects of Large Dams.' Overview. Camelsford: Wader Bridge Ecological Center.
32. B.D. Dhawan.1989 'Mounting Antagonism Towards Big Dams' Economic and Political weekly .may 20,1989
33. Tables have been cited from Balgobind Baboo's article on 'Development and Displacement: The case of large dams in India' in Man and Development. Dec. 1991:pp 45.
34. ibid
35. Op.cit. 1097.EPW.1989.
36. G.parthasarthy. 'Integrated Rural Development Concepts theoretical base contradictions' in Development planning and Policy.
37. C.Subramanyam.1977. 'Strategy for Integrated Rural Development' in Community Development and Panchayti Raj Digest. Vol. 8. April 1977.
38. S.C.Varma.1985 Human Resettlement in lower Narmada Basin. Narmada Valley Development Authority. Govt. of Madhya Pradesh. Bhopal.
39. P.K.Biswas. 1988. Sociological issues in Forestry in The Indian Journal of Social Science. Vol I. No.2 New Delhi: Sage Publications.
40. Govt. of India Report of the Committee on orientation of Forest Education in India. New Delhi Ministry of Home Affairs. 1983.pp3
41. cf.Biswas ibid.pp212
42. Development of Forest and Forest Products. New Delhi: Ministry of Agriculture and cooperation. Forestry Division. July 1981.
43. J.S. Bhandri and Subhadra Channana. 1992 'Forests and Tribes: A Macro Level Perspective' in Mainstream. Sept.26.1992.
44. ibid:54
45. A.K.Bhatt. 1989. Tribal's control on his Environment and some related Issues: Experiences from Bastar. Unpublished paper presented at a seminar on Tribal Situation in India held at Raipur. Organized by CRRID, Chandigarh.
46. S.L.Sharma, 1992 'Ethno development: Some critical issues' in new quest. Nov. Dec. 92 issue.
47. M. Michael Cernea 1989 'Involuntary Resettlement and Development' in The Human Dimension of Development ed. by Hari Mohan Mathur. Delhi Concept Publ.
48. ibid. 124-125
49. ibid.126

Author's Address: Shalina Mehta, Professor, Department of Anthropology, Panjab University, Chandigarh 160 011, India
Email: shalinamehta@yahoo.co.uk.