Displacement and Relocation of Protected Areas: A Synthesis and Analysis of Case Studies

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Relocation of human populations from the protected areas results in a host of socio-economic impacts. In India, in many cases, especially relating to tribal communities that have been relatively isolated from the outside world, the displacement is traumatic from both economic and cultural points of view. This paper provides brief case studies of displacement (past, ongoing, or proposed) from protected areas, number of villages/families displaced, the place where these villages/families were relocated to, governance of the relocation process, and the kind or nature of relocation (voluntary, induced or forced). It finds that not even a single study shows the ecological costs and benefits of relocation, comparing what happens at the old site to what happens at the rehabilitation site. This is a shocking gap, given that relocation is always justified from the point of view of reducing pressures and securing wildlife habitats.

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Relocation of human populations from within areas notified for wildlife conservation (protected areas or PAs) has been undertaken in several countries, as a means of trying to reduce pressures on wildlife. It is not the aim of this essay to dwell on the ecological and social justification for such relocation. Instead, it attempts to describe and analyse the full range of relocation cases in India in the last few decades, discuss the impacts of these displacements from both environmental and livelihood perspectives, and offer recommendations on the way to enhance the process by which relocation decisions are taken and implemented.[1]

1 Background

1.1 PAs and Relocation

India's first modern "protected area" was Hailey National Park created in 1936 by the British colonialists, though there were many reserves declared by rulers before this, and thousands of sites protected by communities for centuries. From a number of about 100 in the early 1970s, when the Wild Life (Protection) Act (WLPA) 1972 was promulgated, India today has 657 PAs (99 national parks, 513 wildlife sanctuaries, 41 conservation reserves and four community reserves) (MOEF 2008a). These together cover almost 5% of the country's land area.

The management of these PAs is based on premises inherited from the western concept of conservation: it requires the exclusion of subsistence demands and other resource uses, and only centralised trained bureaucracies are capable, with no role for local communities and their knowledge (Kothari et al 1995; Saberwal et al 2001). In this paper we do not challenge or accept this world view (there is already a considerably large body of literature debating it), but only note its consequences in relation to displacement of people.

Thus, human habitation and uses of natural resources are prohibited or severely restricted within most PAs. There are three to four million people living inside these PAs and several million more in adjacent or nearby areas, whose livelihoods depend on natural resources from these PAs (Kothari et al 1995). These local communities often have unclear or unregistered right to natural resources and lands. Moreover, many development facilities (access to basic amenities, transport, health and education facilities, land development, etc) do not reach adequately to villages located inside PAs. Hence, local communities inside PAs have varying access to natural resources for survival and livelihoods, but often also live in a state of deprivation, poverty and in conflict with PA managers, who usually perceive them as being responsible for the loss of wildlife.

They are also sometimes in conflict with wildlife through crop or livestock damage, or human injury and death on the one hand, and retaliatory killings of animals on the other. Thus voluntary or forced displacement from PAs has long been seen as a solution to these issues.[2]

1.2 Policy and Legislative Background

There are a few national and state laws, policies or programmes governing or related to displacement of local communities from PAs:

- Wild Life (Protection) Act, 1972: This Act was amended in 1982, 1986, 1991, 2003, and 2006 and provides for the creation of the different categories of PAs, limits the right to live inside PAs (of national park and sanctuary categories), puts restrictions on harvesting of natural products, and establishes a centralised and exclusive management.
- Scheduled Tribes and Other Traditional Forest-Dwellers (Recognition of Forest Rights) Act 2006: It provides for the establishment of people's rights within all forest areas including PAs, and for the creation of critical wildlife habitats within PAs, in which people's rights can be modified or extinguished and people displaced, with their consent.
- State Level Legislation: Some state level legislation like, the Maharashtra Project Affected Persons Rehabilitation Act, 1986, amended in 1999, which deals with resettlement of persons affected by development or conservation projects.
- National Policy on Resettlement and Rehabilitation 2007: The new (2008) centrally-sponsored scheme on PA-related relocation (see paragraph below) specifies that relocation should be "voluntary and in conformity with" the provisions of this national policy.
- Centrally-Sponsored Schemes: Till 2008, relocation from PAs was funded through the centrally-sponsored beneficiary oriented scheme for tribal villages of project tiger areas, national parks and wildlife sanctuaries, framed by the Ministry of Environment and Forests (MoEF) in 1989-90 (Annex 1, p 47). The compensation package of Rs 1,00,000 under this scheme has been increased to Rs 10 lakh (1 million) in the scheme on "Integrated Development of Wildlife Habitats", in the 11th Five-Year Plan (Annex 2, p 47). A similar scheme is applicable for tiger reserves (TR).[3]
- Judicial Orders: In 2000, an order was passed by the Supreme Court, restraining all state governments from ordering the removal of timber, grasses, etc, from PAs. Though passed in the context of a state government trying to open up timber felling within PAs, the order has been interpreted by the MoEF to mean stoppage of all rights. Directions have gone to all state governments to cease the operation of such rights in all PAs. This has had a severe impact on the livelihoods of communities living inside PAs, paving the way for forced and induced displacement from within PAs.

1.3 Kinds of Displacement/Relocation

For the purposes of analysis, we distinguish three kinds of displacement or relocation, depending on the willingness (or lack thereof) of the displaced families to be relocated:

- Voluntary Displacement: When the concerned communities or families on their own and without situations created by the PA, ask for relocation.
- Forced Displacement: When the relocation takes place despite opposition or unwillingness from the concerned communities or families.
- Induced Displacement: When the relocation is sought or accepted by the communities or families concerned, due to circumstances created by the PA (by itself or in conjunction with other factors). These circumstances could include severe pressure and harassment by officials, deprivation of natural resources that are essential for their livelihoods, denial of basic developmental facilities, or "sandwiching" between a development project and the PA.

The category of "induced" displacement is crucial to understand, for it may be the most common one in recent times, and could get mistaken for "voluntary" displacement. With greater public visibility, mobilisation of communities, and involvement of civil society, it has become politically difficult to forcibly evict communities. Much more common now (either as a deliberate method or as a situation that gets created without any intention) is where communities accept or ask for relocation because life within the PA is very difficult.

Available literature does not necessarily distinguish amongst these three categories. Our attempt to place each of the displacement cases below into one of these categories should therefore be treated as provisional, subject to change if the information base changes.

This paper is mainly based on existing literature. No fresh fieldwork was done for this paper, though field observations by one of the authors (AK) have been used. The judgments expressed in this paper, on the nature and impacts of relocation cases, are also based on the views of the authors of the literature cited. There is a general paucity of independent and systematic documentation or long-term studies on PA-related relocation in India. The paper is, therefore, intended as a first-cut attempt at consolidating available information on relocation.

Some of the terms used in this paper are subject to varying interpretations. The concepts of "core" and "buffer", for instance, had no legal basis till recently,[4] but were used as an administrative measure. Often the "core" of a TR would be a national park, and the "buffer" would be a sanctuary and reserve forests or other lands. But this is not necessarily the case. The term is used here in the way the original source has used it, and no attempt has been made to make the usage consistent.

We have also made a mention of the governance of the relocation process. This indicates whether basic factors of good governance, such as participation of affected people, access to relevant information, transparency of decision-making, and so on, were in place. Again, available literature does not necessarily provide adequate information on this, so our assessment should be considered provisional and subject to change.

2 Status of Relocation

2.1 Early Relocation

Before studying the relocation cases that have taken place in India for a few decades, a brief historical review of relocation in India seems relevant (adopted from Rangarajan and Shahabuddin 2006, unless otherwise stated). The first relocation cases date

from the pre-independence times. Even during the 19th century, the British made some proposals for relocation of local communities. But the first actual relocation reportedly took place in 1908 from Kaziranga reserve in Assam, when two small villages were removed (and the another three in 1914).[5] In 1910, 10 villages in Dachigam in Kashmir were removed from shikar reserves.[6] Then, Baigas (an indigenous or tribal people) were displaced by the British from the Banjar Valley Reserve Forest (now the Kanha National Park) in Madhya Pradesh. Even when no displacement took place, the British controlled forest and hill communities and limited their customary rights over lands and natural resources. Soon after 1947, there were some displacement cases in the Sariska Wildlife Sanctuary in Rajasthan, in the Gir Forest in Gujarat and in the Kanha National Park in Madhya Pradesh. But relocation from PAs really became common during the 1970s, after the passing of the WLPA in 1972, and the launching of Project Tiger in 1973. We will review these post-1972 relocation cases later.

2.2 Scale of Relocation

Precise figures on the number of people displaced from PAs are not available (itself an indication of the casual way in which this has been treated by state and central governments). Extrapolating from figures obtained from about 300 PAs in the mid-1980s (Kothari et al 1989), the number could be about 1,00,000. Other observers, however, put the figure at over 6,00,000 (Fernandes and Paranjpye 1997), the basis of which is not clear.

The Tiger Task Force (2005) estimated that in the case of TR, 80 villages with 2,904 families and a population of 46,341, had been relocated.

The figures collated in this review, appearing in Annex 3 (posted on the EPW web site along with the text of this paper), suggest a relocation of between 15,000 and 20,000 families. This comes close to the estimate of 1,00,000 (people) stated above. But there could be serious under-reporting, and therefore, the figure may be greater. It is an indication of the general lackadaisical approach of the government to relocation, that no accurate or comprehensive figures exist with either the forest department (FD) or any other government agency.

It is worth pointing out here that displacement from PAs is a very small percentage of overall displacement of people, with the other causes (especially "development" projects like dams and mining, and processes of urbanisation) leading to far larger numbers. One estimate based on numerous studies, is 60 million (Mathur 2008).

2.3 Review of Specific Relocation Cases

We provide brief case studies of displacement (past, ongoing, or proposed) from PAs, with the following information where available: year of displacement/relocation; number of villages/families displaced from this PA; the place where these villages/families were relocated to; governance of the relocation process, the kind or nature of relocation (voluntary, induced or forced). These are arranged statewise.

The data available at Annex 3 (posted on the EPW web site along with the text of this paper) sums up the main information on relocation cases given in this section.

In virtually all cases, the officially stated reasons for displacement were "human pressures" or "human-wildlife conflicts", so we have not mentioned these in each case. Only where there is a unique or uncommon reason not found universally, have we mentioned it.

The legal status of the PA and the date(s) of notification are largely taken from Kutty and Kothari (2001).

- Nagarjunsagar-Srisailam Sanctuary and Tiger Reserve, Andhra Pradesh (AP): Declared the Nagarjunsagar Wildlife Sanctuary in 1978 and the Nagarjunsagar-Srisailam TR in 1982. One village (16 families) was relocated. There is no detailed information on when the relocation took place and whether it was forced, induced or voluntary. There are still 24 villages in the core area and 149 in the overall reserve (MOEF 2005).
- Pakhui-Nameri Sanctuary/National Park and Tiger Reserve, Arunachal Pradesh – Assam: Declared Nameri Sanctuary in 1985, intended national park in 1997, and finally notified national park in 1998; Camo Sanctuary in 1977, converted to Pakhui Sanctuary in 2002; Nameri was declared a TR in 1999, and Pakhui in 2002. Around 1,000 Taungya[7] families are under the process of relocation from the periphery of Nameri.[8] There are still eight villages in the overall TR (MOEF 2005).
- Asola Sanctuary in Delhi: Declared in 1992. Two villages have been relocated, but no further details are available. A third village is slated for relocation in the near future, though the residents are protesting.[9]
- Gir National Park, Gujarat: Declared in 1975, this is the only remaining home of the Asiatic Lion. Between 1972 and 1986, 60 Maldhari[10] hamlets (580 families) were relocated in 14 forest settlement villages in the buffer zone of the park (Sharma 2003). According to another source,[11] between 1973 and 1983, 845 Maldharis families were relocated from this park. As stated by Sharma, it seems that these displacements were forced. Moreover, according to Sharma, this forced displacement was very conflict-ridden due to centralised governance by the FD, some delays in the payment of compensations and mismanagement. It was believed to be disastrous for the Maldharis, as they were pushed from a pastoralist existence into an agricultural one without any development of skills necessary for this drastic change. Moreover, there are still 54 hamlets in the overall national park and 65 people living in the core zone (Devullu et al 2005).
- Bandipur National Park and Tiger Reserve, Karnataka: Declared a sanctuary in 1931, the Venugopal National Park in 1941, a TR in 1973-74, and finally, the Bandipur National Park in 1985. Three villages (417 families) were removed from the core area in the multiple use areas (MUAS) of the park. But there are still 54 villages in the core area and 200 villages adjacent to the park (MOEF 2005).
- Bhadra Sanctuary and Tiger Reserve, Karnataka: Declared a sanctuary in 1974 and a TR in 1998. Between 1974 and 2002, 16 villages (736 families) were displaced outside the sanctuary, in Halli and Kelaguru (Kumar 2003). The first relocations were reportedly forced, but after 2000, the remaining villages were apparently voluntary relocated. As reported by Kumar, between 1974 and 2000, the governance of the relocation process was really bad: lack of transparency, very poor communication

between the FD and the villagers (they heard about the relocation decision only in 1982) and many conflicts (protests, fires, demonstrations, petitions). Thus, the villagers resisted the relocation for 26 years. In 2000, the relocation process finally started with fewer conflicts, thanks to a better governance and coordination between the FD, local non-governmental organisations (NGOs) and the villagers. Indeed, there was a better participation of the villagers in the process and an improved relocation package. Thus, the relocation process in Bhadra is considered by some as an example of good governance. There are still five villages in the TR (MOEF 2005).

- Kudremukh National Park, Karnataka: Though relocation of a number of villages has been proposed for many years, no official process has started due to local opposition and other factors. However, NGOs have negotiated relocation of some families that are deep inside the forest; eight families have been resettled from one settlement (Karanth and Karanth 2007). The process is reported to have been consultative, with each family being provided facilities and amenities that they did not have access to earlier.
- Rajiv Gandhi National Park (or Nagarhole National Park), Karnataka: Declared in 1983. In the early 1990s, about 350 tribal families were displaced by force just outside the park area, without any adequate compensation for the loss of livelihoods from the forests and without any land available for agriculture, which led to some conflicts with officials and considerable opposition to relocation (Nadkarni 2001). According to another source,[12] drinking water facilities at the new site were in some cases not adapted to the needs of the relocated tribals. Between 1999 and 2002, 12 tribal villages[13] (250 families) were voluntary relocated in Nagapura (Chakrabarti 2003). The governance of the relocation process was reportedly good, with the formation of tribal committees, transparency, participation of villagers and an adequate relocation package. According to an official report (MOEF 2006b), 105 other tribal families are to be displaced from the park.
- Bandhavgarh National Park, Madhya Pradesh (MP): Declared national park in 1968, and TR in 1993-94. One village (Bathan) was relocated in 1972, and reportedly compensation had not been paid to the people evicted even till the early 2000s, due to which many of the remaining villagers are doubtful about moving out (Sawhney 2003; latest situation not clear). Another village (Sanhatola) with eight families was also moved out, it is not clear when it happened.[14] There are six villages in the core area and 75 villages in the overall reserve (MOEF 2005).
- Bori-Satpura-Pachmarhi Sanctuary, Satpura National Park and Satpura TR, MP: Declared in 1977 as the Bori and Pachmarhi Wildlife Sanctuaries. In 1981, Satpura National Park was notified and in 1999, the Bori-Satpura-Pachmarhi TR was created. Also in 1999, Pachmarhi in MP became a biosphere reserve. One village (Dhain) was relocated outside the TR, in the Dobjhirna Forest (Wani and Kothari 2006). According to these authors, the relocation process lacked transparency and participation of the villagers in the process; it also had some basic faults in not making water and cultivable land adequately available immediately on relocation, though subsequently serious attempts have been made to rectify the situation and to provide some livelihood options. There are still six villages located in the national park, and 60 villages in the overall reserve. There was earlier a plan to relocate 50 villages (4,000 families), which is not accepted by the locals (MOEF 2005). Currently, officials are talking of relocating between 13 and 16 villages.[15]
- Kanha National Park and Tiger Reserve, MP: One of India's largest PAs, it was declared a national park in three separate segments in 1955, 1964 and 1970, and a TR in 1973-74. At this time, 24 villages (around 650 families) were displaced outside the boundaries of the TR. These villages were reportedly relocated voluntarily. Some villagers resisted at the beginning of the process, but after a better understanding of the relocation package, this resistance dwindled (Panwar 2003). It was most likely the first relocation from a PA after independence. As reported by H S Panwar, the then director of the TR, this relocation was made in a participatory and transparency way; youth and elders of the villages participated in decision-making and in the implementation of the relocation package. The park officials apparently had only an advisory role. More recent research, however, suggests that there was a significant "discontent and disillusionment following the displacement of the locals leading to an ambiance of latent conflict", which also showed up in numerous acts of illegal use of resources from within the park, at least some as a deliberate way of expressing resentment (Mukherjee 2009). There are still 19 villages located in the core area and 169 villages in the overall reserve (MOEF 2005).
- Kuno Wildlife Sanctuary, MP: Declared in 1981, and chosen to be the second home of the Asiatic Lion (Asiatic Lion Reintroduction Project). Between 1996 and 2002, 24 Sahariya tribal villages (at least 1,400 families) were relocated on the outskirts of the sanctuary, around the Agraa village (Sharma and Kabra 2003). According to Sharma and Kabra these displacements were a mix of induced and forced. Governance of the relocation process reportedly had several positive elements, including sincerity in the approach, consultation and communication with the communities, and other aspects. However, despite this, economic and social impacts on people have been quite severe, including the loss of forest-based livelihoods and decline in agricultural productivity.
- Madhav National Park, MP: Declared in 1958. One village (102 families) was voluntary displaced from the park (MOEF 2005). There is no detailed information on when the relocation took place, or of its nature and governance.
- Panna National Park and TR, MP: Declared in 1975 as a wildlife sanctuary, it became a national park in 1982 and a TR in 1994. Three villages (210 families) were voluntary displaced from the reserve in the 1980s,[16] and the relocation of eight other villages is in progress.[17] According to one source, there are still 45 villages in the reserve (MOEF 2005); another says there are only five;[18] the Project Tiger web site speaks of 15 enclaved villages.[19]
- Pench Wildlife Sanctuary, National Park, and TR (MP and Maharashtra): Declared a national park in Maharashtra in 1975, a sanctuary in 1977 and national park in 1983 in MP. Then, in 1992, the park in MP, and in 1998 the park in Maharashtra, became a TR. Between 1973 and 1990, more than 10,000 people were evacuated and resettled (for the usual stated reasons, but

some also due to a dam) (Devullu et al 2005). This displacement was conflict-ridden because of mismanagement by FD, evidence of corruption and disagreements between the local communities and the FD. There is still one village in the core area and 100 villages in the TR (MOEF 2005).

- Sanjay National Park, MP: Declared in 1981. One village was displaced from the park.[20] There is no detailed information on when the relocation took place, or of its nature and governance (see also Pench, in Madhya Pradesh above).
- Melghat Sanctuary and TR, Maharashtra: Declared a wildlife sanctuary in 1967 and a TR in 1973, a part of which was declared the Gugamal National Park in 1987. Between 1999 and 2002, three tribal villages (Bori, Koha and Kund, 92 families) were voluntary relocated outside the TR near Akot tahsil (Rithe 2003). According to Rithe, the relocation was well-managed and transparent, there was a good communication with the villagers, who formed some committees and participated in the relocation package. However, other reports suggest that some of the provisions included in the relocation package have not been given yet, like full compensation, adequate water facilities, pasture land and community latrines (Jamwal 2005). Moreover, there are still 19 villages (1,585 families) in the sanctuary area, and 58 villages in the overall TR; the former are proposed to be relocated with the declaration of the area as a critical tiger habitat under the Wild Life Amendment Act 2006.
- Tadoba-Andhari National Park and TR, Maharashtra: First declared Tadoba Sanctuary in 1931, upgraded to National Park in 1955; Andhari Sanctuary declared in 1986, Tadoba Andhari Tiger Reserve was formed in 1995. Since 1986, six villages (527 families) have been slated for relocation (which seems induced) outside the TR, in Kaiselghat near Mul. Only two villages out of six have started to be displaced. The governance of the relocation process is reported to be poor. According to Bhagwan and Ghate (2003), the villagers have never been consulted and never participated in the process. Additionally, those relocated had legal title to their lands earlier, but the lands allocated to them have remained "forest" land, and therefore, without legal title.[21] A number of non-timber forest produce on which their lives are heavily dependent, are not available at the resettlement site. About 550 hectares of forest with significant flora diversity has been cleared for the resettlement (Mehra 2004). The villages still in the reserve have no rights to natural resources and many of the governmental schemes (health, land development, education, tribal schemes, etc) do not reach them.
- Dampa Sanctuary and TR, Mizoram: Declared in 1974, and again in 1985 due to a procedural lapse, and declared a TR in 1994.[22] Twelve settlements are reported to have been relocated, possibly forcibly and with poor rehabilitation, affecting already marginalised ethnic minorities Chakma and Reang; further details are not available (PEACE et al 2006). Sixty-one villages are still located in the overall reserve (MOEF 2005).
- Phawngpui (Blue Mountain) National Park, Mizoram: Notified in 1997. One village has been relocated in 1993 (Gupta and Sharma 2005), but no further details are available.
- Chandaka-Dampara Wildlife Sanctuary in Orissa: Declared in 1982. According to one source (MOEF 2005, citing Project Tiger), three tribal villages (188 families) were voluntarily relocated from Chandaka-Dampara Wildlife Sanctuary after 1984. Other sources, however, give a different picture. In 1994, 85 tribal families were displaced in an induced way from the sanctuary and relocated in Krishnanagar and Tulsadeipur villages (Kothari and Asher 2005). Three hundred and ninety eight other families refused to be relocated and chose to stay inside the sanctuary. According to these authors, the governance of the relocation process was really bad, without any participation of the tribals and written contract. Moreover, there were serious administrative delays in the process, since the provisions included in the relocation package had not been given to the displaced tribals even a decade later. Sustained pressure by NGOs like Vasundhara has more recently (more than a decade after relocation) led to attention by the state assembly, a visit by the Public Accounts Committee in May 2006, and supply of agricultural land, homestead land titles, and developmental facilities.[23]
- Simlipal National Park, TR and and Biosphere Reserve, Mizoram: First created as a wildlife sanctuary in 1970, in 1973 it became a TR. Then, the North Simlipal National Park was notified in 1986. Lastly, the area became a biosphere reserve in 1994. Three villages (Jenabil, Bakua and Kabatghai, 72 families) were displaced from the core zone of the reserve (MOEF 2005). There is no precise information on when the relocation took place. According to another official report (MOEF 2006b), this relocation process was a failure because the new land was not suitable for irrigation. There are still villages in the core area and 65 in the overall reserve (MOEF 2005).
- Ranthambore National Park and TR Rajasthan: Declared the Sawai Madhopur Sanctuary in 1955, and a TR in 1973, of which the core was declared the Ranthambore National Park in 1980; the TR includes the Kailadevi Sanctuary (declared 1983) and the Sawai Mansingh Sanctuary (declared 1984). Between 1975 and 1979, 12 Van Gujjars[24] villages (195 families) were displaced outside the park, in Kailashpuri and Gopalpura (Devullu et al 2005). There are still four villages in the core area of the park and 25 villages in the overall park (MOEF 2005).
- Sariska National Park and TR, Rajasthan: Declared a sanctuary in 1959, a TR in 1978-79, and a national park in 1992. In 1980, one village (71 families) was removed by force to avoid conflicts with tigers. The relocation was very ineffective and some villagers even came back to their original settlements within the PA. There are still 24 villages in the core zone of the park and 246 in the buffer zone (MOEF 2005). According to this report, the relocation of 11 villages from the core zone is already planned. This relocation is proposed specifically to enable the reintroduction of tigers, which were found to have disappeared by 2005. Studies suggest that there is little readiness in the government for a satisfactory resettlement process, promises of participatory planning are being broken, most people have little idea of the relocation package, and there is likely to be substantial economic loss for villagers if relocated, apart from conflicts with the host populations at the proposed resettlement sites (Shahabuddin et al 2005, 2007).
- Corbett National Park and TR, Uttarakhand: Declared a national park in 1936. It was one of the first PAs to be designated a TR in 1973. Between 1973 and 2001, four villages (411 families) were displaced near Ramnagar and Kashipur, in what appears to be a

mix of voluntary and induced factors including serious wildlife related damage and lack of access to development projects (Negi 2003). According to Negi, the relocation process was transparent and participative: creation of village committees, meetings between the different villages and good participation of villagers in the relocation package. There are still 25 villages in the overall TR (MOEF 2005), of which relocation of one (Laldhang) is in the final stages, and of another two (Teria and Pandh) is proposed.[25]

- Rajaji National Park, Uttarakhand: Declared in 1983. At the same time, 1,390 Van Gujjars families were proposed to be displaced outside the park in Pathri and Gaindikhata near Haridwar; this was forcible and encountered substantial opposition (Kaushal 2003; Dasgupta 2003). According to Kaushal, these families were threatened into moving into the resettlement colony. Moreover, as reported by Kaushal and Dasgupta, the governance of this forceful resettlement was really bad: coercion, exploitation of the Van Gujjars, oppression by the FD (illegal fines, threats, cases of beating, etc) and no participation in the relocation plan. Forest officials are reported to have violated National Human Rights Commission orders safeguarding the rights of the Van Gujjars. Subsequent attempts in a second phase relocation appear to have been better handled, with involvement of NGOs like Friends of Doon.[26] Additionally, one Taungya village has been relocated (MOEF 2008b). There remain some Gujjar families, three Taungya villages, and one settlement of Gothiyas, all of which are slated for relocation (ibid). The standing committee of the National Board for Wildlife has also recommended the relocation of two revenue villages (with 451 families) that are enclaved within the park (ibid).
- Dudhwa National Park and TR in Uttar Pradesh: Declared in 1977 as a national park and a TR in 1987. Twenty-four families from the village Surma were relocated outside the TR. According to an official report (MOEF 2006), "in the Dudhwa Tiger Reserve, villagers filed a petition against relocation, as court's order for financial help to villagers for construction of houses was not implemented". The relocation thus appears to have been forced. There is still one village in the core area and 37 villages in the overall reserve (MOEF 2005).
- Buxa National Park and TR in West Bengal: Declared a TR (out of Reserve Forests) in 1982, notified a sanctuary in 1986, and a national park with initial notification in 1992 and final in 1997. One village (Bhutia Basti, 33 families) was displaced from the park in 1994, near Patkopara tea garden (Khalid 2003). Moreover, as stated by Khalid, voluntary relocation of two other villages (Bhutri and Bangdoba) is already planned but still not finalised. Bhutia Basti was flooded in 1993, which may be one reason it was relocated. The FD reportedly governed the relocation of Bhutia Basti in a very centralised way. Then, Bangdoba was also flooded in 1998 and 1999, and hence, is waiting for its relocation. There are an additional 89 villages in the tiger reserve (MOEF 2005). A recent report by the comptroller and auditor general has chastised the Buxa authorities for not utilising allocated money for relocation of the other villages (Parshad 2007).

According to unpublished data from a survey conducted by the Indian Institute of Public Administration, there are also some cases of relocation in the following PAs, for which further information is not available to us: Balphakram NP, Meghalaya;[27] Barnawapara WLS, Chhattisgarh; Chinnar WLS, Kerala; Hadgarh WLS, Orissa; Kaziranga NP, Assam; Pakke WLS, Arunachal Pradesh; Sunabeda WLS, Orissa.

2.4 Future Relocations?

Several other national parks and sanctuaries in India continue to have communities living inside. It is likely that there will be proposals for relocation in the following situations: National parks, since the WLPA mandates this; core zones of sanctuaries, though there is no legal necessity to relocate villages in such areas, critical wildlife habitats declared under the Scheduled Tribes and Other Traditional Forest-Dwellers (Recognition of Forest Rights) Act 2006. Villagers can be relocated from these with their consent. As of late 2008, there are sporadic reports from some states that the government is planning such relocation. However, no official proposals have yet been made to the MOEF, as required under the Act's provisions. TRs, which will now be notified under a new legal category provided for in the Wild Life Amendment Act 2006; under this, critical tiger habitats are to be made "inviolate" though only with local community consent.

Examples where these conditions may apply include many of the PAs listed above, where villages still exist inside, and some additional ones below:

- Palamau Wildlife Sanctuary and National Park in Jharkhand was created as a TR in 1973 and was notified as a wildlife sanctuary in 1976 and as Betla National Park in 1986. More than 200 tribal villages use the reserve as a resource catchment, three villages are still in the core zone of the reserve and 16 are located within MUAs and habitat management zone (Mishra 2003; MOEF 2005).
- Manas National Park in Assam was declared a TR in 1973. It was notified as a biosphere reserve in 1989 and as a national park in 1990. The village Agrang is still in the core zone of the park, 167 villages are located in the overall tiger reserve (MOEF 2005).
- Valmiki Sanctuary in Bihar was declared in 1978 and became a TR in 1989. No village is in the core area, 20 villages are in the buffer zone and 142 villages (81,000 persons) are located on the fringe of the reserve (MOEF 2005).
- Pin Valley National Park in Himachal Pradesh created in 1987, contains 17 villages (1,600 persons) in the periphery of the park and 17 summer settlements cultivated by Buddhist tribals inside the park.[28] Namdapha TR in Arunachal Pradesh was created in 1982. Two villages live within the core area (MOEF 2005).
- Indravati TR in Chhattisgarh was created in 1982. There are 56 villages in the core area of the reserve (MOEF 2005).
- Kalakad-Mudumalai TR in Tamil Nadu, declared a sanctuary in 1976, and TR in 1990, contains 15 villages in the core area (10,000 tea workers and 102 Kani tribal families) and 145 hamlets on the fringe area (MOEF 2005).

3 Impacts of Relocation

We now review the main environmental, socio-economic and other impacts of the displacement of local communities from PAs in India. As far as possible, we do this for both the old and the new sites (before and after relocation). The impacts of each relocation case are detailed in the Annex 3 (posted on the EPW web site along with the text of this paper). Unfortunately, the information is rather incomplete, as we found a very few studies of

post-relocation, and almost none that have assessed the situation over a long-term period.

3.1 Environmental Impacts

The main expected environmental impact of relocation at the old site is the decrease of human pressures and disturbance. However, there are only a few studies and mostly anecdotal evidence of this. After relocation of 411 families from Corbett TR in Uttarakhand, the tiger population has increased by 52% over the period 1984-2002; and 273 ha of land were restored back to prime tiger habitat (MOEF 2006b), though it is not clear if there may have been a number of other factors involved in these changes such as improved management and increasing resources for the TR. Similarly, it is reported that the hard-ground subspecies of the Swamp deer or *barasingha* (*Cervus duvaucelii*), once down to only 66 in the 1970s, increased to over 400 after relocation of villages from the Kanha National Park (see http://www.india-wildlife-tours.com/wildlife-packages/national-parks-in-india/swamp-deer-in-kanha-national-park.html; also Panwar 1978). Karanth (2006) reports the recovery of prey and predator populations in areas that have been freed of human presence.

The other reported impacts at the old site are the decrease of forest fires and human-wildlife conflicts, leading to a better conservation. On the other hand, local people and scholars also point out that relocation sometimes leads to reclamation of grasslands and grassy blanks by the forest, reducing the space for herbivores and grassland birds, and indirectly impacting predators (Rangarajan and Shahabuddin 2006). This then necessitates the use of fire or grass cutting as a management tool, as in Kanha and Corbett Tiger Reserves.

It is interesting that in many cases the relocation of people has been undertaken or sought under the assumption that it will help sustain the current "natural" features of the landscape, without realising that these features may actually be a result of long-standing human interactions with the resources. This was shown, for instance, in the case of a number of protected areas in the United States, such as those with extensive prairies that were a result of repeated fires lit by the natives (see, for instance, Schama 1995 in the case of Yosemite).

Indeed, there appear to be very few systematic or long-term studies to show the changes that take place at sites from where villages are relocated. In their absence, the assumption with which relocation is carried out remains, in many or most cases, only an assumption.

At the *new (rehabilitation) site*, the main environmental impact is the destruction or degradation of natural ecosystems. This is directly due to clearance for cultivation and housing sites, roads, etc, or indirectly due to increased biotic pressure by the relocated human and livestock population. Again, there are very few systematic studies on this aspect. In the case of the relocation of Dhain village from Satpura Tiger Reserve in Madhya Pradesh, over 30,000 trees were felled to prepare the rehabilitation site, but there is no assessment of the loss of wildlife that this entailed (Wani and Kothari 2006). The relocation of villages from the Tadoba National Park has claimed 550 hectares of biologically diverse forest, in which forest officials and local people have reported the presence of tiger, leopard, and other wildlife including substantial floral diversity (Dilip Gode, VNCS, personal communication 2007; Mehra 2004).

We could not find a single study of the ecological costs and benefits of relocation, comparing what happens at the old site to what happens at the rehabilitation site. This is a shocking gap, given that relocation is always justified from the point of view of reducing pressures and securing wildlife habitats.

3.2 Socio-economic Impacts

Relocation results in a host of socio-economic impacts. In many cases, especially relating to tribal communities that have been relatively isolated from the outside world, the displacement is traumatic from both economic and cultural points of view. From a predominantly non-monetised economy to a money-dominated one, and from relatively isolated cultural existence to one in which other cultures start imposing themselves, the transition is painful. In many cases, free access to survival and livelihood resources such as water, fuel, fodder, medicinal plants, and wild foods, has to be replaced by purchasing these goods in the market, which opens up such communities to serious exploitation.

In the case of land-based rehabilitation, the quality of the new land is an important factor. Often the new land given is degraded forest land. Fertility of such lands varies from good to very poor, and there could be situations where the land is not even cultivable at the time of the shift (e g, in the case of relocation from Rajaji National Park in Uttarakhand, see Dasgupta 2003; or in the case of New Dhain village resettled from Satpura Tiger Reserve in Madhya Pradesh, where it took a year after relocation for the land to be fully cleared and readied for cultivation, see Wani and Kothari 2006).

For communities dependent on livestock, the availability of grazing lands and fodder is crucial. In many cases no provision was made for grazing land or fodder. The loss of livestock in the relocation process is also quite frequent, which can lead to loss of income[29] (e g, in the case of relocation from Rajaji National Park in Uttarakhand, see Dasgupta 2003). But there are also other cases in which pasture development is part of the relocation package (e g, in the case of relocation from Kanha National Park in Madhya Pradesh, see Panwar 2003).

For communities heavily dependent on non-timber forest produce or aquatic produce at their traditional locations, there is often a severe loss since the resettlement sites do not have the same kind or level of resources. This impacts both the household economy and in particular aspects like nutrition, as also market economy and in particular earnings from forest produce. In Tadoba, for instance, the sites earmarked for resettlement have far less quantities of species like bamboo, mahua (*Madhuca indica)* and tendu (*Diospyros melanoxylon*), which form a substantial part of the income for villagers at their present pre-relocation sites (Bhagwan and Ghate 2003).

Another essential aspect is the availability of water sources at the new site. In some cases, displaced people have to face serious issues of water scarcity (for both drinking and irrigation). This was the experience in the case of relocation from Pench National Park in Madhya Pradesh. Consequently, agriculture and horticulture are sometimes impossible at the new site, leading to loss of food security and income. But in other cases, the relocation

package includes provisions like drinking water and irrigation facilities (e g, in the case of relocation from Melghat PA in Maharashtra, see Rithe 2003).

Equity (or inequity) in distribution of land and compensation during the relocation process is another crucial factor. In some cases, the allocation of land is very equitable ("land for land") and land is provided to landless too (e g, in the case of relocation from Kanha National Park in Madhya Pradesh, see Panwar 2003). But in other cases people can obtain a cultivable land smaller than their land at the old site, leading to rivalry between families and loss of income from agriculture. Often, the landless may receive very little or nothing (this is perhaps especially so for the very early relocations).

Some relocation packages provide land and agriculture development schemes, which can improve the livelihoods of the displaced families (e g, in the case of Bhadra Sanctuary, see Karanth and Karanth 2007).

Some families can also have no access to landownership or land titles in the relocation process (e g, in the case of relocation from Rajaji National Park in Uttarakhand, see Dasgupta 2003). This is particularly problematic where land legally classified as forest is given for relocation, and its legal status is not changed, exposing the relocated population to future uncertainties created by legislation related to forests (e g, in the case of Tadoba-Andhari Tiger Reserve, Rucha Ghate, Shodh, personal communication, 2007).

In some relocation cases there is a drastic change in occupation, with little time for the displaced communities to adjust and learn new skills. For instance, in the case of Maldharis from Gir National Park (Gujarat) (Sharma 2003), pastoralists were forced to shift to settled agriculture at the new site. Most families did not know how to make this transition, and it took years for people to settle down.

In some cases (e g, New Dhain village relocated from Satpura Tiger Reserve, Madhya Pradesh, see Wani and Kothari 2006), houses at the new site are constructed by or with the families themselves, leading to a more satisfactory outcome.

Some communities who did not have access to local and central development schemes at the old site inside the PA (because of remoteness and the inability of government services to reach there), can get funds from these schemes after relocation (e g, in the case of relocation from Melghat Tiger Reserve in Maharashtra, see Rithe 2003).

Some relocation packages provide access to existing or new education, electricity, transport and health facilities at the new site (e g, in the cases of relocation from Kuno Wildlife Sanctuary in Madhya Pradesh, though with the usual inefficiencies plaguing rural development departments in general, see Sharma and Kabra 2003 and Chouhan 2003; and Bhadra Wildlife Sanctuary in Karnataka, see Kumar 2003 and Karanth 2005), which can change the lives of the displaced families. Moreover, transport facilities allow a better access to markets and developed towns around the new site.

Lastly, relocation of villages can lead to socio-economic conflicts with the locals at the new site (as is the case with the New Dhain relocated village vis-à-vis the existing Doobjhirna village, outside the Satpura Tiger Reserve, see Wani and Kothari 2006). Indeed, the land chosen for resettlement is sometimes already used by some people living in the surrounding areas. So the displaced families can be in conflict with the locals for access to natural resources and income generation at the new site. It can even lead to physical clashes in some cases.

There seems to be no gender-differentiated impact assessment of relocation from PAs. Given the much greater day to day dependence of women on natural resources, and their greater vulnerability to socio-economic changes, it can be assumed that displacement has greater and special impacts on them compared to men. However, this aspect needs further study.

Having to suddenly live in another cultural environment, with other values and references, can be traumatic. They are expected to forget their old culturally important sites and beliefs (including sacred natural places), and a common question asked by them is: "we can move, but how will our gods move?". They also have to adapt themselves to new cultural concepts (law, finance, state, development, etc). There could also be serious psychological impacts, given that many families lead a very uncertain life for at least some time after the relocation. There appear to be no studies on these aspects in relation to relocation from PAs.

3.3 Other Impacts

When local communities are displaced from PAs by force or through inducement, or when the relocation package is not adapted to their livelihood needs, there are almost always conflicts between FD officials or PA authorities and local communities. But even after relocation takes place, the relationships between the displaced families and the authorities can remain tense. Often, when local communities are forced or induced to be relocated, or when the relocation package is not adapted to their livelihood needs, they try to come back at the old site or go back to their old economic activities. Thus, there are often conflicts occurring between them and PA authorities during and after such relocation processes.

4 Conclusions and Recommendations

In this article, 28 cases of displacement from PAs all over India were reviewed. These cases were from the 1970s onwards, involving between 15,000 and 20,000 families (see Annex 3, posted on the EPW web site along with the text of this paper). But this review may be incomplete and these figures are likely to be underestimates. The quality of relocation is widely varying, with a majority being forcible or induced, and a very large number being non-transparent, conflictual, mismanaged and non-participatory. In a few cases, the governance and outcomes of the relocation process were reportedly good. Unfortunately, information on the ecological and socio-economic (including cultural) impacts of relocation is scarce. Many stated impacts are based on assumptions rather than on systematic assessments.

We list below some recommendations that would improve the process of deciding about whether relocation is necessary, and about the actual relocation processes and packages.[30]

First, there is an urgent need to build a national database on past and ongoing relocation from PAs, including the scale, and the ecological and socio-economic impacts (including gender-differentiated effects).

There is a need for a process based on clear and comprehensive knowledge (traditional and modern), and based on the participation

of all concerned, that determines where and how much relocation is necessary. It should be noted that this is now required for TRs under the Wild Life (Protection) Amendment Act 2006, and for all PAs under the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006.

Much greater transparency and participation of the concerned families in relocation processes is needed. A full discussion should be facilitated or encouraged in the gram sabha or village assembly, along with the creation and involvement of village committees. The concerned families should be aware of the conservation imperatives that require relocation. During these meetings, they could choose whether they prefer to be relocated outside the PA with a suitable package (*relocation scenario*), or to go on living inside the PA with rights over land and natural resources, but also with conservation related restrictions (*coexistence scenario*). Special attention needs to be given to marginalised sections of society, including women.

If the concerned families choose the relocation scenario, officials should show to the village committee a range of potential new sites for resettlement. Some ecological and socio-economic impacts assessment should have been done beforehand. These would include an assessment of the wildlife/biodiversity impacts of relocation at the old and new sites, the potential for land development and provision of drinking water and irrigation facilities, potential for livelihood generation at the new site, potential access to markets, transport, energy, education and health facilities, potential for social conflict with existing villages at the new site, and so on. A choice of two to three appropriate sites (where these impact assessments are positive) should be proposed to and visited by the communities concerned. At the end, these committees could choose one of these potential sites.

Subsequent to the above actions, an agreement should be signed between officials and the villages committees. All the provisions given in the relocation package should be detailed in this agreement. Moreover, the timeline for resettlement and other relevant conditions should also be included. This formal agreement would help to institutionalise the relocation process, reduce arbitrary actions, and avoid potential misunderstandings on the given provisions.

The new site and the provisions given in the relocation package should be prepared *before* the relocation physically takes place. This means that the land would be cultivable, water would be available, and there would be access to basic livelihood and developmental facilities (including basic health, energy, and educational options). Some aspects like housing could be completed as the relocation is taking place, since people often want to determine the kind of houses they want. They should also immediately have access to alternative employment opportunities to compensate the loss of income caused by the relocation.

The relocation process is only one step, it needs to be followed up by a longer-term rehabilitation process. This is especially to enable the community, and in particular the disprivileged and weaker amongst them, to adopt to the new site, to face the trauma of displacement, and to secure a long-term livelihood option. In most past relocation processes, this aspect has been especially missing.

Finally, there needs to be a transparent, participatory monitoring and assessment process. This could alert relevant agencies to problems in the rehabilitation process, and provide indicators for corrective measures to be built in. Ideally this should be done by an agency independent of both the official agencies involved in relocation and the communities themselves.

The steps outlined above would greatly improve the relocation scenario in India. But as we noticed above, local communities could also choose an alternative scenario ("coexistence" or "integrated conservation and livelihood") in which they would go on living inside the PA with rights over land and natural resources to secure their livelihoods, and a role in decision-making, but also with restrictions on resource use for the purpose of conservation. Existing schemes for "ecodevelopment" aim to partially achieve this, at least as far as alternative livelihood sources are concerned. But the initiatives need to go beyond this into joint or collaborative management, and the recognition of people's own role in conservation. The recent (2006) amendment to the Wild Life (Protection) Act, and the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006 have both opened up some possibilities towards this.[31] However, in this paper we are not going into the coexistence issue.

Some community-based initiatives reconciling livelihood security and biodiversity conservation in rich biodiversity sites can also be alternative scenarios to relocation. These sites, called community conserved areas (CCAs), are traditional, sacred or even recent sites where local communities have decided to conserve their local biodiversity in order to secure their livelihoods or because of political, cultural, spiritual, or ethical reasons. This category of conservation sites has been internationally recognised since 2003 as a powerful tool to conserve wildlife and biodiversity, reduce poverty, and secure livelihoods of local communities.[32] There are thousands of CCAs in India. But the recognition of CCAs in India has been very slow and these sites are not yet centrally or appropriately integrated into wildlife laws and policies (Pathak et al 2006; Pathak 2009).

NOTES

1 A data table summing up the information on relocation cases is posted on the *EPW* web site along with this article.

2 It should be noted that many international agencies including bilateral and multilateral donors have adopted a wider definition of displacement, to include not only physical eviction, but also denial of access to survival and livelihood resources (Cernea 2006). In this paper, while we acknowledge the validity of this wider definition, we have restricted the scope of the term displacement to physical eviction.

3 See http://projecttiger.nic.in/whtsnew/format_relocation_plan_pt.pdf

4 In 2006, these terms were introduced into the Wild Life (Protection) Act in relation to TR.

5 Data reported by Assam Forest Department as part of a survey of wildlife protected areas in India, carried out by Indian Institute of Public Administration and Centre for Equity Studies (CES 2003).

6 It is ironic that the Dachigam National Park, now Kashmir's most famous PA, still retains the name meaning "10 villages".

7 Communities settled inside forests in the past by the government, for forestry work.

8 http://projecttiger.nic.in/nameri.htm

9 Ravi Agarwal, Toxics Link, personal communication 2007.

10 Maldharis are traditional pastoralists depending almost completely on livestock related livelihoods linked to the forests.

11 JPAM Update, No 10, 1996.

12 PA Update, Nos 27 and 28, 2000.

13 Karanth and Karanth (2007) put the number of villages at nine; they also state that this phase of relocation was better handled.

14 H S Pabla, MP forest department, personal communication, 2007.

15 Chief wildlife warden, Madhya Pradesh, personal communication, 2006.

16 http://projecttiger.nic.in/panna.htm

17 http://www.forest.mp.gov.in/wildlife.html, accessed 2007.

18 H S Pabla, MP forest department, personal communication, 2007.

19 http://projecttiger.nic.in/panna.htm

20 http://www.forest.mp.gov.in/wildlife.html, accessed 2007.

21 Rucha Ghate, Shodh, personal communication, 2007.

22 Project Tiger web site.

23 Sweta Mishra, Vasundhara, personal communication, 2007.

24 The Van Gujjars are a nomadic pastoral community living in northern India.

25 Rajiv Bhartari, Uttarakhand FD personal communication, 2007.

26 JPAM Update No 18, October 1998.

27 The situation here is not very clear, this may be more a case of people selling their lands and moving out, then of displacement caused by acquisition of land.

28 http://hplahaulspiti.gov.in/pinpark.htm.

29 E g, in the case of relocation from Rajaji National Park in Uttarakhand, see Dasgupta 2003.

30 Readers may also see a set of recommendations on relocation contained in the note on "Proposed Guidelines on Identfication of Critical Tiger Habitats, Coexistence, and Relocation in Relation to Tiger Reserves (In Pursuance of the WLPA as Amended in 2006)", by the Future of Conservation network (see http://www.atree.org/cth_cwh.html or http://www.kalpavriksh.org/f1/f1.2).

31 See "Proposed Guidelines on Identfication of Critical Tiger Habitats, Coexistence, and Relocation in Relation to Tiger Reserves (In Pursuance of the WLPA as Amended in 2006)" and "Proposed Guidelines on Identification of Critical Wildlife Habitats in National Parks and Wildlife Sanctuaries Under the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006", both by the Future of Conservation network (see http://www.atree.org/cth_cwh.html or http://www.kalpavriksh.org/f1/f1.2).

32 See a number of documents at www.tilcepa.org.

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Annex 1

Provisions of the Centrally-Sponsored Beneficiary-Oriented Tribal Development Scheme, for Project Tiger Areas, National Parks and Wildlife Sanctuaries Rehabilitation Package under the BOTD Scheme

Expenditure Heads	Specified Norms (Rs per family)
Land development (for 2 hectares per family)	36,000
House construction (on 5,000 sq ft of land per family)	36,000
Community facilities	9,000
Fuel and fodder plantation	8,000
Pasture development	8,000
Transport of household goods	1,000
Cash incentive for shifting	1,000
Miscellaneous expenses	1,000
Total	1,00,000

Details of Funds Released under BOTD (Rs in Lakh)

Year	Madhya Pradesh	Karnataka	Maharashtra	Orissa	Rajasthan	Uttaranchal
1997-98	45.00	25.00	–	40.00	–	–
1998-99	350.00	–	–	–	–	–
1999-2000	201.08	68.50	–	–	–	–
2000-01	200.00	64.65	46.00	–	–	–
2001-02	300.00	100.00	–	–	–	–
2002-03	210.00	300.00	400.00	–	145.92	–
2003-04	374.00	283.00	–	81.00	–	–
2004-05	–	150.00	–	–	–	–
2005-06	175	77.00	17.00	–	80.00	110.20
2006-07	230	58.80	–	–	–	

(In the Eleventh Five-Year Plan, this scheme has been merged into the scheme on Integrated Development of Wildlife Habitats, see Annex 2).
Source: Information provided by the then Minister of State for Environment and Forests, Namo Narain Meena, in a written reply to a question by Vijay J Darda and Syeda Anwara Taimur in the Rajya Sabha. Reported in: "Relocation of Existing Habitations", Press Release, MoEF, 16 March 2007.

Annex 2: Details of the Activities to be Supported under the Centrally-Sponsored Scheme – Integrated Development of Wildlife Habitats
(Eleventh Five-Year Plan, Ministry of Environment and Forests 2008)

Determining inviolate spaces and relocation of villages from core-critical/crucial wildlife habitats:

The Wildlife (Protection) Act, 1972, as well as the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, require that right of people (scheduled tribes and other traditional forest dwellers) recognised in forest areas within core-critical habitats may be modified or resettled for providing inviolate spaces to wild animals. This requires payment of compensation (rights settlement in addition the relocation package offered under the CSS). Therefore, payment of compensation for the immovable property of people forms part of modifying setting their rights, which is a statutory requirement. This is independent of the rehabilitation package given for village relocation from Tiger Reserves under the Scheme "Project Tiger".

The proposed package (in consonance with the proposal under the CSS – Project Tiger) has two options:

Option I – Payment of the entire package amount to the family in case the family opts so, without involving any rehabilitation/relocation process by the Forest Department.

Option II – Carrying out relocation/rehabilitation of village from Protected Area/Tiger Reserve by the Forest Department.

(i) In case of Option I, a monitoring process involving the district magistrate of concerned district(s) would be ensured so that the villagers rehabilitate themselves with the package money provided to them.

(ii) In case of Option II, the following package (per family) is proposed, at the rate of Rs 10 lakh per family:

(a) Agriculture land procurement (two hectare) and development 35% of the total package.

(b) Settlement of rights 30% of the total package.

(c) Homestead land and house construction 20% of the total package.

(d) Incentive 5% of the total package.

(e) Community facilities commuted by the family (access road, irrigation, drinking water, sanitation, electricity, telecommunication, community centre, religious places of worship, burial/cremation ground) 10% of the total package.

(iii) The relocation process would be monitored/implemented by the following two committees:

(State-level Monitoring Committee consisting of chief secretary of the state as the chairman, secrearies of related departments as members and chief wildlife warden as member secretary.)

(District-level Implementing Committee for ensuring convergence of other sectors consisting of district collector as chairman, CEO as the member and representative officials from: public works department, social welfare, tribal department, health department, agriculture department, education department, power and irrigation departments as members. The warden/manager of the PA/crucial wildlife habitat is the member secretary.

(iv) The above cost norms are indicative in nature to facilitate flexibility for state/site specific situation.

(v) The relocated village would be taken up on a priority basis for eco-development as well as local development through convergence of district-level schemes.

(vi) The labour-oriented works involved in the relocation process would be preferably implemented through the villagers who are being relocated, so that they derive benefits out of the same apart from ensuring the field implementation to their satisfaction.

(vii) In case resettlement has been done on a forestland, the new settlement will be eligible for access to forest resources for their bonafide use through the village level committee and gram sabhas.

(viii) The district administration would facilitate fair price shop, education, and health centre close to the relocated site.

(ix) "Handholding" after relocation would be ensured through independent agency with ongoing eco-developmental inputs through central assistance and district-level inputs, which should also have an inbuilt grievance redressal system.

(x) The relocated villagers would be given priority for livelihood options emanating from the protected area.

(xi) In case the cost of relocation including settlement of rights per family exceeds Rs 10.00 lakh, the state government has to meet the extra cost.

(xii) The state/union territory governments shall, wherever appropriate, consult/collaborate/involve the concerned panchayati raj institutions, while planning, formulating and implementing the relocation processes.

The activities envisaged include determination of inviolate spaces, critical wildlife habitats, voluntary relocation of villages from PAs/selected high value biodiversity areas/recovery programmes by providing a better relocation package, apart from supporting the state governments for settlement of rights of such people. It also includes acquisition and/purchase of land and wildlife corridors, rehabilitation of traditional hunting tribes living in and around PAs/selected high value biodiversity areas/recovery programmes.

Further, as relocation involves largely the forest dwelling rural poor, it should be ensured that any relocation/resettlement is voluntary and in conformity with the provisions of the National Policy on Resettlement and Rehabilitation for project affected families. The proposal of relocation should be examined only when express willingness of the villagers is obtained, preparation for actual implementation is completed and the work can be started. The allocation earmarked for relocation should not be used for any other purpose. Norms for reallocation should clearly specify the components for which payment will be made to the people opting out of the identified location. Further, as per the provisions of the Tribal Act, there is a provision to identify Critical Wildlife Habitats. A committee is also envisaged in furtherance of this objective. It is proposed that this committee looks into the appraisal and approval of relocation proposals on a case-to-case basis. However, if need arises, a separate committee can be constituted for this as well.

(A scheme for relocation of villages from tiger reserves is substantially the same as this one, see http://projecttiger.nic.in/whtsnew/format_relocation_plan_pt.pdf).

Annex 3: Environmental and Socio-economic Impacts of Relocation from Protected Areas in India, since the 1970s

(As reported in the sources of information given in the last column; PAs are arranged in alphabetical order)

Name of the PA	Year of Notification*	Year of Relocation	Number of Persons, Families or Villages Displaced	Officially Stated Causes of Relocation**	Governance of Relocation	Nature of the Relocation Process (see Section 1.3)	Environmental Impacts of Relocation	Socio-economic Impacts of Relocation	Sources of Information
Asola Sanctuary, Delhi	1992	No information	Two villages		No information	No information	No information	No information	Ravi Agarwal, Toxics Link, personal communication, 2007
Bandhavgarh National Park and Tiger Reserve, Forest Department, Madhya Pradesh	NP in 1968 TR in 1993-94	1972	Two villages (one, Sanhatola, with eight families)		No information	No information	No information	In the case of one village (Bathan), paid till early 2000s (latest status not known) No information on other village (Koluabah)	Sawhney 2003 H S Pabla, MP no compensation personal communication, 2007
Bandipur National Park and Tiger Reserve, Karnataka	WLS in 1931 Venugopal NP in 1941 TR in 1973-74 NP in 1985	Since 1974	Three villages (417 families)		No information	No information	- At the old site: increase of the tiger population by 55%. - At the new site: No information.	No information	MoEF, 2006b MoEF, 2005
Bhadra Sanctuary and Tiger Reserve, Karnataka	WLS in 1974 TR in 1998	1974-2002	16 villages (736 families) 11 villages (419 HH, 4,000 people) relocated by 2007		Lack of transparency, very poor communication, many conflicts, resistance during first 26 years. After 2000, better governance.	Initially forced and voluntary after 2000	- At the old site: forest fires controlled, decrease in poaching and better conservation of wildlife in the TR. - At the new site: No information	- Equity in land distribution, emphasis given to landless and marginal farmers. - Bank accounts provided. - More fertile soils, no free access to forest products, drinking water facilities provided, land development and diversification of crop production (hence more harvests per year). No free access to forest products. - Transport, electricity and education facilities provided. - Opening of restaurants, shops, etc.	Karanth, 2005 Kumar, 2003 Karanth and Karanth 2007
Bori-Satpura Sanctuary, National Park and Tiger Reserve and Pachmarhi Biosphere Reserve, Madhya Pradesh (MP)	Bori and Pachmarhi WLSs in 1977 Satpura NP in 1981 Bori-Satpura-Pachmarhi TR in 1999 Pachmarhi Biosphere Reserve in 1999	Since 2000	One village (97 families)		Lack of transparency and participation	Voluntary	- At the old site: No information. - At the new site: Clearing of forest with over 30,000	- Five acres of land given per family. - Construction of houses with the participation of the villagers. - In first year, scarcity of water, irrigation problems, land no prepared. - Fuel and fodder available. - Some alternative employment opportunities provided. - Conflicts with existing village on natural resources access. - Access to markets and health facilities provided. - Bad condition of roads. - Forced shift to settled agriculture.	Wani and Kothari, 2006 MoEF, 2005

Annex 3: (Continued)

Name of the PA	Year of Notification*	Year of Relocation	Number of Persons, Families or Villages Displaced	Officially Stated Causes of Relocation**	Governance of Relocation	Nature of the Relocation Process (see Section 1.3)	Environmental Impacts of Relocation	Socio-economic Impacts of Relocation	Sources of Information
Buxa National Park and Tiger Reserve, West Bengal	TR in 1982 WLS in 1986 NP in 1992 (initial) and 1997 (final)	Since 1994	One village (33 families) already displaced and 2 villages to be relocated	Floods, isolation, and scarcity of water	Centralised process	Forced for the first village and voluntary for the two others	- At the old site: tiger population has doubled over the period 1984-2002. - At the new site: No information.	- Lack of privacy, disturbances from tea gardens and conflicts with locals. - Physical and emotional problems due to a bad adaptation to the natural and cultural environment of the new site. - Some villagers moved back to the old site.	Khalid, 2003 MoEF, 2006b
Chandaka-Dampara Wildlife Sanctuary, Orissa	1982	Since 1984	Between 85 and 188 families, according to different sources		Administrative delays, no participation in the relocation plan	Voluntary (MoEF 2005) Induced (Asher and Kothari 2005)	- At the old site: No information - At the new site: No information	- No access to governmental schemes for decade after relocation. - Water scarcity, poor soil fertility, illegal collecting of firewood within the sanctuary area. - Conflicts with neighbouring villages over scarce resources. - No land and house plot titles for decade after relocation. - Strained relations between the families which were relocated and those which stayed inside the sanctuary.	MoEF, 2005 Kothari and Asher, 2005 Sweta Mishra (Vasundhara), Personal communication 2007
Corbett National Park and Tiger Reserve, Uttarakhand	NP in 1936 TR in 1973	1973-2001 (first batch), and currently ongoing (second batch)	Five villages, of which four villages (411 families) in first batch	No access to development projects inside reserve	Transparency and participation of villagers (creation of village committees) to the relocation package	Voluntary/ induced	- At the old site: in tiger population by 52% over the period 1984-2002 and 273 ha of land restored back as prime tiger habitat in the reserve. - At the new site: clearing of 221.63 ha of forest land	- Fair distribution of land. - Cattle pond. - Better access to markets and to developed towns (Ramnagar and Kashipur), transport facilities provided. - More fertile soils, drinking water and irrigation facilities provided.	Negi 2003 MoEF, 2006b Rajiv Bhartari, Forest Department, personal communication 2007
Dampa Sanctuary and Tiger Reserve, Mizoram	WLS in 1974 and again in 1985 TR in 1994	No information	12 settlements	No information	Poor	Possibly forced	- At the old site: Regeneration of forests in shifting cultivation sites. - At the new site: Increased pressure and intensity of jhum in adjacent areas	Poor rehabilitation, further marginalising and alienating ethnic minority Chakma and Reang people	AC Zonunmawia, personal communication, 2007 PEACE et al 2006 Gupta and Sharma 2005
Dudhwa National Park and Tiger Reserve, Uttar Pradesh	NP in 1977 TR in 1987	Since 1987	One village (24 families)		No information	Forced	No information	No information	MoEF, 2006b MoEF, 2005

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Annex 3: (Continued)

Name of the PA	Year of Notification*	Year of Relocation	Number of Persons, Families or Villages Displaced	Officially Stated Causes of Relocation**	Governance of Relocation	Nature of the Relocation Process (see Section 1.3)	Environmental Impacts of Relocation	Socio-economic Impacts of Relocation	Sources of Information
Gir National Park, Gujarat	1975	1972-86	60 hamlets (580 families)	No access to development projects inside NP	Centralised process, mis-management, administrative and compen-sation delays, conflicts with the FD	Forced	- At the old site: Increase in wildlife popu-lation in the park. But less water source for the wildlife (which used to use the human-made sources before). - At the new site: clearing of 1,867 ha of forest land.	- Land given to cultivators, land development and forest settlement schemes by the FD. But no right and control over land and natural resources. - Conflicts with FD officials. - No education facilities provided. - Forced shift from pastoralism to agriculture.	Sharma 2003
Kanha National Park and Tiger Reserve, Madhya Pradesh	NP in 1955, 1964 and 1970 TR in 1973-74	1973-74	24 villages (around 650 families)		Transparency and participation of villagers in the relocation package	Seven in a voluntary way and 17 in an induced way	- At the old site: increase in the tiger population over 1984-2002; increase in Swamp deer population - At the new site: No information.	- Equity in land distribution (land for land), land provided to landless. - More fertile soils, grazing facilities, help provided in pasture development and animal husbandry, wells and irrigation facilities. - Paid construction of traditional houses. - Health and education facilities provided. - Significant discontent and resentment, expressed as deliberate illegal acts.	Panwar, 1978 Panwar, 2003 MoEF, 2006b Mukherjee, 2009
Kudremukh National Park, Karnataka	1987	2003-ongoing	One settlement (eight families)	Classified as "encroachers"	NGO-led process, consultative	No information	No information	No information	Karanth and Karanth 2007
Kuno Wildlife Sanctuary, Madhya Pradesh	1981	1996-2002	24 villages (at least 1,400 families)		No participation, poor communication and admini-strative errors	Induced and forced	- At the old site: ecological restoration conducive to lion relocation. - At the new site: clearing of 5,000 ha of protected forest land	- Equity in land distribution. - Loss of cattle. - Loss of income from reduced access to forest products. - Decrease of crop yields. - Increase of migrations. - Decrease of wage labour opportunities provided by the FD. - Poor quality of soils, drinking water facilities provided but scarcity of water, irrigation facilities provided but mainly inoperative, no source of fodder. - Access to police station, health, education, communication and electricity facilities, though inefficient. - Decline in livelihood security. - After 2004, at least 300 families moved back to the old site, but then most were moved back out again.	Chouhan, 2003 Sharma and Kabra, in press Sharma and Kabra, 2003

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Annex 3: (Continued)

Name of the PA	Year of Notification*	Year of Relocation	Number of Persons, Families or Villages Displaced	Officially Stated Causes of Relocation**	Governance of Relocation	Nature of the Relocation Process (see Section 1.3)	Environmental Impacts of Relocation	Socio-economic Impacts of Relocation	Sources of Information
Madhav National Park, Madhya Pradesh	1958	No information	One village (102 families)	No information	No information	Voluntary	No information.	No information.	MoEF 2005
Melghat Sanctuary, Gugamal National, and Melghat Tiger Reserve, Maharashtra	Melghat WLS in 1967 TR in 1973 Gugamal NP (part of TR) in 1987	1999-2002	Three villages (92 families)	Conflicts with TR authorities	Transparency, good communication and participation of villagers to the relocation plan (creation of village committees)	Voluntary	- At the old site: decrease in the total population of tigers in the reserve from 80 in 1984 to 73 in 2001-02. However, less human pressures on the biodiversity. - At the new site: clearing of 95 ha of forest land.	- Education, transport, health facilities provided. - Promised community latrines not provided yet. - No pasture land. - No full money compensation provided. - Access to drinking water and irrigation facilities promised but not provided on time. - Access to funds from rural development schemes. - Enhanced livelihoods.	Rithe, 2003 MoEF, 2006b Jamwal, 2005
Nagarjunsagar-Srisailam Sanctuary and Tiger Reserve, Andhra Pradesh	Nagarjunsagar WLS in 1978 Nagarjunsagar-Srisailam TR in 1982	No information	One village (167 families)		No information	No information	No information.	No information.	MoEF, 2005
Pakhui-Nameri Sanctuary, National Park and Tiger Reserve, Assam and Arunachal Pradesh	Nameri WLS in 1985, NP in 1998 Camo WLS in 1977, converted to Pakhui WLS in 2002 Nameri TR in 1999, Pakhui TR in 2002	Since 2000	1,000 families (from Nameri)		No information	No information	No information.	No information.	http://projecttiger.nic.in/nameri.htm
Panna National Park and Tiger Reserve, Madhya Pradesh	WLS in 1975 NP in 1982 TR in 1994	1980s	Three villages (210 families) and eight villages in the process of relocation		No information	Voluntary	No information.	No information.	http://www.forest.mp.gov.in/wildlife.html, accessed 2007 http://projecttiger.nic.in/panna.htm
Pench Wildlife Sanctuary, National Park and Tiger Reserve, Madhya Pradesh	Mah: NP in 1975, TR in 1998 MP: WLS in 1977, NP in 1983, and TR in 1992	1973-90	10,000 persons	Dam construction	Corruption, mis-management and conflicts with the FD	No information	- At the old site: No information. - At the new site: No information.	- Financial compensation for landless. - No compensation for some families. - Water scarcity, a few working biogas plants provided, big restrictions on forest products and irregular irrigation facilities provided	Devullu et al 2005
Phawn-gpui National Park, Mizoram	1997	1993	One village	No information	No information	No information	No information	No information	Gupta and Sharma 2005
Rajaji National Park, Uttarakhand	1983	1983-onwards	1390 Van Gujjars families 1 Taungya village (three more proposed) 1 Gothiya village (236 families)	Gothiya village reportedly illegal, did not accept settlement compensation	Oppression, threats, violence, conflicts with the FD and no participation to the relocation plan, in the first phase. More participatory in second phase, ongoing.	Forced or induced	- At the old site: better conservation of wildlife in the PA. - At the new site: No information (forest land cleared for relocation)	- No toilet and bad roofs in the new houses provided. - No land or land title for some families. - Prohibition of cattle, loss of livestock, new site unsuitable for agriculture (bad quality of land). - Conflicts with FD officials. - No governmental schemes provided. - Better in more recent relocation	Dasgupta, 2003 Kaushal 2003 *JPAM Update* 18 October 1998 MoEF 2008b

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Annex 3: (Continued)

Name of the PA	Year of Notification*	Year of Relocation	Number of Persons, Families or Villages Displaced	Officially Stated Causes of Relocation**	Governance of Relocation	Nature of the Relocation Process (see Section 1.3)	Environmental Impacts of Relocation	Socio-economic Impacts of Relocation	Sources of Information
Rajiv Gandhi National Park, Karnataka	1983	Since 1999	12 villages (Chakrabarti 2003)/9 villages (Karanth and Karanth 2007) (250 families) 3,500 families earlier; and 105 more others proposed by the end of 2007	Poverty due to isolation	Transparency and good participation (creation of tribal committees) in the recent relocation plan. In earlier and some recent cases, bad relocation package and conflicts.	Voluntary. In some cases, forced, with considerable opposition to the process.	- At the old site: better conservation of wildlife. - At the new site: clearing of 1931 ha of forest land, drinking water facilities provided, supply of cattle, pasture and fodder plantations provided, access to fuel wood reserves, land and poultry development. In some cases, no adequate financial compensation, land and drinking water facilities.	- Access to agriculture machines. - Health, education, transport and electricity facilities provided. - Alternative income generation. - Training and capacity building. - Fuel saving devices provided. - Better levels of livelihoods.	Chakrabarti, 2003 MoEF, 2006a Nadkarni, 2001 *PA Update* N°27 and 28. Karanth and Karanth 2007
Ranthambore National Park and Tiger Reserve, Rajasthan	Sawai Madhopur WLS in 1955 TR in 1973 (includes Kailadevi WLS, declared in 1983, and Sawai Mansingh WLS, declared in 1984) NP in 1980	1975-\79	12 Gujjars villages (195 families)		No information	No information	- At the old site: No information. - At the new site: No information.	- Forced shift from animal husbandry to settled agriculture. - Poor quality of land, scarcity of fodder and drinking water, livestock affected. - Severe deterioration of economic conditions. - Conflicts with park authorities.	MoEF, 2005 Devullu et al, 2005
Sanjay National Park, Madhya Pradesh	1981	No information	One village	No information	No information	No information	No information.	No information.	http://www.forest.mp.gov.in/wildlife.html, accessed 2007
Sariska National Park and Tiger Reserve, Rajasthan	WLS in 1959 TR in 1978-79 NP in 1992	1980	One village already displaced (71 families) and 11 to be relocated; process initiated in 2008		Ineffective process in first relocation, several families returned to original site. Poor planning and consultation in new phase	Forced	No information.	No information. Poor land and livelihood availability; conflicts with host population, including marginalisation of Gujjar oustees in midst of Meena communities	MoEF, 2005 Shahabuddin et al 2005 and 2007
Simlipal National Park, Tiger Reserve and Biosphere Reserve, Orissa	WLS in 1970 TR in 1973 North Simlipal NP in 1986 Biosphere Reserve in 1994	Recently (information unclear)	Three villages (72 families)		Bad relocation package	No information	- At the old site: No information. - At the new site: No information.	- Land not suitable for irrigation. No other information.	MoEF, 2006b MoEF, 2005
Tadoba-Andhari National Park, Sanctuary and Tiger Reserve, Maharashtra	Tadoba WLS in 1931 Tadoba NP in 1955 Andhari WLS in 1986 TR in 1995	Since 1986	Six villages (527 families)		No consultation, no participation and administrative delays	Induced	- At the old site: no information - At the new site: clearing of 550 ha of forest, with significant flora and fauna diversity.	- Health, education and transport facilities provided. - Land provided to landless. - Poor groundwater table, no source of water during summer, irregular irrigation, lack of grazing space, lack of fodder and pasture,	Bhagwan and Ghate, 2003 Mehra 2004 Rucha Ghate, Shodh, personal communication 2007 Dilip Gode, VNCS, personal communication 2007

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Annex 3: (Continued)

Name of the PA	Year of Notification*	Year of Relocation	Number of Persons, Families or Villages Displaced	Officially Stated Causes of Relocation**	Governance of Relocation	Nature of the Relocation Process (see Section 1.3)	Environmental Impacts of Relocation	Socio-economic Impacts of Relocation	Sources of Information
								irregular quality of soils - Loss of nutrition and other household goods, and income from forest products. - Lack of employment options. - No legal titles to lands allocated (lands at original habitation had legal title). - Conflicts with locals on water access.	

*WLS = Wildlife Sanctuary; NP = National Park; TR = Tiger Reserve.
**Other than reasons common to all or most areas, viz, human pressures on wildlife and habitat, and human-wildlife conflicts.