BHADRA VOLUNTARY RELOCATION
During my tenure as Director Project Tiger in the Ministry of Environment and Forests, Govt. of India, I had the privilege of participating in voluntary relocation of villages from Bhadra Tiger Reserve. As nearly two decades have passed, whatever is written below is from my memory only.

Mr. Yatish Kumar was the Field Director of Bhadra Tiger Reserve and Mr Gopalakrishne Gowda was the Collector of Chikmagalur District of Karnataka during voluntary relocation in Bhadra Tiger Reserve. This Sanctuary was notified as a Tiger Reserve in the year 1998. After the notification as tiger reserve, it was necessary to relocate the existing villages as the entire population with their cattle were dependent on the Tiger Reserve. The area which I saw in the year 1998 was very rich in flora and fauna. Excellent bamboo forests were available but it was a fire hazard too because of the presence of villagers and their cattle. Tiger population in Bhadra Tiger Reserve was estimated by Dr. Ullas Karanth and his love for this area was due to highly rich biodiversity. Ultimately, resulted in relocation of all the villages from within the reserve.

Dr Karanth, a devoted biologist was a close friend of mine and during his visit to Delhi he proposed voluntary relocation of villages. As the Director of Project Tiger, I was looking at voluntary relocation of villages for tribals only from inside Tiger Reserve by de-notifying suitable areas of forests for relocation, but in this case the villagers were to be relocated by purchasing a revenue land which was very expensive. However, I took up this project as a challenge and went to the higher ups in the Ministry of Environment & Forests through Mr S.C. Sharma, the then Additional DG, Wildlife. The total cost of the land was nearly 13 crores and to get this huge sum we had to approach the Secretary, MoEF.

I went to Chikmagalur and discussed the matter with the Collector and Field Director of Bhadra Tiger Reserve. The land selected for moving the willing families was very fertile with irrigation facilities, and was plotted by the field staff of the Forest Department and revenue staff of the
Collector. The proposal was to allot the plots of nearly two hectares each by drawing lottery so that no biasness was shown. I came back to Delhi and discussed the matter with the Secretary, MoEF. The proposal was so convincing that he agreed to divert funds from different programme and give the money in two instalments for purchase of revenue land and subsequent shifting of villagers. First instalment was approximately Rs. 9 crores that was deposited with the Collector of Chikmagalur. Thus began the process of voluntary relocation in Bhadra.

Mr Girish, a close associate of Dr Karanth was instrumental in facilitating the voluntary relocation programme, and perhaps this would not have happened successfully without the close cooperation of Forest Department, Revenue Department, Mr Girish running an NGO in Chikmagalur and finally Dr Ullas Karanth, the then Director of Wildlife Conservation Society India programme.

By the time I relinquished office, entire process of voluntary relocation was completed and the Tiger Reserve was blooming with excellent biomass to support large number of big and small ungulates. Consequently, the tiger population in the reserve rose up considerably. The Bhadra Voluntary Relocation programme was considered to be the finest in the whole country.

This workshop will definitely give an overview of the process, and successful implementation of it that involved close cooperation between Mr Gopalakrishne Gowda representing Revenue Department, Mr Yatish Kumar - the Field Director, Karnataka Forest Department, Mr. Girish, Ministry of Environment and Forests, Govt. of India and WCS-India. I wish the people know about it in greater detail and see how successful voluntary relocation process can facilitate growth in tiger population as well as bring in positive changes in the lives of marginalized communities.

P K Sen, IFS (Retd.)
Former Director, Project Tiger
India is a megadiverse country that supports the largest population of Royal Bengal Tigers and Asian Elephants in the world. The country is redolent of stellar landscapes, from the Himalayas and the Deccan Plateau, the Western and Eastern Ghats to the rainforests of Northeast India, which are home to many endemic species of flora and fauna. While significant portions of Indian forests remain intact, they are highly fragmented – and under tremendous threat of outright conversion for non-forest land, furthering fragmentation. Thousands of human settlements still reside inside the protected areas (PAs), honeycombing forests and natural wildlife habitats. Additionally, rapid infrastructure development such as roads, dams, and mining activities further pose a significant threat to the unique biodiversity and the natural forests of this landscape. On the social front, forest-dwelling communities share habitats with large mammals including tigers, elephants, bears, etc. and are thus subjected to intense human-wildlife conflict, often resulting in crippling injuries, loss of lives or financial loss in the form of crop damage or livestock depredation. These communities feel isolated and marooned, especially from the younger generation who are eager to partake in the benefits of economic development. Families are in need of better lives and a good future for their children outside the protected areas; they seek better livelihood options, healthcare, education and access to basic facilities like electricity, public ration shops, etc. These communities face huge adversities due to the lack of financial opportunities, education and awareness, as well as the fear of the unknown, even though they wish to go out and are desperate to seek a better life. Although many of the younger generations of these forest-dwelling communities have sparingly started migrating out of the forests - at great personal and financial loss without any support - there have been many instances where parents send their children out of the forests to live with their relatives in the hope of a better future and improved education and livelihood opportunities. However, many of these children are either badly treated by the relatives or end up working as labourers in the towns and cities. They ultimately become a prisoner of their circumstances and continue living a sub-par live inside the forests often against their will. In their pursuit for better education for their children as well as to escape from human-wildlife conflict, the forest-dwelling families end up taking loans from money lenders, and become indebted for life. These circumstances limit their ability to exercise their fundamental democratic right to a better life.

Taking cognizance of this issue as well as to safeguard the wildlife and natural habitats, to increase green cover and to benefit the environment with its ecosystem services, the Government of India introduced the scheme of voluntary relocation wherein they provide support to such forest-dwelling communities to move out of the forests and start a new life. This process is entirely voluntary where people give their free consent. Voluntary relocation is a social welfare scheme being offered by the government which gives an opportunity to such forest-dwelling communities to seek a better life, who otherwise have been disenfranchised and disadvantaged for generations. Further, the Government-sponsored voluntary relocation schemes have released hundreds of acres of critical wildlife habitats while ensuring resettlement of forest-dwelling communities to move out of the forests and start a new life.
communities outside the PAs. Integration of these forests into the PA landscape and subsequent greening and recovery of flora renders them intact, free of human disturbances, and restores ecosystem services, e.g. water availability, clean air, nutrient recycling, climate mitigation, soil regeneration and biodiversity protection.

The process of voluntary relocation is a continuous one that proceeds through the concerted efforts of multiple government Departments including the Ministry of Environment, Forest and Climate Change, state departments of Forest, Revenue, Tribal Welfare, Panchayat Raj, etc.; a close coordination ensures the success of voluntary relocation. In the pre-voluntary relocation phase, families are identified, and introduced to the benefits of voluntary relocation. This critical stage determines the efficacy of the process, but happens in a democratic manner of convincing them about the benefits of life outside forests. Upon approval from the communities, the Government systematically evaluates the families’ land-holdings, and works towards delivery of the voluntary relocation package. At this stage, and beyond, hand-holding of the voluntarily relocating families becomes crucial. Evidently, the hand-holding of communities through the various stages of voluntary relocation as well as in the post-relocation phase results in community empowerment and the creation of jobs that can sustain the voluntarily relocated families. The benefits of post voluntary relocation support are accrued in the form of improved livelihood opportunities, increase in household incomes, better social integration with the mainstream, improved access to healthcare and education facilities. The voluntarily relocated communities engage in agriculture and sell their produce; receive vocational training and use their skills to derive employment; establish community institutions and re-create their communities outside forests; and gradually gain socio-economic mobility.

Thus, this excellent initiative led by the Government helps beneficiaries by transforming their lives and integrating them into mainstream society without any major impediments.

Furthermore, the Government-facilitated voluntary relocation of forest-dwelling communities has released thousands of acres of forests across India, freeing critical wildlife habitats from anthropogenic pressures, and enabling gradual recovery of threatened species including tigers, elephants, etc. The resilience of forests has increased with widespread greening and restoration of vital ecosystem services like climate mitigation, while the risk of human-wildlife conflict for the forest-dwelling communities as well as the animals has witnessed a decrease. Consolidation of critical wildlife habitats in these PAs through voluntary relocation and land purchase has also contributed to restoring and better protection of the rivers and streams originating in these PAs, thus leading to enhanced water conservation and ensuring water security for millions of people. These are continuous processes; further support to the whole process of voluntary relocation will make these processes resilient and preserve India’s biodiversity and wildlife habitats.
The Bhadra voluntary relocation project is an exemplar of coordination between various Government departments, and how a systematic effort led to the successful voluntary relocation of villages from the Tiger Reserve. The following sections have insights from deeply committed field experts who led the initiative, providing details on how the process was implemented, and why voluntary relocation has been a *win-win* for both the wildlife and local communities.
Importance of voluntary relocation from core-critical tiger habitats

Written by Dr. Rajesh Gopal IFS (Retd.)
Secretary General, Global Tiger Forum

Since the inception of Project Tiger, voluntary relocation of settlements from tiger habitats has been an important agenda item, with several guidelines and 100 % central assistance forming part of the Centrally Sponsored scheme of Project Tiger. Over the years, the said guidelines have been revised along with the package. The amendment to the Wildlife (Protection) Act, 1972 during 2006 based on the Tiger Task Force Report, gave a new thrust to the process. For the first time, core–critical tiger habitat and peripheral buffer areas were explained as part of a Tiger Reserve. More clarity was there on the “exclusive tiger agenda” of core areas, complemented by the equally aggressive “inclusive agenda of co-occurrence” in peripheral buffer. The Project Tiger package was revised soon, and the voluntary relocation package was enhanced from Rs. One lakh per family to Ten lakhs, while providing two options viz. a regular land for land and rehabilitation by the Forest Department or a cash option.

The outcome was encouraging. Several States successfully did voluntary relocation of settlements residing within core–critical tiger habitats (such as in Maharashtra and Madhya Pradesh), and the core habitat was made more productive for the tiger. It is very important to mention that the process was and is purely voluntary in nature, with provisions of both special acts, viz. Wildlife (Protection) Act, 1972, read with those of Forest Dweller’s Act.

Why do we need relocation from core areas?
Inviolate space is fundamental for tiger source areas (the core-critical tiger habitat) to make available the habitat with its natural complement of welfare factors including food, water and space for the tigers to live and breed. Tiger, being an ecological umbrella species, requires a good prey biomass and the latter requires a habitat free of biotic disturbances to generate a reproductive surplus. Such surpluses are crucial for the herbivores, since relatively abundant, gregarious wild herbivores do not become targets of regulation on account of predation by big cats like the tiger. Undisturbed habitat ensures welfare factors like forage and browse for wild
herbivores, while providing ample space for their foraging, courtship and anti-predator strategies. It also reduces the chances of disease transmission from village livestock.

Furthermore, as a territorial animal advertising its presence, the tiger requires inviolate space. Empirical inference has proved that an inviolate space of 800 to 1200 sq km of productive habitat is required for a viable population of tiger (20 breeding tigresses). Given the source-sink dynamics, internecine relationships of tiger ethology, the sex ratio skewed towards the female (1 male: 2 females), post-natal care with 50% neo natal mortality, such a dispensation of 20 tigresses would support a total population of 65 to 70 tigers (including sub-adult males waiting for a foothold in the productive habitat, old territorial tigers edged out from prime areas of habitat, prime males thriving as per the sex ratio, tigresses exhibiting site fidelity in select natal areas, philopatry and the like). Such innate life cycle processes would NOT be possible if the source area is dotted with human settlements, owing to obvious human–tiger/wild herbivore interface conflicts resulting in human/crop depredation and possible revenge killings.

It should be remembered, there can be NO CO-EXISTENCE with a big cat like the tiger or leopard. For want of options, only CO-OCURRENCE is possible with obvious trade-offs (as being strategized in buffer and corridor at a larger landscape level).

What has relocation done to the habitat?
A snapshot appraisal of tiger reserves like Kanha, Bandhavgarh, Satpura, Tadoba, Melghat, Sariska (some portion) would reveal the remarkable habitat recovery at relocated sites, fostering wildlife abundance with no interface issues. It has contributed to the resurrection of the habitat, improved water regime, reduced man-made fires, promoted heterogeneous indigenous grass growth with no disease threat. The natural prey-predator cycle has been restored with enhanced relative abundance of tiger, co-predators and prey.

What has relocation done to people?
The voluntarily relocated people have also benefited from the process. Due to sectoral integration, they have gained with more income opportunities, better health and sanitation facilities, apart from other basic amenities like communication, electricity, education and others which were not available to them in the core area (status being a National Park or a Sanctuary). Due to more livelihood options, their forest resource dependency has also reduced. Owing to such reasons, many villagers in Madhya Pradesh have been willingly demanding relocation.

Why is such voluntary relocation important for the future as well?
Voluntary relocation is crucial for tiger as well as people. It does justice to the Wildlife Protection) Act 1972, and the Sustainable Agenda for people (by addressing the three important pillars of the latter, viz. environmental, economic and social). The three basics of post relocation-hand holding strategy – resource substitution, income generation and community welfare-emanate from the sustainability concept. Through innovative dovetailing of ongoing Government Schemes, CSR, off-site mitigation commitments of agencies securing forest land within the tiger landscape the relocated people can benefit more.
Bhadra relocation is a case in point, where voluntary relocation was implemented innovatively with support of Government of India, State Government (especially through the District level portfolio), prior to the said protected area becoming a tiger reserve. The Karnataka Forest Department and its officials deserve all the credit for such concerted efforts.

Voluntary relocation is also an INVESTMENT for adaptation to Climate Change. The new forest growth at the relocated site “locks up free carbon”. In this regard the effort also qualifies for access to Climate Funds.

Relocation restores and augments “ecosystem services” in the tiger source areas, much of which go unnoticed.

Hence, Voluntary Relocation of people from core areas of tiger reserves needs to be given the topmost priority at the present juncture as well as in the coming years for implementing the tiger as well as other wildlife conservation agenda, duly complying with the provisions of Wildlife (Protection) Act, 1972 and the Forest Dweller’s Act. It is the biggest contribution for in-situ tiger conservation.
Bhadra Voluntary Relocation
… the trail to a new life

Written by Jayalakshmi K
Head of Media and Outreach, Wildlife Conservation Society – India

Bhadra landscape
Constituted in 1974 by amalgamating fifteen state forests and two minor forests, the Bhadra Wildlife Sanctuary takes the shape of a letter “E” with ‘limb-like’ extensions that give it a very long perimeter. It was brought under Project Tiger in 1998, to become the 25th Tiger Reserve in India. It falls in the Western Ghats, one of the two ecological and biological hotspots in India, and covers an area of 492.30 sq kms across three taluks of Chikmagaluru district and one taluk of Shimoga district. It is classified as a tropical moist forest (TMF) in priority category I.

Situated between Northern latitude 75°-15° and 75°-50° Eastern longitude, 13°-25° and 13°-50°, it is a part of the south-western part of the Western Ghats and constitutes a geographic barrier between the coastal areas and the hinterland.

The altitude varies from 650 metres to 1875 meters above M.S.L. The highest peak in the sanctuary is the Kallathigiri peak with a height of 1875 meters while Mullaiangiri, the highest peak in Karnataka with the height of 1914 Mtrs., touches the northern boundary of the sanctuary. The underlying rocks on the hill slopes contain magnetite, haematite, quartzite and iron ores.

The reserve is bisected into two halves by the Bababudan Hills, which encircle the lower half, Jagara Valley (Muthodi Range), almost completely. Within the crescent formed by the hills sits Muthodi, which with the northern half (Lakkavalli Range), forms a hilly terrain made of thick forests, grassy undulating peaks and sholas. The sanctuary is well drained by Bhadra River and its tributaries Somavahini, Thadabehalla, Hiplahalla, Vatehalla, Odirayanahalla, Jenuhalla, Anegundihalla, Shivanehalla, Nayisathahalla, Neerahalla and Mavinahalla.

In the 1960’s the river was dammed on the north-eastern side near Lakkavalli and the resulting reservoir submerged large parts of the reserve. To the north of the sanctuary is the Bhadra reservoir and the cultivated plains, and in the east and south the coffee estates, with the river on the west. Temperature ranges from 7-36 deg C with the southwest monsoon between June and September bringing 1000-2500 mm of rainfall.
A map of Bhadra Tiger Reserve
Flora and Fauna

A major portion of the reserve is covered by moist deciduous forests which gradually merge with tropical dry deciduous forests towards the north-eastern Lakkavalli side. The inner slopes house the semi-evergreen sholas. According to the Forest Department there are more than 120 tree species, with some of the timber species being Teak, Rosewood, etc. There are a variety of figs and then there are the bamboos, both in the Jagara valley as well as in the Lakkavalli area. *Bambusa arundinacea* occurs widely in the area, especially in wide belts along streams and nullahs. About 6% of the area is covered by Forest Department plantations, mainly of teak *Tectona grandis*.

Bhadra also has low-lying marshy glades locally known as 'hadlus'. These are mostly perennially moist and covered by luxuriant grass growth through the dry seasons, providing food for large ungulates like elephants and gaur.

In the first status survey of the reserve done by WWF, its potential as an excellent wildlife habitat, if managed well, was documented.

Besides the omnipresent cicadas whose rising and falling trill resonates through the landscape, there are many species of birds including birds of prey and forest birds. Some of these include hornbills, parakeets, paradise flycatcher, bee-eaters, etc. Estimates put tiger numbers at 30, in addition to a good population of leopards, dholes, sloth bears, gaur, langurs, small carnivores, and ungulates including sambar, chital, muntjac and wild pigs. Overall, the tiger reserve is teeming with biodiversity and supports significant numbers of large mammals, birds, reptiles, amphibians, butterflies and insects.
Conservation Challenges

Back in the 80s, when the first study looked into the problems of the tiger reserve, some of the issues facing the reserve were identified as fires, poaching, cattle grazing, timber and bamboo logging, wildlife tourism, mining, etc. Some of these can be traced back to the beginning of the last century.

Mining in these pristine parts of the Western Ghats began in the year 1923 when about 738.55 ha of forested area was leased to a public sector company, Vishveshwariah Iron and Steel Limited (VISL), for a period of 40 years to extract the iron ore. This went on till 2007 when mining was stopped, putting an end to the degradation of the shola forests, high-altitude grasslands and the main catchment of the river Bhadra and its tributaries.

Wartime needs also saw railroads make way into the reserve for massive timber extraction. But gradually the deleterious impact on the forests was felt and restrictions imposed.

The Mysore Paper Mills started in 1937 had an arrangement with Forest Department for an annual supply of 14000 tons of small bamboo which was increased to 20000 tons and then 50000 tons of bamboo. The Medar community members were also allowed to cut bamboo for weaving, which was their traditional livelihood. Setting fire to the undergrowth to access the bamboo became a practice. In dry parts of the reserve, the forests are especially inflammable. (Extraction of any kind of timber or dead wood was put to a halt since 1997.)

Around this time, the reserve began to face another kind of pressure from the settlers and
plantations. Several incursions extended into the reserve, with erstwhile human habitations, and plantations dipping into it like 'giant fingers.' With plantations encroaching into the hills, the valley was surrounded by estates. In addition, there were 16 villages with about 4000 people and 2000 heads of cattle in the southern half. The low-lying areas were converted to paddy fields, while the cattle began grazing in the reserve.

Not only did the cattle pose a serious competition to the wild ungulates for fodder, but also became a conduit for disease transmission. In 1989, a Rinderpest epidemic of cattle claimed a large population of the Indian gaur in the reserve. Bhadra, which was once known for very high gaur densities, is yet to recover.

The people began to exert pressure on the forests by extraction of products like *Acacia sinuata* (seege) pods, honey, firewood and bamboo from the reserve. Fuel wood consumption rate varied between 2190 kg per week in the smallest village Karvani and 22140 kg per week in the largest village Madla, according to a survey. A single family required around 20 kgs of firewood daily.

The residents started growing paddy even in the *hadlus*. Thus, deprived of their natural food source, the wild animals began raiding crops. This loss of crops constituted up to 30 percent of the annual income of households at times.

Considering the rich habitat in Bhadra with excellent availability of grasses, abundant bamboo growth and quite low invasion by weeds, ungulate densities were expected to be high but studies in '98, '99 and 2000 showed lower densities. While initially it was suggested that this may be simply because the habitat was not suitable for some species like chital, some evidence from a subsequent study suggested that it could be explained by human presence and pressures of poaching. Poaching, both using guns and snares, was noted by the Forest Department as a major problem. This was not restricted to villagers but also indulged in by coffee planters and estate workers too.

Use of insecticides by the estates as also release of effluents from coffee pulpers began to affect the birds and insects. The challenge taken up by local environmentalists, subsequently has been to make the farms and estates wildlife-friendly by adopting organic practises and reducing their pollution footprints.

Conflict between wildlife and humans often follow adverse human impacts on wildlife. Early this century, a two-year field study at Bandipur National Park showed that resource competition between wild herbivores and livestock could be intense and trigger declines of wild herbivores if unchecked. It found a definite decline in densities of gaur, chital and elephant with increasing livestock densities, as also a drop in preferred plant biomass with livestock densities going up. The density of the three wild herbivore species went up within a year following a decline in livestock density in the years prior to voluntary relocation.
A similar situation has been witnessed in Bhadra also. Along with direct impacts of human disturbances on wildlife, almost every household living in the forest had lost 12% of their cattle holdings to large felines and 11% of their crops to elephant raids, as noted during surveys done during 1996-99.

**People's problems**

In the early part of the last century, the reserve is said to have had one village, Madla, in a four sq km area, with 36 families of less than 100 people and around 200 heads of cattle. Soon others followed. Most were settlers who had come in as labour and settled in the forest. During 1956–1966, a major irrigation reservoir was constructed that split the reserve and totally isolated the Muthodi area. By then there were more villages and some of these were cut off from access to the outside world during the monsoons.

The lives inside the Tiger Reserve was a difficult one at best. There was no provisions of electricity as well as communication in these villages. Deprived of education and health facilities, and sometimes even water; facing attacks by wild carnivores, and crop destruction by elephants, and other challenges eventually saw the people put up the first request for voluntary relocation in the 70s.
Crop losses inflicted by elephants in Bhadra Tiger Reserve, India (1997-1999)

<table>
<thead>
<tr>
<th>Village</th>
<th>Incidents (N)</th>
<th>Land (ha.)</th>
<th>Share-cropped</th>
<th>Annual productivity (T/ha)</th>
<th>Annual loss (T/ha)</th>
<th>Ratio of loss to productivity (%)</th>
<th>Annual monetary loss (Rs.)</th>
<th>Annual loss per family (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hipla</td>
<td>41</td>
<td>46.01</td>
<td>4.86</td>
<td>4.05</td>
<td>0.54</td>
<td>13</td>
<td>69,750.00</td>
<td>5,103.66</td>
</tr>
<tr>
<td>Karnavari</td>
<td>26</td>
<td>14.97</td>
<td>0.00</td>
<td>2.82</td>
<td>0.35</td>
<td>12</td>
<td>28,750.00</td>
<td>3,317.31</td>
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<tr>
<td>Kesave</td>
<td>16</td>
<td>9.71</td>
<td>4.86</td>
<td>2.97</td>
<td>0.84</td>
<td>28</td>
<td>52,166.67</td>
<td>9,781.25</td>
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<tr>
<td>Maadla</td>
<td>53</td>
<td>43.75</td>
<td>16.59</td>
<td>3.46</td>
<td>0.32</td>
<td>9</td>
<td>79,666.67</td>
<td>4,509.43</td>
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<tr>
<td>Muthodi</td>
<td>7</td>
<td>4.05</td>
<td>1.21</td>
<td>3.19</td>
<td>0.64</td>
<td>20</td>
<td>12,833.33</td>
<td>5,500.00</td>
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<tr>
<td>Overall</td>
<td>145</td>
<td>119.1</td>
<td>27.5</td>
<td>3.45</td>
<td>0.47</td>
<td>14</td>
<td>243,166.67</td>
<td>5,101.40</td>
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</tbody>
</table>

*Data from a sample of 23 interviewees in Hipla, 9 in Karnavari, 9 in Kesave, 23 in Maadla, and 4 in Muthodi.

Livestock losses inflicted by large carnivores in Bhadra Tiger Reserve, India (1997–1999)

<table>
<thead>
<tr>
<th>Village</th>
<th>Incidents (N)</th>
<th>Livestock killed (N)</th>
<th>Total monetary loss (Rs.)</th>
<th>Mean (Rs.)</th>
<th>CV (%)</th>
<th>Per family (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hipla</td>
<td>30</td>
<td>27</td>
<td>104,764.00</td>
<td>59,500.00</td>
<td>16</td>
<td>2,051.72</td>
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<tr>
<td>Karnavari</td>
<td>14</td>
<td>17</td>
<td>51,223.00</td>
<td>19,166.67</td>
<td>81</td>
<td>1,196.07</td>
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<tr>
<td>Kesave</td>
<td>13</td>
<td>29</td>
<td>73,223.00</td>
<td>26,166.67</td>
<td>55</td>
<td>2,907.41</td>
</tr>
<tr>
<td>Maadla</td>
<td>58</td>
<td>102</td>
<td>299,208.00</td>
<td>109,333.33</td>
<td>47</td>
<td>5,904.76</td>
</tr>
<tr>
<td>Muthodi</td>
<td>10</td>
<td>15</td>
<td>85,611.00</td>
<td>15,333.33</td>
<td>46</td>
<td>1,333.33</td>
</tr>
<tr>
<td>Overall</td>
<td>181</td>
<td>219</td>
<td>627,026.00</td>
<td>227,500.00</td>
<td>4</td>
<td>2,645.35</td>
</tr>
</tbody>
</table>

*Data from a sample of 23 interviewees in Hipla, 10 in Karnavari, 9 in Kesave, 23 in Maadla, and 10 in Muthodi.

Monetary value of cattle assigned on the basis of appraisal of animals’ worth by applicants in compensation claims: adult male = Rs. 3835; adult female = Rs. 2640; yielding calf = Rs. 1360; goat = Rs. 1000; buffalo = Rs. 4000

(Above tables are sourced from the 2003 study by M D Madhusudhan on Livestock and crop depredation in Bhadra Tiger Reserve. DOI: 10.1007/s00267-002-2790-8)

The government did propose a resettlement project in 1974 but the plan took a long time to materialise with surveys to count eligible households initiated only in 1987. Meanwhile, the number of families went up as more migrants came in, calling for even more funds. Finally, the state government accepted the proposal and committed itself to voluntary relocation in 1996. It formally sought Central contribution for the same.
By 2002, there were around 4000 people in 13 villages, leading to intense anthropogenic pressure on the Protected Area. Around 1200 acres of forest land had been converted to farmlands and plantations, of which at least 200 acres was encroached. Few had legal ownership. In fact, out of the 463 families, it was only seven that had legal housing land.

**Voluntary relocation of the villagers from Bhadra**

Except for one village in Madla, most others welcomed the voluntary relocation package but preferred to wait and watch how it went. The people of the Madla village filed a case in Karnataka High Court opposing the relocation, and as part of the agitation even set fire to around 25 sq km of the forest. In 2001, the High Court dismissed the case and recommended quick completion of the project.

The voluntary relocation process had the support of a group of environment and nature lovers, who from 1993, had been working with the forest and revenue departments to hasten the process. Concerned citizens and NGOs like Nature Conservation Guild and Bhadra Wildlife Conservation Trust played a vital role in building rapport with the people and convincing them on the benefits of relocation. D V Girish, honorary wildlife warden, and others took up the onerous task of survey of families in the forest with the forest and revenue departments. From 1250 applications the actual number was whittled down to a quarter after all fake applications were removed. A laborious process, this meant going with the original list submitted and checking on every
The forest department had a DCF with a people-friendly face in Yathish Kumar. He was keen to ensure that the people got a good deal. Helping the two was the district administration in the person of the Deputy Commissioner, Gopalakrishne Gowda. Wildlife Conservation Society - Indian Program too played a catalytic role.

After winning the people's confidence, the NGOs and individuals involved worked with the government departments to ensure transparency and accountability in implementing the promises. While the bureaucratic procedures took time, life inside the forest was made more tolerant by improving the roads, bridges and water supply system. The Steering Committee of Project Tiger ensured that the deal was in place despite the long delays.

With the land surveys and markings initiated in June 1999 when the first village at Hebbe was notified, the actual shifting process began in October 2001. Households were handed land deeds, beside an individual housing site. The allotment was done in a fool-proof method that ruled out any possibility of bias towards anyone - there was no attempt to segregate the people socially or economically. However, there was still a lot of work to be done. For one, the money was to be handed directly into bank accounts, which had to be joint accounts of the couple. To facilitate a speedy completion, the banks obliged by coming to the doorstep of the households and opening the accounts.

The moment that land at MC Halli was finally cleared, the next step was taking possession. Hiring a tractor and running it on fuel supplied by the tractor owner and petrol bunk respectively on deferred payments, around 458 acres of land was ploughed in a period of three days. Grazing land had to be fenced and this was done by putting up 1000 poles across 750 acres, only to be removed by the MLA's men at the behest of the locals. The KSFC pitched in to put back the fence.

While originally around 334 hectares was set aside for resettlement, the delay in occupying had led to locals encroaching the land. This necessitated a further acquiring of 186 hectares of land at Kelaguru. At MC Halli, 373 families were resettled, including all those who did not possess any legal land deed in the forest. That was done as a goodwill gesture. The weaker sections were further helped by building houses at Rs. 42,000 under the Rajiv Gandhi Housing Corporation, without any burden placed on them. Around 203 such units were put up in seven months. Suggestions from the people were incorporated in the design. In a novel initiative, a sustainable house design was offered to the people, something that looked into the climate of the land and use of locally available resources.

Help was on hand all through the process. Dismantling homes and transportation to the new site was also financially catered to in the compensation. The households were given a subsistence allowance for six months to help tide over food, fuel and fodder needs after they were resettled. All houses had electricity and water, as well as easy access to health and education facilities.
There were differences at the two relocation sites. Land at MC Halli was fertile and suited for crops like paddy and sugarcane that fetched the settlers immediate benefits. At Kelaguru, it was mostly coffee and arecanut plantations, which would take time to reap profit. This meant the settlers had to find some other means to fend for themselves, often working as labour. Keeping this in mind, the administration, under the advice of the DC, allotted an extra acre for every acre, thus doubling the land allotted for those at Kelaguru.

The cost of land acquisition was originally proposed as Rs 7.02 crore in 1992, and revised to Rs 13.15 crore in 1999. The relocation and resettlement cost was originally proposed as Rs 5.74 crore in 1992, and revised to Rs 8.07 crore in 1999 (Karnataka Forest Department, 1999).

Prior to the voluntary relocation of villages, people faced intense conflicts due to livestock predation and crop raiding - and also a few deaths and injuries to people due to human-wildlife conflict. There was a marked absence of basic infrastructure and facilities like electricity, water, school, health and transport. However, post resettlement, the children from families that voluntarily relocated obtained better education facilities, were admitted to schools, and all households had access to power, water, gas stoves and phones. Fifty of the children from such families made it to college for the first time. A healthcare centre was established and people at MC Halli were able to grow crops within six months of moving. Some had even opened shops, restaurants and other businesses. With transport facilities, there was access to regional markets and cities in the vicinity. Most notably, all of this meant that land titles and other aid were distributed fairly.

At the same time, the once disturbed forests and natural habitats in Bhadra were recovering, with the floral species that were collected previously for fuel wood needs making a comeback. The absence of 4000 livestock had improved forage for wild herbivores and species like chital had quadrupled with other prey densities also expected to improve. There was recovery of non-timber forest products like bamboo, berries, fruits, mushrooms and honey. There was also a decrease in fires inside the reserve, as also poaching and fishing activities. It was hailed as a success story, which did not involve any forcible eviction and instead focussed on participatory process with consensus-building and active involvement of local NGOs, forest and revenue departments all through the planning and execution.

**Post-relocation scenario**

The process of voluntary relocation doesn’t conclude with the mere ‘relocation’ of communities from the forest to areas outside, but is contingent on post voluntary relocation support leveraged through Government funds from various departments. Agricultural, housing, healthcare, educational, social and employment support are critical to the holistic success of voluntary relocation, and integration of beneficiaries into the mainstream society.
Today, 18 years down the line, the Bhadra story is one of successful families whose lives have changed for the better. As Huliyappa Gowda at Kelaguru puts it, "it is about hard work and fate". And who best to say that but Gowda who has come a long way.

![Paddy field cultivation of a relocation beneficiary at MC Halli. Photo credit: Praneeth Sargur](image)

Back in the forest, he had a small patch of land but mostly worked as labour on others' land. Today, he sits pretty on an annual earning of Rs 10 lakh from his four acres of land where he has grown coffee and pepper. It took him seven years of hard work, caring for the land and crops, but arrive he has. When he talks, it is from confidence and learning that has built over these years. Visiting coffee experts swear at the quality of his beans, sure that "he speaks to all the plants, that is how they are so healthy."

Gowda acknowledges that he was once a nobody in the forest who none cared to talk to, except when called for some work. Today, people recognise me, he says proudly. His son runs a nursery and makes a good earning. He has big plans. The move has done them good, agrees the family.
Sundara Poojary is another one who persisted. Having sold his house, he moved out and built a new home adjacent to the land holding he was allotted. He too makes an annual earning of Rs 8-10 lakh from his five acres. His children and grand-children are doing well. In his porch sit three cars, including a SUV -- all his.

Land value has gone up considerably in both the relocation areas, with an acre fetching anywhere between Rs 25-30 lakh and even higher in some areas. What used to be paddy and sugarcane today sees a definite shift toward arecanut. Dharme Gowda, from Madla, who was the first settler to build his house at MC Halli, has done well. His four acres of arecanut fetches a good income. His son is an engineer while his daughter completed degree in fashion design. So also Kesave Surendra who has just harvested his first crop of arecanut after six years. Women from the neighbourhood sit in his verandah, de-husking the arecanut. His son has completed a degree in metallurgy and now seeks employment.
Mallappa Hegde, known as the 'water man' as he operates the water from the common tank, had no land in the forest. Today, his son has completed education and found a job in Saudi Arabia. Ramachandra from Maadla has educated his two daughters who aspire to compete for IAS. Shifting out gave him 'khushi' (meaning joy, in the local language Kannada) he had said back then and today he has named his daughter 'Khushi'. Having lived in a small shack till recently, Ramachandra has now embarked on building a palatial home, designed and supervised by himself.

All the people spoken to have no doubt whatsoever that the move from the forest has done them good. The efforts of Girish and Yathish are recollected in gratitude by almost everyone. MC Halli now boasts a community hall and its own school. Some of the residents have gone on to be elected to the local panchayat.

A telling difference from days in the forest can be seen in the form of the tempo vehicle delivering gas cylinders to doorsteps -- a far cry from venturing into the forest to collect firewood at the risk of fatal encounters with wildlife. Similarly, the milk van comes to the colony. The school bus comes to pick the students while vegetable sellers from the markets come to sell their produce. The markets, schools, colleges, hospitals are all within a few hundred metres away and transportation is available. Now, these voluntarily relocated families no longer depend on the vagaries of a forest life but look ahead to a bright future for their children.
In terms of recovery of wildlife too, according to the NTCA report ‘Status of tigers co-predators and prey, 2014’ after the relocation in 2002 there has been a gradual increasing trend seen for large mammal populations at Bhadra. Following the disappearance of tigers from Sariska in 2005, the Tiger Task Force had deliberated on the two alternatives of harmonious coexistence in the forest and relocation. Opinions varied between providing facilities within the forest or relocating people. In the latter context, the task force had cited the Bhadra voluntary relocation programme as one of the most successful ones in the country. Even today, it remains one of the best show case for voluntary relocation -- in the way it was planned, supported, executed and monitored.
Chikmagalur was my third district as Deputy Commissioner; prior to that I served a three-year stint at Mandya and a two-year stint at Tumkur in succession. Mandya, carved out of erstwhile Mysore district, is mostly irrigated from Krishna Raja Sagar and Hemavati irrigation dams. Tumkur, on the other hand is a dry district on the eastern plains of the state with only agricultural lands under a chain of tanks being irrigated by the Hemavati project. I was posted to a third district only because I never sought any posting to the state capital.

Chikmagalur is a hill district in the lap of the Western Ghats with a large dry plain area of Kadur taluk bordering Tumkur district on the eastern side. The picturesque evergreen Western Ghat segment of the district is the birthplace of several rivers such as Tunga, Bhadra and Hemavati flowing towards the east and Netravati flowing towards the west. The district is home to the Bhadra Tiger Reserve and Kudremukh National Park, rich in flora and fauna and biodiversity. Coming from the dry district of Kolar I was enchanted by the natural splendour and scenic beauty of Chikmagalur. It also reminded me of the responsibility of preventing encroachments on wooded lands, protection of forest area, conservation of river systems, ecology, environment and wildlife.

As per my normal practice while in service, after handing over charge at Tumkur, I proceeded to Karwar, where my in-laws resided, for a restful stay of ten days. From there while travelling towards Chikmagalur via the Western Ghats from Sirsi and Shimoga side, my vehicle broke down at the Chikmagalur district border between Bhadravati and Tarikere Taluks - to be precise at Malali Chennelahally (MC Hally) village limits. There I observed on either side of the Bangalore-Honnavara (BH) national highway, vast tracts of irrigated lands lying fallow (for decades).

Later on, the Assistant Commissioner of Tarikere Sub Division clarified that the land had been reserved for some public purpose but the locals were litigating for granting the land in their favour. I felt leaving hundreds of acres of irrigated land unproductive for two decades was a
crime. This public land was once leased to the Mysore Paper Mills for growing species required for pulp production. It was later released for cultivation following the construction of the Bhadra Reservoir in the seventies and reserved for granting to the inhabitants of the Bhadra Game Sanctuary notified under the Wildlife (Protection) Act, 1972. A sum of Rs 1 crore was also released by the Government of India to rehabilitate villagers coming under the game sanctuary. Land was lying fallow; money was gathering interest at the local State Bank of Mysore branch but the project never took shape.

**Early Days**

It is normal practice at district headquarters of Karnataka for public representatives, important citizens, heads of social organizations and various pressure groups to meet the new Deputy Commissioner and put forth their demands in the guise of welcoming him/her. It is routine for officials to meet the new DC and brief him on important issues concerning their department. Besides, newspapers also highlight the burning problems of the day to draw the attention of the new DC.

During the course of such welcome visits and briefings, two youngsters attempted to draw my attention towards relocating people from BTR, a project pending for years. One of them was Yatish Kumar, an officer of the rank of DCF from the State Forest Department, and the other was DV Girish, the Honorary District Wildlife Warden (HDWW) who was also leading an NGO working for wildlife conservation.

I was very impressed by their knowledge about the forest, flora and fauna of the district, the rivers, rivulets and mountain ranges, problems of villages within BTR, etc. The soft-spoken DCF briefed me about what has to be done to speed up implementation of the project for which money had been released and land reserved a decade ago. I was moved by the commitment and determination of the two youngsters. While assuring them of my support, I also gave them a task of first getting the approval for voluntary relocation from the communities. Unless people are convinced and willingly agree to move to the land earmarked for the purpose, we could not go ahead with the project. Therefore, meet the inhabitants of the villages, brief them about the benefits of the project and only after they are fully prepared to leave can we go ahead, I told the duo. They happily accepted the task and appeared confident of convincing the inhabitants of not one, but sixteen villages. I smiled inwardly at their inexperience and was sure they would never come back.

Two other developments within the district also welcomed me. Towards one issue my attention was drawn by none other than the famous litterateur-cum-conservationist Dr. Poomanchandra Tejasvi. This related to the issue of mining in the Western Ghat peak area of Kudremukh. The tenure of lease granted to the KIOCL had expired, yet mining operations continued, polluting the Bhadra water downstream.

The writer K.P Tejasvi and a group including the HDWW D.V Girish and journalist Girijashankar submitted a memorandum to me and compelled me to accompany them to Nellibeedu and Balehonnur to inspect the quality of the Bhadra water. Ullas Karanth and
Praveen Bharghav were fighting against the mining company through courts at Bangalore and Delhi. All of them wanted the mining activity by the KIOCL stopped forthwith.

The other issue was about encroachment of forest area for coffee cultivation. Since coffee cultivation requires shade, coffee saplings are planted on the wooded land without cutting trees. This process is difficult to detect. The area under coffee cultivation thus increases without a single tree having been cut. Public interest litigants had moved the high court against rampant unauthorized cultivation of coffee in the wooded areas. The high court had directed the Deputy Commissioner time and again to evict encroachments and to save the pristine forest cover of the Western Ghats by preventing unauthorized occupation. The DC had to respond by initiating appropriate action.

Amidst my collectorate functions of “Reception, Collection and Election”, there emerged three other priority issues that required my attention in this Western Ghat hill-district of Chikmagalur. These were (1) Voluntary relocation of villagers from BTR; (2) Discontinuance of mining operations by KIOCL; and (3) Prevention of further encroachment of forest and thickly wooded government lands for cultivation. I silently committed to contribute my might to bring in a positive change.

Compared to my previous stints at Mandya and Tumkur, I found that the workload of the Deputy Commissioner at Chikmagalur in terms of pending files and court cases was lower. This gave me enough time to concentrate on the three priority issues of nature conservation despite an election for the zilla panchayat and taluk panchayats in the district.

Conducting elections is the unique responsibility of the Deputy Commissioner. The DC supervises overall conduct of elections from filing of nominations, appointment and training of polling staff, finalizing polling station-wise voter lists, setting up of polling stations, deployment and movement of polling staff and material, collection of polled boxes, arranging for their security at taluk headquarters and finally organizing counting of votes and declaration of results. The whole process, done in a limited time frame and according to a set calendar involves a lot of travel, frequent meetings and inspections. Yet, during this period, the DC would be alone and free as every other subordinate and district officer would be drafted and entrusted with election work.

**Project initiation**

During one of those days I was surprised to receive DV Girish, Yatish Kumar and Girijashankar. The topic of our conversation shifted to the voluntary relocation of people from the 16 villages within Bhadra TR. To my surprise the trio enthusiastically declared that they had convinced the inhabitants of the villages who were now willing to relocate. The trio had managed this impossible task within two months by holding village-level meetings, giving the villagers all the information about the resettlement project, its benefits such as compensation for their agricultural lands and houses at market rate and grant of land, and assistance to shift families to the alternate place of resettlement. The assurance made by them that would be delivered without any cut and delay, made the villagers change their mind. Another reason for their willingness
was the daily hardships faced by them inside the tiger reserve due to absence of any development work including roads and buildings in these villages after the area was deemed a ‘Tiger Reserve’.

It was now my responsibility to at least initiate the project implementation.

The project had been lingering for a very long time and some of the land acquisition notifications had vitiating without any follow-up. In a few cases a survey had to be conducted, lands and structures inspected and evaluated, and awards were to be framed to determine compensation. But the Central Government which is supposed to bear the cost of land acquisition had not released the second installment for want of a utilization certificate. Secondly, the land reserved for the voluntarily relocated families was to be divided into plots to be granted to agriculturists, and a layout plan was to be prepared for assigning the housing sites.

In order to oversee the implementation of the project, I requested the State Government of Karnataka to constitute a district level committee. My proposal was accepted by the State Government and a committee on resettlement was constituted comprising of only official members. No public representative was included. I met the district minister and requested him to include a few MLAs of Chikmagalur district. But the minister was of the opinion that such a committee would only delay matters and advised me to hasten the process, while promising his whole-hearted support. Needless to say, I was the chairman of the committee and the minister kept his word till the end.
At its very first meeting, the committee took stock of the state of affairs and resolved to adopt a multi-pronged approach. The general talk so far of acquiring land and structures in the villages, awarding compensation to the families willing to relocate, grant of alternate land to agriculturalists was to be reduced to specifics. In other words, the list of beneficiaries (land holders, agricultural laborers) had to be finalized. Vitiated land acquisition notifications were to be reissued. As the grant of equal extent of land handed over by big landholders was not possible, a matrix had to be evolved that would bring in a parity between the land possessed by the voluntarily relocating landholders, and the alternate land available for granting to the identified beneficiaries.

**Drawing the list**

About 200 landless agricultural laborers were to be granted a minimum extent of land for their survival. The greatest difficulty in properly implementing any government project is finalizing the list of beneficiaries accurately. When grant of land involves a large joint agriculturist family, family members may put up rival claims. To ensure accuracy and efficiency, this important task of drawing the list of beneficiaries was not entrusted to subordinate revenue and forest officials susceptible to political influence or pecuniary interest. It was jointly entrusted to the HDWW and DCF since they personally knew every family to be voluntarily shifted. In record time, a list of beneficiaries willing for voluntary relocation was accurately finalized.

Two very important and time-consuming tasks to be achieved within the available time frame of my likely tenure in the district were: (1) Acquiring the land given up by the voluntarily relocating families; and (2) Granting of alternate sites and land to the voluntarily relocating families. Both these tasks fell under the revenue domain and hence it was my responsibility to accelerate the process by cutting red tape and avoiding political interference. The Land Acquisition Officer (LAO) was none other than the Assistant Commissioner (AC), Chikmagalur, working from the DC's office complex. He was my immediate subordinate, but in the capacity of land acquisition officer, he was a quasi-judicial independent authority and I would not interfere in his work. My only interest was to hasten the proceedings, eliminating delay at every stage.

Normally, in any land acquisition proceedings a preliminary notification under section 4(1) of the Land Acquisition Act is mandatory, followed by sufficient time to landholders to file objections against the acquisition. Only on the expiry of the time specified for filing objections, are all objections heard and a 5A enquiry report submitted to the government by the LAO, following which a decision is taken by the government on whether to proceed with the acquisition or drop the process.

In case the decision is taken to proceed with the acquisition, the extent of the lands notified would then be measured and a final notification under section 6(1) of the Land Acquisition Act be published with prior approval of the State Government. From my past experience as a LAO for Kabini, Hemavati irrigation projects and Kali-hydro Electric project, I was aware that the entire process, beginning from hearing individual objections, submission of the 5A enquiry report, joint inspection and survey of structures and agricultural lands, drafting the final
notification with details of ownership of land, to getting the final notification under section 6(1) approved from the state headquarters, takes years together.

I was also sure that unless the project is implemented during my tenure of two years in the district, it would go haywire without a proper follow-up. The Land Acquisition Officer and the Assistant Commissioner, though my immediate subordinate, knew the law well. Being aware that he was an independent quasi-judicial authority, he was not inclined to speed up the process and told the villagers that he had to follow every rule, each process and opportunity as enunciated in the law. Further, he had other responsibilities to accord priority to. In other words, he wanted to take adequate time for every stage, thus delaying the process of land acquisition—the first compulsory and statutory step for the voluntary relocation of people from the reserve. This approach of the LAO discouraged the villagers and caused resentment among them.

Gopalakrishne Gowda with the villagers from Bhadra Tiger Reserve. Photo credit: DV Girish

At the very next meeting of the committee I had to advise the LAO as how the process could be expedited without violating any law, rule or procedure. Firstly, since all the landholders and inhabitants of the villages had given in writing their consent for the acquisition and stated that they had no objection, there was no need to wait for two months to reject the objections and proceed with inspection of lands, structures and conduct a joint survey. Secondly, since every piece of land and every structure in each village would be acquired, there was no need for actual field surveys for the same. The RTC, Village Record of Rights, and the Village Panchayats' khata and demand register of all structures would be enough to prepare the draft 6(1) notification since they contain all the details about the extent of land structures as well as ownership.

Cutting the red tape
Yet the AC was reluctant. I had to finally tell him that I was the ‘award’ approving authority and hence equally responsible for any lapse in the process, and not the LAO alone. Thereafter, he had no reason to resist. Thus the red tape was cut, eliminating enormous delay in the process. But delay was still inevitable at the government-level where they had to process the final land acquisition notifications and the high value awards of projects across the state. At this stage, Yatish Kumar played an important role in visiting Bangalore frequently and pursuing the publication of the notification process methodically. He also played an important role in liaising with the Forest and Finance Departments at the state and the central level for release of funds towards payment of compensation to land and property owners.

On my part, I reviewed the progress almost every day by contacting the AC, DCF and the Honorary Wildlife Warden, and according approval to proposals received on the subject the same day itself. The compensation amount was paid to the villagers by cheque and deposited into their bank accounts. Since all land and structures of the willing families were acquired without exception and award of compensation was determined uniformly for every class of land and kind of structure there was no political interference or any serious allegation about the process from any of the beneficiaries or public representatives.

The other major issue was of allotment of dwelling sites and plots of agricultural lands at MC Halli to the beneficiaries. The committee deliberated at length on this. Since land reserved and available for grant was to be judiciously utilized observing the tenets of social justice, and without ignoring the interest of any affected family, the benefit of grant of land equal to the extent acquired was deprived to the large landholders. The committee resolved to grant a minimum extent of 20 guntas of irrigated land each to 200 families of landless agricultural laborers. A matrix was worked out for the land holders for grant of 1-acre, 3-acre and 5-acre land depending on the extent of land acquired from each family. No one was granted more than 5 acres of irrigated land or an equivalent extent of rain-fed land.

Delineation of sites for construction of dwelling units and demarcation of the alternate land into plots (1A, 2A, 3A) etc., involved the process of survey which would again take a considerable amount of time if the State Department of Survey and Settlement was involved. In order to completely divide a thousand acres of land into smaller plots, it would have taken at least a year using the traditional chain survey. In addition, the manual process is an invitation for complaints as well as mistakes and lapses.

Mr. Yatish Kumar came up with the idea to adopt the geodetic survey involving computerization. While it was a costly process, it saved a lot of time and confusion. A separate colony was planned for landless labourers for which 20 guntas plots was demarcated and allotted. Housing was leveraged under the ‘Ashraya Scheme’. For others, a settlement next to the BH road was planned and sites distributed to each beneficiary family. Demarcation of agricultural land into 1A, 2A, 3A plots with independent sketches for each plot was also completed in record time.
Land survey and allotment

The latest GIS-based technology for survey of lands was adopted over manual surveys to avoid involving traditional surveyors who create more problems than they solve. Thanks to the foresight of the DCF we could finalize the demarcation of sites and agricultural plots without any loss of time. Finally, what remained was the allotment. Normally government departments organize a function inviting one or two ministers for a token distribution of title deeds to a select few and then shift the scene to the office, where clerks deal with people. But at that point, there were three ministers from the district.

We wanted to maintain utmost transparency during the distribution of dwelling sites and agriculture plots to eliminate allegations of any kind. We decided to allot sites and agriculture plots through a lottery system. Then the question arose as to who should draw the lottery. It was decided to allow the beneficiaries themselves to draw the lottery. For each category of beneficiaries including landless agricultural laborers, small farmers and big farmers, serial numbers were given to beneficiaries’, the dwelling sites and agricultural plots, which were then recorded on separate pieces of paper, rolled up and kept in three separate bowls. Category-wise, the beneficiaries were called on to the stage one by one and asked to pick three rolled slips, one from each of the three bowls. The picked slips would then be pinned together and opened, and the serial number of the beneficiary and the serial number of the agricultural plot and dwelling site were announced in the open. This process ensured that total transparency was followed in the distribution of sites and plots of agricultural land to the voluntarily relocated families, without any sort of political influence or official favor.

As luck would have it, a prominent Congress leader's family from Madla village got a plot of 3 Acres agricultural land, a part of which included rock formation. He moved heaven and earth to get the plot number changed. We did not meet his demand since doing so would jeopardize the interest of other persons. We advised the leader to quarry out the rock and sell stones to the neighboring beneficiaries who would need them to lay the foundation for their houses.

Moving out of the forest

The next stage was the actual physical relocation and resettlement of villagers from their houses. After receiving compensation for their lands, structures and securing title deeds for sites and agricultural land at MC Halli, the villagers were supposed to immediately move out of the PA. But this process was not easy to achieve as the villagers delayed the process offering one excuse or another. In fact, I had to curtly order the demolition of houses to facilitate early exit of the villagers to the rehabilitation centre at MC Halli. Again Yatish Kumar, the DCF, accelerated the process by promising transport arrangement for the excavated material from demolished houses, and belongings of each voluntarily relocating family. A fleet of vehicles was hired for the same purpose. Only then the process of actual shifting of voluntarily relocating families commenced.

After the excavated material reached the new settlement, the construction of houses by individual farmers started. Ashraya homes were ready for occupation by families of landless
agricultural laborers. Their houses were situated very close to the agricultural plots allotted to them. Therefore, they were the first to be happily relocated.

Site allotment and grant order of agricultural lands to the affected people and the consequent title deeds were signed by me in the capacity of the Deputy Commissioner of the District. Since five acres of irrigated land could not be granted due to non-availability at MC Halli, an equivalent extent of dry land (C&D class) along with sites within Kelaguru village limits of Chikmagalur taluk were granted to about 50 families of agriculturists following a similar process. These lands were developed for coffee and spices cultivation by the families.

After grant of land and title deeds the names of grantees with the extent of land granted to them should be entered in the village record of rights and RTC issued in their favor. While the mutation of land grant rights was done without any problem in Chikmagalur taluk by the Tahsildar in respect of Kelaguru lands, the process was not done in respect of lands granted within the MC Halli village limits by the Tahsildar of Tarikere taluk. This was under the influence of the local MLA who was opposed to the project tooth and nail and had been obstructing it physically and officially at every stage. Then I had to rope in the Assistant Commissioner of Tarikere, bypassing the Tahsildar who was a stooge of the local MLA.

Though the project could be pushed through during my tenure of two years as Deputy Commissioner, the entire process was not a smooth affair despite the whole-hearted support from the State Government (including the chief minister and the district minister). Hurdles were created by the local MLAs every now and then.

**Politics of the land**

A peculiarity of this voluntary rehabilitation project was that the settlement from which the people were to be moved out, in other words the portion of the Tiger Reserve, was within the jurisdiction of Chikmagalur and Sringeri Assembly constituencies whereas the land reserved for voluntarily relocating families fell within another Assembly constituency viz., Tarikere. As a result, two MLAs, though belonging to the ruling Congress party at that point of time, were opposed to the implementation of this project.

To politicians, successful implementation of the project meant shifting more than 1,000 voters from one constituency to another. While the Chikmagalur MLA, who was the Transport Minister at that point of time, wanted the whole voluntary relocation project to be implemented under his control, the Tarikere MLA was reluctant to admit fresh voters into his constituency and totally opposed to the distribution of land and house sites to beneficiaries moving from another taluk to his taluk. The Tarikere MLA had virtually assumed ownership of the land reserved for voluntary relocation by the government. He wanted at least some portion of the land to be granted to the families residing at Tarikere taluks as per his wish list. We could not meet this demand and hence met with his opposition.

Even his political opponent and a defeated candidate from the rival political party joined the local MLA in opposing the project tooth and nail. In fact, they jointly organized a bandh of Tarikere town against the district minister and the deputy commissioner and burnt our effigies.
They joined hands and started opposing every move of ours. They incited people to destroy the fence raised by us to demarcate the boundary of the reserved land. I wanted to get the local MLA arrested, and the superintendent of police concurred. But the instructions from the state capital were to do anything and everything for the implementation of the project, except for arresting the local MLA.

The MLA was powerful and all the Tarikere local officers were posted at his behest, so they blindly obeyed him. The taluk executive magistrate and the tahsildar was no different. Under the influence of the MLA he pleaded helplessness to effect the mutation of rights into land records in favour of the grantee families who voluntarily relocated. I was eager to put the grantees into possession by creating an RTC in their favour to facilitate their cultivation of lands immediately.

The local MLA set up pressure groups of landless agricultural laborers and writ petitions against the deputy commissioner were filed in the High Court every week. We had to be alert and defend the land grants made in favor of the families that voluntarily moved out from the Tiger Reserve. The project implementation team would meet every day in the evening to take stock of the situation at the ground level in the old and new settlements as well as at the High Court at Bangalore.

All of us - the DC, DFO, SP, AC, HDWW, took a personal interest in this matter and countered every mischief created by the local MLA and ex-MLA to scuttle the project. We took quick decisions so that the voluntarily relocated families could get legal possession of the granted houses, house sites and plots of cultivable land. The sincere service rendered by the Tarikere AC in recording RTC entries in favor of the voluntarily relocated families over-ruling the Tahsildar's objections, along with the pace with which the beneficiary families were shifted with their belongings from old settlements to the relocation village in three days by the DCF Bhadra and HDWW was the laudable climax of the project.

Thus we were able to overcome every hurdle created by the local MLA and put the families who voluntarily moved out from the Tiger Reserve in physical possession of alternative land and sites. I am of the opinion that unless one takes personal interest and monitors the progress every day and hour, assuming overall personal responsibility, it is impossible to implement such a project.

(The author was the Deputy Commissioner, Chikmagalur and played a big role in ensuring the success of Bhadra Voluntary Relocation Project)
Voluntary relocation of people from any place is a very sensitive and emotional process, especially when the whole village is being relocated. The Bhadra story was no exception.

Bhadra lies in the coffee district of Chikmagalur district. It is part of the Western Ghats and endowed with rich flora and fauna. In 1974 the State Govt. declared an area of 492.46 sq.kms as Bhadra Wildlife Sanctuary. With the construction of the Bhadra dam at Lakkavalli across the river, the villages of Hebbe, Madla and Hipla were cut off from the main cities like NR Pura and Chikmagalur. This led the Govt. to decide for relocating these villages from Bhadra Wildlife Sanctuary, but nothing much happened with regard to the decision for some time.

In 1996, the Forest Department and district authorities for the first time surveyed all the villages inside Bhadra, and prepared a basic document including details of all the land holdings and properties of the villagers and estimated the cost of the voluntary relocation programme. This document was the first step.

Voluntary relocation is a two-step process where a person’s land is obtained first and then he/she is rehabilitated elsewhere with all basic facilities. Since the lands were to be acquired first, the Revenue Department demanded that a quarter of the cost of acquisition be deposited with it before starting the process of acquisition, as per the Land Acquisition Act. Towards this, the State Govt. requested the Centre to release money for acquisition. The Centre sought an agreement with the State wherein it would assist in acquisition but the State should take up the responsibility of rehabilitation. Thus in 1996, an agreement was reached stating that the Centre would release the amount for acquisition and the State would bear the rehabilitation cost. The Govt. of India released an amount of Rs. 1.68 crores to the State Govt. The amount should have been transferred to the Revenue Department (RD) for acquisition and then to the DC, Chikmagalur for initiating acquisition. But while a Govt. order was issued for transferring the amount to the RD, nothing else was done.

I took charge of Bhadra Wildlife Division in 1998 and started enquiring about that money. I soon realized that the money was still lying with the State exchequer and to utilize it we needed
revalidation from Govt. of India. This was obtained by the end of March 1999 and an amount of Rs. 1.68 crores from the Centre and Rs. 50 lakhs from the State was deposited with the DC, Chikmagalur on March 31st 1999. The DC thereafter issued Section 4(1) notification for acquisition of lands at Hebbe and Madla villages. This set the ball rolling in the process of voluntary relocation.

Representative image: People carrying firewood inside forest. Photo credit: Conservation India

Relocation of people from the forest will no doubt benefit wildlife in that area, but the benefit to people is greater and this needs to be communicated to them properly.

Voluntary relocation is a process that needs to be dealt with a human touch. More than what is actually allotted to the people, how this is given is very important for the success of the project. We cannot compensate for the emotional attachment they have with their forefathers’ land nor for the memories. Hence, care should be taken in addressing such issues.

With the process of acquisition started, we wanted to have a rehabilitation package approved by the Govt. This process was discussed at the district by involving all stakeholders and a generous package was prepared. The proposal was sent to the Govt. for approval, but again things remained dormant with no action. Then, I realized that without personal involvement and perseverance, nothing would move in the Govt. Taking the help of my senior officers, we got the voluntary rehabilitation package approved by a High-Power Committee in March, 2001.

Meanwhile, the people of Bhadra were initially opposing the relocation process, fearing that they would become homeless and be abandoned by the Govt. They had heard about earlier dam relocation stories where people had suffered. Hence, convincing them to agree to relocation was
a challenge. First, we had to win their confidence and convince them that we were genuinely interested in their well-being. We could achieve this by providing basic drinking water facilities, solar light and some other welfare measures within our capacity. As a result, they slowly started developing confidence in us and we were able to convince them that relocation was in their own interest, a once-in-a-lifetime opportunity to start a new, better life. Eventually they saw merit in this programme, and themselves approved the idea.

Now that the relocation package was in place and the people were ready to move out, it was important to expedite the implementation of the package. Normally the acquisition amount is paid to the willing families through the Govt. treasuries, but this often results in delays and hardships to the beneficiaries. Hence, the DC instructed the land acquisition officer (Assistant Commissioner) to disburse the acquisition amount through crossed cheques. This ensured speedy disbursal of money to the beneficiaries.

The lands identified for rehabilitation were next surveyed and a plan prepared for accommodating all the willing families strategically, in a short time. It was transferred from paper to the ground with the latest technology and the plots demarcated. These plots were distributed to all the families through a lottery system in a transparent manner.

The identification of the families living inside the Bhadra Tiger Reserve was done with the help of local NGOs, then discussed with all the villagers and the list was finalized. The list formed the basis for provision of all future facilities. The implementation of the project was taken on a war

\[MC\text{ Halli site inspection by Yatish Kumar with the DC and other officers during Bhadra relocation.}\]
\[Photo\ credit:\ D\ V\ Girish\]
footing. We had to face a lot of local and bureaucratic hurdles, all of which were overcome by timely intervention and by going the extra mile.

The process of implementation taught us new lessons at every step and we were able to overcome all of them with a positive approach and support from like-minded people within the Govt. and outside.

It is very difficult to now list out all the hurdles but suffice it to say we overcame them. However, some of the major issues must be listed out for future reference of individuals involved in implementing relocation projects. But rather than merely listing out the problems, the approach needs to be highlighted. I have done this here below:

1) A human touch is a must in all planning and during the implementation.

2) We should maintain a positive attitude during the implementation, because there are bound to be many hurdles which can dampen the mood and lead one to think the task is impossible. It helps to keep the faith in the almighty who will show us the way. We often encountered such dead ends but miraculously the hurdles were cleared.

3) Perseverance and personal involvement at every step is the key element in successful implementation, especially when working with the Govt.

4) Teamwork is the essence of success. Since the work involves coordinating with different departments within the Govt., we should go beyond the limitations of our ego and be willing to communicate personally with people in every other department to get the required help from them.

5) We need to coordinate within the department, since it involves corresponding with the State and Central governments at every stage. Unless there is a personal rapport with the higher officers within the department, both at the State and Centre, it is very difficult to implement the project successfully.

6) We should be ready to go the extra mile in helping the voluntarily relocating families. Since not everything can be put down in the rules and regulations, there will be situations where you are forced to think differently. We encountered many such situations, wherein we were able to help them while on the move. This increased our credibility and helped gain their confidence.

7) We should not care about who gets the credit for the success of the project. If bothered on that count, subconsciously we may end up blocking many opportunities. This could determine whether the project is a success or a failure.

8) At every stage transparency must be maintained. All the families received their compensation amount to the tune of Rs. 50 lakhs at their doorstep and without much hassles. Even the rehabilitation benefits were handed to them with a sense of honour and dignity. This helped maintain the clean image of the project.

9) Always try to dovetail other facilities available from the government to downtrodden families in a constructive way. We were able to build 203 houses for landless families by availing benefits from other schemes. In a span of three months, these units were ready for occupation.
10) Help the people with local farming techniques and other livelihood strategies by bringing in experts in those fields. This inspires confidence in starting a new life in a new place.

11) Lastly, we need dedicated officers and staff to implement these kinds of projects. We need to work beyond the call of duty to make the project a success.

The Bhadra voluntary relocation project has been a great teacher for me personally. It has taught me to look at people living in the forests with empathy. It has totally transformed my thinking about conservation. Conservation efforts without involving the people living in the forests is doomed to fail miserably. It has reinforced in me the confidence that implementation becomes possible provided we take the effort to listen and solve the problems of the local people. Finally, if forests and wildlife have to be saved in our country, it is possible only with the help of the local people living in the forests.

(The author was Deputy Conservator of Forest, Bhadra Wildlife Division, Chikmagalur and played a big role in ensuring the success of Bhadra voluntary relocation project)
I first visited Bhadra Wildlife Sanctuary in 1978 as a young boy interested in wildlife without much insight. Subsequently most of my trips to the park between 1978 and 1985 were when I was escorted and guided by parents, my school or scouting trips. Slowly my interest and knowledge about wildlife broadened. The understanding and love for all things wild was enriched and nurtured during those formative years. Soon enough when I became independent and was able to travel on my own and sometimes with a few like-minded friends, the explorative trips to the forests and mountains increased manifold, all the time with meagre allowances and many hardships.

With knowledge, understanding and awareness, our love and a sense of belongingness increased and we slowly started noticing problems and threats to wildlife. While we greatly enjoyed birding, tree identification and watching wildlife, exploring new areas and new species, making trips to the forest helped to better understand the various aspects of wildlife and their ecology.

The other world of management and people and their life in the forest was also unfolding and it was stark. We started feeling the threats and realized wildlife was the last priority for authorities.

We were familiar with many villagers and interacted with them regularly. Listening to them and their stories, their life and problems, joys and sorrows, we did what we could to help them and offered whatever we could.

While we enjoyed the marvels and beauty of nature, what was unravelling was also the assault and wanton destruction by man. Cultivations in the forest that led to clearing of large patches, logging, cattle grazing, hunting, wood and bamboo extraction, fire and burning forests,
extraction of non-timber produce like honey, gooseberries, soap nut, shikakai, plants and herbs; diverting natural streams, depriving wildlife of limited and precious resources for survival, incursion of roads into the forest with the accompanying movement of people inside; it was all disturbing and enlightening.

Sambar herd inside Bhadra Tiger Reserve. Photo credit: Ng Bishwanath Singh

We became aware of the proposal to rehabilitate people from the Bhadra reserve and decided to pitch in and contribute what we could to the process. We started interacting with people and seeking their opinion about moving out to a life outside the forest. Some of us who were involved kept track of the paperwork and progress of the proposal. We intervened for the rehabilitation at any and every opportunity, pushing the idea at all forums.

To give an understanding of the process, we can begin with the demography of the villages. Around 920 acres of land had been reserved for occupation when people were settled in the forests as part of the grow-more-food campaign. But after encroachment, the total area occupied was around 1200 acres. 463 families spread over 13 villages cultivated the land which fell in the Muthodi subdivision of Muthodi and Hebbe ranges of Bhadra Wildlife Sanctuary.

The first notification of a reserve forest in 1915 referred to a village Madla with a population of 36. Most of the other families were settlers and composed mainly of people who came as contractors with their teams to work for the forest department, in silvicultural activities, timber extraction, charring coal, preparing teak plantations and maintaining them, etc.

The people we met were generally from the working class, farm hands and labourers. The small land holders were not very different from them. There were very few big land-owners who were mostly residing outside the forest who had invested in land and housing outside the forest areas. About half of the population was landless.
**Details of villagers from Bhadra Tiger Reserve**

<table>
<thead>
<tr>
<th>Sl No</th>
<th>Village</th>
<th>&gt; 5 acres</th>
<th>5-2 acres</th>
<th>2-1 acres</th>
<th>&lt; 1 acre</th>
<th>Landless and farm workers</th>
<th>Total</th>
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<tbody>
<tr>
<td>1</td>
<td>Hebbe, Kanchigaru, Kurkulumane</td>
<td>2</td>
<td>24</td>
<td>19</td>
<td>1</td>
<td>31</td>
<td>77</td>
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<td>2</td>
<td>Madla, Dabgaru, Vaddihatti, Hirebellu, Heggaru, Matvani</td>
<td>12</td>
<td>44</td>
<td>42</td>
<td>42</td>
<td>59</td>
<td>199</td>
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<tr>
<td>3</td>
<td>Hippla, Karvane</td>
<td>8</td>
<td>13</td>
<td>23</td>
<td>2</td>
<td>38</td>
<td>84</td>
</tr>
<tr>
<td>4</td>
<td>Kesave, Muthodi</td>
<td>6</td>
<td>7</td>
<td>12</td>
<td>13</td>
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<td>63</td>
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<td>5</td>
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<td>0</td>
<td>9</td>
<td>18</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>31</strong></td>
<td><strong>95</strong></td>
<td><strong>96</strong></td>
<td><strong>58</strong></td>
<td><strong>162</strong></td>
<td><strong>442</strong></td>
</tr>
</tbody>
</table>

* With additional adult members in some families, the total was increased to 463.
* Relocation of 13 villages has been fully completed.

Other than working as farm hands and growing crops, or barter-working in each other’s fields and seasonally working for the forest department as fire watchers and labourers, or walking miles together out of the park to work in surrounding coffee estates and paddy farms, there was very little job opportunity.

In terms of education there were a couple of primary schools for the 13 villages. Higher education meant long walks out of the sanctuary or being put up in hostels or with relatives in nearby towns. Perhaps this was the reason why there were very few who had pursued any level of higher education.

Social interactions were severely limited owing to the distances and the forest. As a result, the people were isolated in their villages so much so that finding marriage alliances became very difficult. Marriages and deaths were the only occasions when families reached out of their villages. Feudal domination was another issue with the landless and labor class being subjugated by the few landlords.

With very little access to markets, even accessing efficient farming equipment was difficult. Marketing products was the biggest challenge. To procure household products it meant visiting the nearest town, a trip that needed elaborate planning and travel.

Most of the people cultivated or worked as rice paddy growers, few had areca nut and fewer had cultivated coffee. A couple of them had tried rubber growing too. No other crops were available for consumption within the villages.

Human wildlife conflict was part of the daily routine. Encountering wildlife, the constant fear and uncertainty around living in a forest, especially when children had to walk through the forest, crossing rivers and streams to reach school, was a daily affair. Crop loss caused by wildlife too was a regular casualty as a result of which elephants, gaur, deer, pigs were not objects of affection or concern but perceived as the enemy. Prized cattle or milch cows, and
much-treasured draft bulls were lost to tigers or leopards. Retaliatory killing by poisoning cattle carcasses or shooting crop raiding animals were common, though not talked about. Harmonious living with the forest and wildlife was nothing more than a convenient theory.

Hunting for pot was common, known but mostly ignored by authorities. Life in the village almost bordered on lawlessness in administrative terms, with people following the jungle law.

In terms of entertainment there was pretty much nothing besides the radio. Communication too was nil. There was no electricity in the forest and with dusk it was time to abandon activities and retire for the day. Practices like using firewood for cooking, etc and the inhalation of smoke were detrimental to health. It was a day to day living that the forest allowed with no provision for future dreams and ambitions. The elders clearly did not want their children to continue in the forest given the many uncertainties and fears.

**Process**
The initial survey was done in 1989 with another one and a formal proposal for voluntary relocation put up later in 1992. This became the base for us to move forward.

*DV Girish and team engaged in a field survey at Bhadra Tiger Reserve. Photo credit : DV Girish*

We started interacting with officers at various levels; the local officers of both revenue and forest department had to be convinced and informed about the project needs while interaction with the village people had to be direct and open. We feared all kinds of sabotaging efforts from many fronts and prepared ourselves for it.
Our interactions with state level officers were discouraging at best. I personally felt it was something impossible to persuade them to push the project but kept trying nevertheless. The most important person to take it forward and push it had to be the Deputy Commissioner as also the Deputy Conservator of Forests, Bhadra.

The year 1996 was a good one as we had a good politician, a Gandhian, in-charge of our district, (Govinde Gowda). We met him and explained the need and benefits of the project. We also had a good DC in Chikmagalur in I.S.N Prasad who understood the need of the project and was interested in taking it forward and the DCFs Bhadra (Lokanath and Parameswar) who were keen and wanted to start the process.

Though the project was approved by the government at the centre, and a quarter of its share of money to acquire land was allotted by the finance department, it never reached the Government of Karnataka as there was no commitment from the state. The first breakthrough came in the form of a letter of commitment from the Government of Karnataka, which the DC managed to get and communicated to the MoEF -- a letter stating that the Government of Karnataka would take up the rehabilitation of the villages inside Bhadra Wildlife Sanctuary, if the Government of India provided funding for the acquisition of the villages. After 15 years from the date of submission of the relocation proposal, we had something that encouraged us to go forward.

In 1998, Yatish Kumar was posted as DCF Bhadra. He took some time to understand the issues related to Bhadra and placed the voluntary relocation as his priority. He promised us that he would try his best and make a sincere effort to move this project forward.

The initial paperwork was prepared and while we were continuously engaged at different levels, things started falling in place. It was a wonderful effort to engage at all levels and make it happen. The committed amount finally reached the DCF's office and in turn was deposited with the DC. This was 1999 and what was a project on paper finally seemed to be taking shape on the ground. The DC began the paperwork and started the process of acquisition of the villages in Bhadra. These were spread in two taluks and the most interior village was Hebbe which had most vocally been demanding for the rehabilitation. The first notifications were published by the then DC Manjunath.

The voluntary rehabilitation package had to be approved by the state government based on good practices in many other acquisition and rehabilitation packages announced by the governments. Meanwhile we talked to politicians from our district about the process and were able to garner their support and assistance for the project. We had two different governments at the state since we began the process in 1996 as also at the Centre. We managed to keep it going at both levels, thanks to some well-meaning people.

Continuous interaction with the people helped us to reach them with the acquisition process, to explain the voluntary rehabilitation process, the money and facilities they would get, the civic amenities that would be provided at the new site, etc. We even organized a trip to the
rehabilitation sites to show them the land and sites to make them comfortable and disprove rumours and fears.

The survey and designing of plots and land was very scientifically done using the best possible survey equipment and methods. Once we had the numbers of plots and sites required, based on the possession of land and housing inside the forest, a Computer Aided Design (CAD) was employed to make the number and sizes of plots and sites at MC Halli and Kelagur. Some additions were eventually carried out to accommodate people based on their demand and needs. One of the highlights was the building up of 203 houses under the housing corporation for the landless families, utilizing the rehabilitation grant money.

### Plot allocation details:

#### Residential plot allocation

<table>
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<tr>
<th>Relocated village</th>
<th>90X60 ft</th>
<th>80X50 ft</th>
<th>50X40 ft</th>
<th>Odd size</th>
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<tbody>
<tr>
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<td>128</td>
<td>294</td>
<td>2</td>
<td>443</td>
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<tr>
<td>Kelagur</td>
<td>12</td>
<td>58</td>
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<td>10</td>
<td>80</td>
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<tr>
<td><strong>Total</strong></td>
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<td>294</td>
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<td>523</td>
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<table>
<thead>
<tr>
<th>Relocated village</th>
<th>10 acres</th>
<th>5 acres</th>
<th>4 acres</th>
<th>3 acres</th>
<th>2 acres</th>
<th>1 acre</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>MC Halli</td>
<td>0</td>
<td>18</td>
<td>0</td>
<td>81</td>
<td>89</td>
<td>226</td>
<td>414</td>
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<tr>
<td>Kelagur</td>
<td>7</td>
<td>36</td>
<td>32</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>75</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>7</td>
<td>54</td>
<td>32</td>
<td>81</td>
<td>89</td>
<td>226</td>
<td>489</td>
</tr>
</tbody>
</table>

### The challenges

Prior to rehabilitation, we had conducted a survey of residents to note how many resided within the forest and how many owned properties inside but lived outside, how many were landless residents, etc. This was done with the consultation of residents in each village.

Ensuring no misuse of the project when it was announced and when applications were invited from residents, we saw that the number of residents had almost doubled. However since we already had the list of residents well categorized, it was easy to filter out the fake applications. We also went to each village and met everybody in person and finalised the list of residents.

There was need to handhold people who were innocent and had no idea of the outside world. We ensured the package reached every person in full. This also meant making sure the money was not misused or taken away by middlemen and operators. Hence it was deposited into their bank accounts that were opened after ensuring joint operation among family members. Temporary camps were established to feed and house the men from the community who were encouraged to take possession of their lands early. By being present and supporting them 24x7 we could give the voluntarily relocated villagers confidence and support in cultivating in the new areas. Help was enlisted from all quarters including petrol bunk and tractor owners who pitched in and helped with deferred payment.
Support came from the administration, police and politicians when the rehabilitated people were threatened or their new farms were damaged. Legal assistance and support was provided to families facing problems. Self-help groups were organized to involve people to diversify and invest in small savings, etc.

After the actual move, some of us continued to monitor the situation and ensure that the lives of those rehabilitated went on smoothly. In the end the reward came in the satisfaction that we had helped a few hundreds of people to take the first few steps towards a better life. A life with no constant fear of attack or loss of crops, a life where basic amenities were available and at arm's distance (almost!), a life where aspirations of the people and their desire for a better life for their progeny materialised.

Years after the people moved out of the forest, it was equally heartening to see how the flora and fauna which had been impacted began to revive. The bamboo began to flourish. Sloth bears began to frequent these parts of the reserve while tiger numbers showed a rise.

(The author was the Honorary Wildlife Warden, Chikmagalur District and played a big role in ensuring the success of Bhadra voluntary relocation project)