TIGER CONSERVATION IN INDIA AND VOLUNTARY VILLAGE RELOCATION FROM CRITICAL TIGER HABITAT OF TIGER RESERVES

NATIONAL TIGER CONSERVATION AUTHORITY
The Beginning…

Project Tiger
(1973)

40,000
(1905-1935)

2,000
(1970)

Project Tiger
(1973)
PROJECT TIGER

• Launched in 1973, with 9 tiger reserves.
• Objective
  – To ensure a viable population of tiger in India
• Vision
  – To ensure the maintenance of a viable population of the tiger in India for scientific, economic, aesthetic, cultural and ecological values.
• Mission
  – To plan, promote, coordinate and oversee the implementation of Project Tiger in order to protect tigers and their habitat; maintain a balance between conservation and development activities.
& the Crisis...

International Illegal demand of tiger body parts hit India in mid 1990’s and by 2005 started resulting in local extinctions
NTCA...Background

- Sariska debacle in 2005 prompted constitution of a Tiger Task Force

- Established NTCA & WCCB in 2006, under Wildlife (Protection) Act 1972

- NTCA- Statutory Body of MoEF & CC so that compliance and directives become legal

- Coverage: 50 Tiger Reserves in 18 States

- Area: 72749.02 sq. km. (2.21% of the country’s geographical area)
SUCCESSFUL TIGER RE-INTRODUCTION
PROJECT TIGER ...THE IMPACT

• 30% increase in tiger numbers...now 2226...which is 70% of the global population
• 2.5 million man days generated to benefit local people
• Tiger Reserves conserve forest stock...some of India’s (1/3rd) highly dense forests, to the tune of Rs. 22 billion to 656 billion*
• Monetary benefit from ecosystem services is to the tune of Rs. 8.3 to 17.6 billion annually*
• Carbon sequestered in tiger forests is worth Rs. 1 billion/year*
• More than 350 rivers originate from Project Tiger Reserves
NTCA: TECHNICAL SUPPORT

- Normative guidelines
- Tiger Estimation
- Standard Operating Procedures
- Species recovery
- Securing connecting landscapes
- Management Effectiveness Evaluation
- Economic Valuation
- Guidelines on tiger safari
NTCA: FINANCIAL SUPPORT

- Voluntary Village Relocation
- Special Tiger Protection Force (STPF)
- Anti-poaching
- Habitat Management
- M-STrIPES (Monitoring system for tigers, intensive protection and ecological status)
- Awareness and outreach
- Man-animal conflict
- Eco development
- HRD
- Monitoring through Phase IV protocol
- Technological interventions like UAVs and e-Eye
Tiger Population Growth @ 6% per annum

\[
\ln(\text{pop}) = 0.057(\text{years}) - 107.08
\]

\[R^2 = 0.98\]
THREATS TO TIGERS

• Habitat fragmentation: source-sink dynamics
• Ecologically unsustainable land uses in tiger landscapes: loss of connectivity
• Man-tiger conflicts: managing in human dominated landscapes
• Poaching & trafficking of body parts
• Lack of local support
• Insufficient inviolate space for tiger source areas
Prioritizing Tiger Conservation through Landscape Genetics and Habitat Linkages

Bibek Yumnam1, Yadavendra V. Jhala1, Qamar Qureshi1, Jesus E. Maldonado2,3, Rajesh Gopal4, Swati Saini5, Y. Srinivas1, Robert C. Fleischer2

MANAGEMENT STRATEGY: LANDSCAPE APPROACH TO CONSERVATION
CURRENT SCIENCE BASED APPROACH TO TIGER CONSERVATION

• Core/Critical Tiger Habitats (CTHs)
  – Consolidating and strengthening the “source” population of tiger and its prey in tiger reserves, protected areas and tiger bearing forests and keep them inviolate

• Buffer
  – The buffer area, absorbs the “shock” of extraneous pressure on populations of tiger and other wild animals

• Corridor/Adjoining Areas
  – Managing the “source-sink dynamics” by restoring habitat connectivity
CORE/CRITICAL TIGER HABITAT (CTH)

• Provision for notification of “Core Critical Tiger Habitat” is a very special dispensation

• Provided only in Chapter IV B of the Wildlife (Protection) Act, 1972, based on the amendment to the said Act in 2006

• Takes care of the special/territorial land tenure dynamics of the critically endangered tiger.
CSS-PT - Voluntary Village Relocation

- Revised Guidelines - February, 2008
- Package for voluntary village relocation / rehabilitation
- Package has two options
- Option-I
  - Payment of entire package amount Rs. 10.00 Lakhs per family in case of family opts so, without involving any rehabilitation / relocation process by the Forest Department.
Option-II

- Carrying out relocation / rehabilitation of village from tiger Reserve and protected area by the Forest Department.
- Agriculture land procurement (2 hectare) and development : 35%
- Settlement of rights : 30% of the Package
- Homestead land and house construction : 20%
- Incentive : 5%
- Community facilities commuted by the family (access road, irrigation, drinking water etc. 10%

For monitoring and implementation – two committees (State level monitoring committee & District level implementing committee for ensuring convergence of other sectors.)
CSS-PT- Voluntary Village Relocation-Funding Process

- Format for voluntary village relocation plan – to be submitted by the Tiger Reserve
- Due diligence / 10 check points
- DBT (Direct Benefit Transfer) - details of the beneficiaries in the prescribed format
- Financial dispensation between Centre and State is the same as per the Non-Recurring activities – States’ commitment for providing their share is must.
Amount spent on Voluntary Village Resettlement
Amount in Lakhs

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount in Lakhs</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017-18</td>
<td>9300.4</td>
<td>till date</td>
</tr>
<tr>
<td>2016-17</td>
<td>11838</td>
<td></td>
</tr>
<tr>
<td>2015-16</td>
<td>4752</td>
<td></td>
</tr>
<tr>
<td>2014-15</td>
<td>4415</td>
<td></td>
</tr>
</tbody>
</table>
Voluntary Village Relocation

- Extent of Villages inside Core/CTH-
  - 56247 Families in 751 villages across the 50 TRs.
  - Around 12327 families in 173 villages – relocated/resettled till now.

- CSS-PT guidelines were revised in 2008- enhanced relocation package (from Rs 1 lakh per family to 10 Lakhs)

- In case, relocation cost including settlement of rights per family exceeds Rs. 10.00 lakhs, – State Govt. to bear additional cost.

- Relocation process – *Open ended with dovetailing / convergence to the existing welfare scheme of the Govt. of India and concerned State Govt.* to be incorporated to make the package attractive and conducive for the beneficiaries.

- Hand holding support during the initial phase-Key component.
Voluntary Village Relocation

- For the revision of existing package, a Team has been constituted by NTCA comprising of the following:
  a) Shri B. K. Patnaik, Ret. PCCF & CWLW, Uttar Pradesh – Chairman
  b) Dr. Rajan Gurukhal, Visiting Professor, India Institute of Science, Bangalore – Member
  c) Dr. R. Sridhar, Environment Trust, New Delhi – Member
  d) Ms. Madhu Verma, Faculty member, IIFM, Bhopal
  e) CWLW, Madhya Pradesh – Member
  f) CWLW, Rajasthan – Member
  g) Shri Nishant Verma, DIG, NTCA, HQrs.,

Terms of reference (ToR) – revision of package keeping in view inflationary trends, circle rates of owned lands, convergence with the welfare scheme of Govt. of India besides ensuring handholding in the initial phase.

- Mandated task for the team is in progress and shall be submitting its report by end of January, 2018
Voluntary Village Relocation vis-a-vis CAMPA Funds

- IA No. (3922-3923) filed in Hon’ble Supreme Court in WP (Civil No. 202/1995: TN Godavarman Thirumalpad v/s UOI & Ors, seeking permission to release Rs 5000 Crores from the interest generated on the CAMPA Funds held in the name of States/ Uts CAMPAs for relocation of villages from core/ CTH/ Wildlife habitats.

- No decision has been taken in this IA till now.

- However, States have been allowed to prepare such proposals, as part of APOs sent for release of CAMPA Funds.
Successful Case Studies of village relocation from TRs

- Satkosia & Similipal Tiger Reserves, Odisha
- Satpura Tiger Reserve, Madhya Pradesh
- Bor Tiger Reserve, Maharashtra
- Melghat Tiger Reserve, Maharashtra
Satkosia Tiger Reserve Notified vide Notification No.8 F (S)-32/2006/20807/F & E Dated 31st December, 2007 comprising two contiguous Wildlife Sanctuaries, namely Satkosia Gorge Sanctuary and the Baisipalli Sanctuary.

Relocation of Raigoda village

Location of Raigoda village - 20° 37' 12.8" N & 84° 02' 60" E
Agricultural land of Raigoda village – 163 Acrs.
Total household – 33 Nos.
Total defined family – 78 Nos.
Total population of the village - 193 (ST-184, SC-09)

Location of Relocation Site- 20° 39' 20.8" N & 85° 03' 6" E & 20° 39' 20.4" N & 85° 03' 07" E
Available Govt. land – 17 Acrs. Kissam-Puratan patita
Date of relocation to the new Site at Saruali near Nuakheta-06.12.2017
Reasons of Village Relocation

- 131 villages are situated inside the Tiger Reserve
- 5 villages inside the Core/CTH of Tiger Reserve
- No basic minimum facilities like road communication, education, electricity, water supply, sanitation, telephone network and health care available in Raigoda village.
- The villagers of Raigoda have shown their consent for relocation.
- In first phase for relocation of Raigoda village from the core, the relocation plan as per guidelines of NTCA is submitted to PCCF(WL) Odisha for onward transmission to NTCA for funding.
Palli Sabha at Raigoda village
Site selection for relocation at Saruali
Bush cutting and Levelling of land

Site Cleaning

Site levelling
Communication & water supply

Road construction

Drinking water supply
Construction of temporary sheds
Shifting of village Goddess-Maa Brahmanidei.
Shifting of villagers with personal belongings to Saruali on 6.12.2017
Construction of temporary shed

Community hall

Solar Panel

Temporary shed
Free fooding & Clothes to villagers at Saruali
Visit of Officials & dignitaries
Distribution of homestead land title and work order of Biju Pucca Ghar to the beneficiaries
State Village Relocation Policy

- Govt. of Odisha has notified guidelines for village relocation from TR-buffer/ NP/ WLS.
- Option- I & II : similar to NTCA

**Additional Package Benefits**

- 10 decimals of homestead land per family
- One Indira Awas House or Biju Pucca Ghar to each family
- Electricity/ Drinking water facility to be provided to relocation site
- Hand-holding through NGO for 2 years
- NFSA cards for eligible beneficiaries
- Enrollment of children in Govt. run residential schools
- Mason training & other livelihood training support
- 1lakh per acre of agricultural land (case to case basis approval)
- Funds met out of CAMPA & OEMF (Odisha Environment Mgmt. Fund) or other source
Ancillary Expenditure

Construction of
- Temporary shed
- Community kitchen
- Livestock Shed
- Approach Road

- Land Development (Both Relocation & Relocated Area)
- Supply of Cooking Food & Dry Ration
Relocation Initiatives

Relocation colony: Nabara

Temporary House @ Relocation site

Shram-dan for Biju Pucca Ghar Yojana

Relocation colony: Manada
Out of 42 villages, 6 villages relocated from Satpura National Park, 19 from Pachmarhi sanctuary, 14 from Bori sanctuary and 03 from Buffer area.
Relocation options

- Option I – All Cash – 10 lakhs per relocation unit.
- Option II – Land and Cash

<table>
<thead>
<tr>
<th>Type</th>
<th>Units</th>
<th>%</th>
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<tbody>
<tr>
<td>Option I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td>2946</td>
<td>76%</td>
</tr>
<tr>
<td>Option II</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land to land</td>
<td>1107</td>
<td>24%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>4053</td>
<td>100%</td>
</tr>
</tbody>
</table>

- Option I – All Cash
  - 10 lakhs per relocation unit.
- Option II – Land and Cash

<table>
<thead>
<tr>
<th>Type of village</th>
<th>Relocated units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue vill.</td>
<td>18</td>
</tr>
<tr>
<td>Forest vill.</td>
<td>24</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>42</strong></td>
</tr>
</tbody>
</table>
PROCESS OF RELOCATION

- Frequent meetings with villagers to win their consent and their confidence.
- Resolution passed by The Gram Sabha.
- Budget Provision.
- Frequent visits by Forest Officers.
- Eligibility determination by SDM headed committee.
- Relocation in new land or purchased land.
- Bank Deposit in individual account.
- Mainstreaming after relocation.
HIGHLIGHTS

• Maximum funding from M.P. State Govt.- More than 200 crore in 3 years.

• Funding from various sources- Tribal Deptt. & Forest Deptt. Fund.

• Development of Grasslands in Vacated Village sites.

• 9739.47 Ha area added to Park management
CONFIDENCE BUILDING- MEDICAL CHECKUP
CS/PS/PCCF/FD MEETING WITH VILLAGERS
VILLAGE RELOCATION
Basic facilities at the new site
CONSTRUCTION OF HOUSE BY VILLAGERS
Electricity & development Works in relocated villages
Land levelling, agricultural land development works, provisioning of irrigation etc. has shown valuable results.
Utilizing CSR opportunities

- RBS Foundation & Indian Grameen Services – adopted 12 Villages with 2.1 crore
- Reliance Foundation’s Bharat India Jodo (BIJ) Initiative – adopted 7 Villages
- Donation of winter clothes to children by local NGO in Dec 2014 – Jan 2015
- Involvement of agencies like local Security Paper Mill Energy to provide solar street lights at new sites
HANDHOLDING AFTER RELOCATION

Forest department facilitates the villagers to help them get the most of different government schemes like:

- Mukhya Mantri Awas Yojan
- Gram Sadak Yojana
- Agriculture department – e.g. Surajdhara Scheme and Annapurna Scheme
- Horticulture department – e.g. drip irrigation
- Some other works done:
  - Tubewells for drinking water
  - Construction of Anganwadi, schools, health centre etc.
  - Water conservation initiatives like farm pond construction
Key Effects of Relocation:

• Large part of population is happy with the relocation process
• Majority of the facilities have been provided by the respective authority/Dept.
• Continuous Mentorship from the Forest Dept. helped villagers in taking informed decision
• Living close to the vicinity of cities allows them great no. of opportunities
Key Effects of Relocation

- Most of the families have started their new phase of life.
- They consider relocation to be helpful in raising the standard of living.
- All the basic amenities like Health and Education within reach has helped in creating a well balanced society.
- Only water issues (for irrigation purpose) cropped up after relocating the villages.
- More Villages are willing to be relocated.
Current Issues Relocation

- More demand for Land Option
  Availability of Suitable land and Diversion process
- Increasing Land Prices
- Differential unit cost for each TR
- Additional resources for Option 1 for village development
- Additional resources for development of relocated sites
- Handholding – Continuous process
Bor Tiger Reserve, Maharashtra

- Relocated Village – Nawargaon
- Total Population – 294
- Total No. of plot allotted -233
- Size of the plot -1500 sq.ft (30/50)
- Total Amount paid -6458.4387 (in Lacs)
- Rehabilitated place – Khadki (Amgaon)
Bor Tiger Reserve, Maharashtra
Salient Points

• Each family was paid Rs. 10.00 lakhs.
• Each family was allotted 1500 sq. ft. of land beside State highway to construct their houses from the money, they received for each family.
• Land was compensated four times the market price arrived at by the Revenue Department. Around Rs. 11.36 lakhs per ha. compensation was paid.
• 2 times price of all immovable priority, which includes houses, trees, wells, horticulture crop etc was paid
Village before and after resettlement:

Photographs
Melghat Tiger Reserve

Area Details
Core Area: 1500.50 sq.km.
Buffer Area: 1268.03 sq.km.
## Villages Relocated from Melghat Tiger Reserve:

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Name of Village</th>
<th>No. of Families</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Koha</td>
<td>41</td>
<td>2001-2002</td>
</tr>
<tr>
<td>3</td>
<td>Kund</td>
<td>33</td>
<td>2001-2002</td>
</tr>
<tr>
<td>5</td>
<td>Bori</td>
<td>20</td>
<td>2001-2002</td>
</tr>
<tr>
<td>6</td>
<td>Dhargad</td>
<td>141</td>
<td>2011-2012</td>
</tr>
<tr>
<td>7</td>
<td>Kelpani</td>
<td>412</td>
<td>2014-2015</td>
</tr>
<tr>
<td>8</td>
<td>Gullerghat</td>
<td>185</td>
<td>2012-2013</td>
</tr>
<tr>
<td>9</td>
<td>Ambabarwa</td>
<td>305</td>
<td>2016-2017</td>
</tr>
<tr>
<td>10</td>
<td>Rohinkhidaki</td>
<td>594</td>
<td>2017-2018</td>
</tr>
<tr>
<td>11</td>
<td>Chukhadi</td>
<td>236</td>
<td>2015-2016</td>
</tr>
<tr>
<td>12</td>
<td>Nagartas</td>
<td>66</td>
<td>2011-2012</td>
</tr>
<tr>
<td>13</td>
<td>Barukheda</td>
<td>241</td>
<td>2010-2011 &amp; 2011-2012</td>
</tr>
<tr>
<td>14</td>
<td>Amona</td>
<td>82</td>
<td>2011-2012</td>
</tr>
<tr>
<td>15</td>
<td>Somthana (Kh)</td>
<td>269</td>
<td>2013-2014 &amp; 2014-2015</td>
</tr>
<tr>
<td>16</td>
<td>Somthana (Bk)</td>
<td>203</td>
<td>2013-2014</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>2754</strong></td>
<td></td>
</tr>
</tbody>
</table>
Meadows : After relocation of Villages from core area
Meadows: After relocation of Villages from core area
Villages before and after resettlement:

Amona (Melghat Tiger Reserve)  →  Kasod (resettled Amona)

Dhargad (Melghat Tiger Reserve)  →  Dharud (resettled Dhargad)
Villages before and after resettlement:

Nagartas (Melghat Tiger Reserve)

Kawalewada (Navegaon NP)

Saundad (resettled Kawalewada)

Wari (resettled Nagartas & Barukheda)
Villages after resettlement:

Dharud (resettled Dhargad) electricity

Dharud (resettled Dhargad) School building

Narsala (resettled Vairat & Churni)

Dharud (resettled Dhargad) shop
<table>
<thead>
<tr>
<th>S. No</th>
<th>Points as per the minutes</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Raising the package amount from Rs. 10.00 lakhs to minimum of Rs. 20.00 lakhs per family and utilization of CAMPA funds for village relocation/ resettlement for the ST beneficiaries. Relocation to be done on voluntary basis under option I of NTCA package.</td>
<td>The NTCA package is completely voluntary. This suggestion shall be incorporated by the constituted team. The utilization of CAMPA funds is also being considered.</td>
</tr>
<tr>
<td>2</td>
<td>For the village relocation, 4 ha. Land (of the same type) to be made available to every family of ST beneficiaries. If the same type of land is not available then double of the land in position or land of 8 ha. (whichever is minimum) to be made available.</td>
<td>Subjected to the availability of land outside the jurisdiction of Tiger Reserves. The beneficiaries are provided with 2 ha. of land and if they have more than 2 ha. of land, the compensation for extra land in form of cash is provided.</td>
</tr>
<tr>
<td>3</td>
<td>Entire process of relocation / resettlement to be completed in 3 years.</td>
<td>Efforts shall be made to complete the relocation process but it may takes time, since, it is voluntary.</td>
</tr>
<tr>
<td>4</td>
<td>Not to relocate any ST forest dwelling beneficiaries until he / she gets the alternate land and entire process of relocation / resettlement is completed.</td>
<td>The entire process is voluntary &amp; has adequate checks and balances.</td>
</tr>
</tbody>
</table>
The fate of wildlife and the ecosystems they represent lies not in the hands of wildlife managers or biologists, but in the hands of the people who shape the political will to conserve our natural heritage."