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GLOSSARY OF R&R TERMS

Assistance

All support mechanisms such as monetary help, services or assets given to PAPs or PAGs constitute assistance in this project.

Compensation

Compensation refers to restitution made to property under the Land Acquisition Act, 1894. In this context it refers to payment made by the Government exercising 'Eminent Domain'.

Corridor of Impact (CoI)

The Corridor of Impact (CoI) is the width required for the actual construction of the road including the carriageway, shoulder, embankment, longitudinal drainage, wayside amenities like bus stops, bus shelters, etc. and necessary safety zones. In this project, the CoI varies between a minimum of 9m along urban sections up to a maximum of 27m along rural sections.

Cut-off Dates

Cut-off date is established to identify and enumerate the Entitled Persons. The last date of census survey will be the cut-off date for non-titleholders occupying the RoW. For legal owners, the cut-off date will be the notification by the PIU declaring the intention to acquire the property. For those legal owners who are not agreeable to compensation through negotiations, the date of serving the notice u/s 4 of Land Acquisition Act of 1894 will be established as the cut-off date.

Encroacher

Any person illegally occupying public property by extending their land boundary or a portion of their building onto the RoW is an encroacher.

Entitled Person (EP)

Entitled Person includes all PAPs who qualify for, or are entitled to, compensation / assistance since being impacted by the project. The basis for identification of Entitled Persons (EP) in the project will be the cut-off date.

Kutcha Building

Kutcha building means a temporary type of structure, which includes buildings with roofs constructed of thatch, galvanized iron or asbestos.

Major Impact

The PAHs suffering the following impacts are categorized as Major Impact PAHs:

- Loss of place of dwelling,
- Loss of place of business,
- Loss of livelihood.
- Loss of 25% or more of agriculturally productive land out of the affected land holding, or
- Loss of land due to severance or acquisition and the remaining land is not economically viable.

Minor Impact

A PAH suffering minor impact is one who is affected to a lesser degree than the major impacts defined above. Compensation for minor impacts will be limited to one-time payment of cash or giving advance notice.

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Minimum Wages

The wage of a person for his/her services/labour to be paid @ Rs.77/= per day as recommended by the PWD Schedule of Rates, GoTN, 2003.

Non-Perennial Crop

Any plant species, either grown naturally or through cultivation that lives for a season and perishes with harvesting of its yields has been considered as a non-perennial crop in the project. For example, paddy, sugarcane, groundnut, etc.

Perennial Crop

Any plant species that live for years and yields its products after a certain age of maturity is a perennial crop. Generally trees, either grown naturally or horticulturally and yield fruits or timber have been considered as perennial crop in the project. For example, tamarind, coconut, mango, teak, neem etc. are perennial crops.

Persons Losing their Livelihood

Persons losing their livelihood are individual members of the PAH, who are at least 18 years of age and are impacted by loss of primary occupation or source of income.

Private Property Owners

Private property owners are persons who have legal title to structures, land or other assets. These property owners are entitled to compensation under the Land Acquisition Act 1894.

Project Affected Group (PAG)

Any group or community affected by the project is a Project Affected Group (PAG).

Project Affected Household (PAH)

Any household living, cultivating land or carrying on business, trade or any other occupation within the Corridor of Impact (CoI) who are impacted by the project is a Project Affected Household. All the members of a PAH in the project will be treated as PAPs.

Project Affected Person (PAP)

Any individual (part of the PAHs) living, cultivating land or carrying on business, trade or any other occupation within the Corridor of Impact (CoI) who are impacted by the project is a Project Affected Person (PAP).

Pucca Buildings

Buildings of a permanent construction type with reinforced concrete or Madras terrace roofs.

Replacement Cost

The amount required for an affected person to replace the lost asset through purchase in the open market.

Residual Land

Residual land can be defined as the remaining portion of land left with the owner of the holding after acquisition of land by the project.

Semi-Pucca Building

Buildings of a semi-permanent type with tiled roof and walls not of concrete or permanent brickwork.

Severance of Land

Severance of land can be defined as division of a land holding caused due to acquisition of land mainly for laying new project alignment, such as a bypass or a re-alignment.

Squatter

Any person occupying structures entirely within the ROW (with no legal rights to occupy that parcel of land) for residential and/or business purposes, is a squatter.

Tenant

Any person by whom or on whose account rent is payable for any property.

Women Headed Household

A household that is headed by a woman and does not have a male earning member is a Woman Headed Household. This woman may be a widowed, separated or deserted person.

Vulnerable Group (VG)

Vulnerable Group includes but is not limited to the following categories:

- A PAHs falling under 'Below Poverty Line' category as identified by the State Government, and earning up to 25% above the official level.¹
- Landless people.
- Persons who belong to Scheduled Castes (SC) and Scheduled Tribes (ST).
- Women headed households.
- Children and elderly people², including orphans and destitute, and
- Physically and mentally challenged / disabled people

¹ The cut-off income levels for BPL adopted for extending benefits under the Poverty Alleviation Program during the 9th Plan period for Tamil Nadu are nominated as Rs 269.07 and Rs 381.01per capita per month for rural and urban area respectively. Thus, in TNRSP for an average family of 5 considering 25% increase in the state BPL level, the accepted annual income levels for BPL people in rural and urban areas come around Rs 20,180.00 and 28,576.00 respectively.

² PAPs upto 14 years have been considered as children, while those over 60 years of age have been considered as elderly people in the project.

THE PROJECT

The Resettlement Action Plan (RAP) for the Tamil Nadu Road Sector Project (TNRSP) contains the magnitude of Land Acquisition, resettlement issues and the mitigation of impacts. This report also includes the baseline socio-economic characteristics of the Project Affected Persons (PAPs), the R&R policy provisions and entitlements, outcomes of the consultations held with the communities, implementation and monitoring mechanisms and the budget for the implementing the R&R provisions.

The Highways Department (HD), Government of Tamil Nadu (GoTN) is preparing the Tamil Nadu Road Sector Project (TNRSP) with World Bank (WB) loan assistance. The Project Coordinating Consultants (PCC) were appointed to assist the GoTN in project preparation. Based on the outputs of feasibility studies and funding available, a road network that included 743.4 km for upgradation works and 2600 km for maintenance works was identified. There are 14 bypasses proposed for a total length of 106.6km.

The implementation of the upgradation roads is to be taken up in a single phase, and the contractors are expected to mobilize from September 2003. The land acquisition and clearance of the CoI along the project roads will be carried out by the PIU prior to handing over the site for construction to the contractor. The first milestone stretches include a length of 153.7 km to be handed over to the contractor by the 1st of September 2003.

As part of the project preparation, a Resettlement Action Plan (RAP) to address the resettlement issues in the project has been prepared. TNRSP has been classified as a Category "A" project due to its cumulative magnitude of environmental and social impacts. In accordance with the WB requirements for Category 'A' projects, an Independent Review of the EA/SA has been taken up.

MEASURES TAKEN TO MINIMISE RESETTLEMENT IMPACTS

Minimum acquisition and disturbance to existing features has been a prime objective of the design. Socially sensitive stretches have been avoided through selection of alternative links, provision of bypasses around settlements and realignments. Along the existing roads, changes were made in the designs to the extent feasible, thereby resulting in a reduction, if not elimination of impacts. Minimization of impacts within the limitations of technical requirements and cost effectiveness was emphasized. Separate designs were prepared for rural, village and urban sections to minimize impacts. A Corridor of Impact (CoI) approach, wherein the entire RoW will not be cleared, was worked out to minimise resettlement impacts. The CoI varies between a minimum of 9m in urban sections to a maximum of 27 m in rural sections.

R&R POLICY AND ENTITLEMENT FRAMEWORK

To address the resettlement issues in the project, the GoTN has adopted a Resettlement and Rehabilitation Policy for the project (vide GO. Ms. No. 193 dated 10.08.1998). The RAP has been prepared as per the provisions laid down in this policy. The entitlements and options for each impact category have been provided in the detailed entitlement matrix. This matrix has formed the basis for formulation of entitlement options and enabled the working out of the R&R budget for the project.

LAND ACQUISITION AND RESETTLEMENT IMPACTS

Loss of assets: Due to the project, 14976 households are getting affected, of which 8261 households will be subject to major impacts on residence, commercial establishments or land. Among the major impacted households, 4794 lose their agricultural land, 2021 households lose residences, 1043 lose commercial structures and 403 lose residential cum commercial structures. The project has minor impacts on 6715 households who will not be shifted or lose their livelihoods.

Land acquisition requirements: Total land requirement in the project is 609.02 ha. The land requirement in Phase I (Contract Packages TNRSP-01, -02, -03 and -04) for the upgradation along the project corridors is 572.74 ha. This includes 187.93 ha of Government land and 384.80 ha of private lands. For the 13 new bypasses in Phase I, 291.81 ha land will be required, out of which 25.84 ha for Kumbakonam bypass has already been acquired. In Phase II (TNRSP-05) 36.28 ha of land will be required for Ramanathapuram bypass.

Loss of structures: The project affects 3467 private built-up properties of which 2287 are kutcha structures 673 semi-pucca and 466 pucca structures. The area of the structures affected is 14.81 ha. Contract package TNRSP 01 accounts for 69% of the total area of structures acquired.

Impact on Tribal population: Four affected households belonging to Scheduled Tribes are subject to major impacts. These four PAHs are found to be socially transforming leaving their traditional habits.

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Moreover, impact on these people compared to the total number of affected people is insignificant. Thus, no special action is considered necessary to invoke World Bank's OD 4.20 on Indigenous Peoples because of which no Indigenous Peoples Development Plan (IPDP) has been prepared.

Loss of livelihood: There are 8039 cases of loss of livelihoods, of which 6240 are losses to households due to loss of agricultural land or commercial establishments under their possession. Apart from these, there are 1799 cases of individual loss of employment owing to shifting caused to their employers.

Loss of community resources: The project affects 1804 community assets and cultural properties. These include community drinking water facilities, bus shelters, ponds, temples, mosques, shrines etc.

CONSULTATIONS

Consultations during design: To understand the perceptions, concerns and response of likely PAPs, apart from individual consultations with the PAPs during the census surveys, 42 meetings with the local communities, District level public hearings in each of the 11 districts and 3 state level meetings involving PAPs, NGOs and Government agencies were conducted. The outputs obtained from these meetings helped in formulating strategies for minimizing impacts.

Follow-up consultations: Stakeholders workshops as follow-up consultation with the stakeholders and the PAPs were conducted at the state level and along each of the two-upgradation corridors. These follow-up sessions provided the PIU an opportunity to explain the community as to how the various concerns raised during the earlier consultations have been incorporated. The suggestions of the community during these sessions have been incorporated into the project design to the extent possible.

Plan for continued participation: The NGOs implementing the RAP has been entrusted the mandate of conducting continuous consultations with the PAPs and the communities.

IMPLEMENTATION PLAN

Institutional Arrangements: A Social Development Unit (SDU) has been set up within the PIU to tackle land acquisition and resettlement. An officer of the rank of a Joint Project Director, JPD (SDU) has been entrusted the responsibility to oversee and co-ordinate the implementation activities related to Land Acquisition and R&R. Elaborate mechanisms to assist the JPD (SDU), both at the PIU as well as at the field levels (at the districts) is suggested to ensure effective implementation of R&R provisions. The SDU will carry out a periodic internal monitoring of the progress of R&R implementation. An implementation schedule has been prepared with specific targets for each of the R&R components. Four external NGOs will be engaged to implement the RAP provisions.

Resettlement sites: A total of 60 resettlement site locations have been identified to relocate PAPs. These sites are being identified based on their suitability for a resettlement site based on criteria such as access, distance from existing location and infrastructure availability. Consultations with both the PAPs and the host communities are being taken up before finalizing the resettlement site. The PIU, through civil contractors for resettlement works will develop the resettlement sites prior to the contractor's mobilization.

Grievance Redressal: To redress the grievances of the PAPs, state and district level committees have been constituted. The RAP outlines the structure, roles and responsibilities of these committees.

Livelihood restoration: TNRSP proposes to assist in income restoration and provide alternative economic rehabilitation to the various categories of people losing their livelihood. The SDU will carry out the implementation of these measures in collaboration with various government departments and training institutes. The NGOs implementing the RAP will play the role of facilitator to the PAPs.

External impact evaluation: An external evaluation agency will be procured to evaluate the R&R implementation. The mechanisms of monitoring, the various indicators for monitoring and the formats for reporting the same are presented in the RAP.

R & R Costs and Budget: The budget for the implementation of the R&R provisions and other associated costs of implementing the RAP has been estimated to be INR 1033.05 million.

- 1.1 The Resettlement Action Plan (RAP) for the Tamil Nadu Road Sector Project (TNRSP) contains the magnitude of Land Acquisition, resettlement issues and the mitigation of impacts. This report also includes the baseline socio-economic characteristics of the Project Affected Persons (PAPs), the R&R policy provisions and entitlements, outcomes of the consultations held with the communities, implementation and monitoring mechanisms and the budget for the implementing the R&R provisions.
- 1.2 The impacts of land acquisition and resettlement are higher in this project compared to similar projects elsewhere in India. The total land to be acquired for the project for Phase I (TNRSP-01 to TNRSP-04) and Phase II (TNRSP-05) is 609.02 hectares. Phase I land requirement is 572.74 hectares of which 384.81 hectares will be acquired from private owners. A total of 14976 households are affected by the project. Of these, 3467 households will be displaced and 6240 will lose their livelihoods. In Phase II (TNRSP-05) 36.28 hectares of land will be acquired for Ramanathapuram bypass. The addressal of resettlement issues in the project has been carried out in accordance with the Resettlement Policy adopted by the Government of Tamil Nadu (GoTN) and the Operational Policies of the World Bank (WB).

PROJECT BACKGROUND

- 1.3 The Highways Department (HD), GoTN is preparing TNRSP with World Bank loan assistance. The GoTN initiated a Strategic Options Study (SOS) in 1995, which identified 3,238 km of roads in need of upgradation. This need was assessed based on several criteria including traffic volumes, continuity and completeness of road network, routes with high traffic of commercial vehicles, bus routes etc. In 1997, M/s. Kinhill Pty. Ltd was appointed as the Project Coordinating Consultants (PCC) to assist the GoTN in the project preparation. The PCC were entrusted the mandate of identification and prioritization of corridors for improvement and preparation of designs for the same. Based on the outputs of the feasibility studies and the funding available, the road network identified for improvements include 743.4 km for upgradation works and 2600 km for maintenance works. The draft RAP report has been prepared by the HD through the PCC, and has been subsequently updated during the course of the independent review with the assistance from M/s. Lea Associates South Asia Pvt. Ltd. to fill up the gaps and missing information wherever required.
- 1.4 The upgradation component consists of 4 contract packages (TNRSP-01 to TNRSP-04) to be implemented in the first phase. The 11.2 km long Ramanathapuram bypass (TNRSP -05) is likely to be implemented in the second phase of the project. The first phase upgradation roads include the Northern corridor (TNRSP 01) 397.9km long, the Eastern Corridor (TNRSP 02, TNRSP 03 and TNRSP 04) along the eastern coast for a length of 334.3 km. In addition to Ramanathapuram bypass, there are a total of 13 bypasses for a length of 95.4 km. The length of the corridors by packages and links is indicated in **Table 1.1**

Table 1-1: Contract Packages along the Upgradation Routes

	Table F1 Contract Lachages along the opplation Routes								
Contract Package	Corridors	Corridors Description		Proposed treatments					
	01 - E	Chidambaram bypass	16.9	(i) 2 Lane Sealed Shoulders (2LSS)					
	01 - E	Sirkazhi bypass	8.8	(i) 2 Lane scaled subdiders (2L33)					
	01 - N	Arcot - Polur - Elavanasur	152	(i) 2 Lane Sealed Shoulders (2LSS) (ii) 2 Lane Rural Realignment (2LRR) (iii) Enhanced Periodic Maintenance (EPM)					
TNRSP -01	01 - N	Polur - Chengam	45.1	(i) 2 Lane Rural Realignment (2LRR)					
	01 - S	Vriddhachalam - Jayamkondacholapuram - Tiruvarur	131.5	(i) 2 Lane Gravel Shoulders (2LGS) (ii) 2 Lane Rural Realignment (2LRR) (iii) 2 Lane Minor Realignment (2LMR)					
	01 - S	Jayamkondacholapuram - Ariyalur	43.6	(i) 2 Lane Gravel Shoulders (2LGS)					
	Northern C	orridor (TNRSP01)	397.9						
TNRSP - 02	02	Nagapattinam-Kattumavadi	116.6	(i) 2 Lane Sealed Shoulders (2LSS) (ii) 2 Lane Minor Realignment (2LMR)					
TNRSP - 03	03	Kattumavadi -Ramanathapuram	99.8	(i) 2 Lane Gravel Shoulders (2LGS) (ii) 2 Lane Minor Realignment (2LMR)					
TNRSP - 04	TNRSP - 04 04 Ramanathapuram - Tuticorin		117.9	(i) Enhanced Periodic Maintenance (EPM) (ii) 2 Lane Minor Realignment (2LMR)					
	Eastern Corridor (TNRSP02, 03& 04)								
TNRSP - 05	05	Ramanathapuram Bypass	11.2	(i) 2 Lane Sealed Shoulders (2LSS)					
		Total	743.4						

PROJECT DESCRIPTION

1.5 The upgradation roads are of an intermediate lane standard for a major length. The average sealed width is around 5m. The RoW availability varies across different sections, ranging from 5m to 45m. The RoW availability is less than 10m along several urban sections along the corridors. In several cases, where there is sufficient RoW available, encroachments and squatting onto the public RoW is prevalent, especially along the settlements.

1.6 The upgradation works include widening of the carriageway, geometric improvements, structural improvements to the pavement, repair/construction of bridges and culverts, junction improvements and other miscellaneous features to improve safety and comfort of travel. Treatment given for the upgradation roads varies from link to link based on their conditions and the future requirements. In all, the proposed improvements will yield a 7m wide undivided carriageway. Depending on the availability of space, provision has been made for hard and soft shoulders for slow-moving traffic.

Five different treatment options are proposed.

- 2 Lane Sealed Shoulders (2LSS)
- 2 Lane Gravel Shoulders (2LGS)
- 2 Lane Minor Realignment (2LMR)
- 2 Lane Rural Realignment (2LRR) and
- Enhanced Periodic Maintenance (EPM)
- 1.8 For each of the treatments, three variations of the cross sections as rural, village and urban are considered and alternative cross-sections designed. Widening of the road to two lanes and strengthening of carriageway on the existing alignment is involved in the first four treatments but only maintenance of the road shall be carried out in the EPM. The improvement strategies are presented in Table 12.

Table 1-2: Improvement Strategies											
Section type											
	Rural				Village/	Semi-Url	oan	Urban			
Treatment Options	Pavement (m)	Sealed Shoulder (m)	Gravel Shoulder (m)	Provision of Drain	Pavement (m)	Sealed Shoulder (m)/ Parking Lane	Provision of Drain	Pavement (m)	Sealed Shoulder (m)/ Parking Lane	Footpath (m)	Provision of Drain
Two Lane Sealed Shoulders (2LSS)	2x3.5	2x1.5	2x1	Open Drain	2x3.5	2x1.5	Open Drain	2x3.5	2x2.5	2x2.5 (min. of 1.5m)	Closed Drain
Two Lane Gravel Shoulders (2LGS)	2x3.5	-	2x2.5	Open Drain	2x3.5	2x1.5	Open Drain	2x3.5	2x2.5	2x2.5 (min. of 1.5m)	Closed Drain
Two Lane Minimum Realignment (2LMR)	2x3.5	-	2x1	Open Drain	2x3.5	2x1	Open Drain	2x3.5	2x0.5	2x1	Closed Drain
Two Lane Rural Realignment (2LRR)	2x3.5	-	2x2.5	Open Drain	2x3.5	2x1	Open Drain	2x3.5	2x0.5	2x1	Closed Drain
Enhanced Periodic Maintenance	Provisio	on of Struc	tural Paven	nent Overlay	and Should	der Maint	enance With	out Wider	ning		

RESETTLEMENT PLANNING IN THE PROJECT

- 1.9 While most of the improvement works will take place within the Right of Way (RoW), land will have to be acquired for improving geometrics or laying bypasses. Also, the RoW is not free from encumbrances. Both squatters and encroachers have erected structures within the RoW that are used for residential or commercial purposes. Many structures used for community purposes are also found within the RoW. Thus, there is a need of resettlement of the persons affected by the proposed improvements.
- Within the upgradation roads in Phase I (732.2 km), there are two sections of 'enhanced periodic 1.10 maintenance', which do not trigger any R&R requirements. Also, 20.8 ha of 25.84 ha land required for the 8.8km long Kumbakonam Bypass has already been acquired and most of the property owners paid compensation. Consequently, the effective project road length included in this RAP is 682 km.
- Incorporation of environmental and social concerns into the project planning and design has been taken up 1.11 at all stages of the project preparation. As part of the feasibility studies, a screening of the road corridors identified sensitive road sections with respect to the environmental and social components and assessed the environmental implications of the project. These findings were factored into the feasibility analysis for the project for selection and prioritization of the project roads. Further to the selection of the feasible routes, a Sectoral Environmental Assessment (SEA) was conducted to analyze the wider environmental and social issues in the project. Accordingly, Environmental Impact Statements (EIS), Environmental Management Plans (EMP) and a Resettlement Action Plan (RAP) were prepared. TNRSP has been classified as a Category "A" project due to its cumulative magnitude of environmental and social impacts. In accordance with the WB requirements for Category 'A' projects, an Independent Review of EA/SA activities has been taken up for the project preparation activities of TNRSP. The finalization of this RAP document has been done addressing the gaps and deficiencies identified in the Independent Review.

SOCIAL IMPACT ASSESSMENT AND RESETTLEMENT ACTION PLAN (RAP)

- 1.12 The social impact assessment and resettlement planning carried out as part of the project preparation involved the following five main elements:
 - Screening and social impact assessment as part of project feasibility studies;
 - Preparation of resettlement and rehabilitation entitlements and policy framework;
 - A Census of the potentially affected population;
 - A Public consultation; and,
 - Preparation of a Resettlement Action Plan (RAP).
- 1.13 The objective of the RAP is to improve the overall living standards of the persons affected due to the project. This will be achieved by adopting the following measures:
 - Minimisation of land acquisition and resettlement impacts, through provision of bypasses, reduction of the CoI and adopting constricted cross-sections;
 - To provide compensation to PAPs for lost assets at replacement costs;
 - To present an action plan for delivery of compensation and assistance prior to commencement of civil works and,
 - To establish implementation procedures including monitoring and evaluation to track the timely progress
 of implementation.

MAGNITUDE OF IMPACTS

1.14 The total land requirement for the upgradation components in Phase I is to the tune of 572.74 ha. Apart from 187.93 ha of Government land, the project is acquiring 384.80 ha of land from private owners. 14976 households are getting affected, out of which 8261 households will be subject to major impacts on residence, commercial establishments or land. Amongst the major impact category, 2021 households will be displaced from houses, 5837 households will be losing their livelihoods and 403 will suffer from both. The total number of households getting displaced from houses and / or commercial establishments will be 3467. The project has minor social impacts on 6715 households that will not suffer from any displacement or loss of livelihoods (**Table 13**).

Table 1-3: Land Acquisition and Resettlement

Impact Categories	TN RSP 01	TN RSP 02	TN RSP 03	TN RSP 04	Project Total
Major Impacts					
Loss of Houses	1477	422	76	46	2021
Loss of Livelihoods	4100	997	313	427	5837
Loss of Houses and Livelihoods	290	85	20	8	403
Total Major Impacts	5867	1504	409	481	8261
Minor Impacts	3791	1334	653	937	6715
Total Impacts (Major and Minor)	9658	2838	1062	1418	14976
Land Acquisition (in ha)					
Private Land to be acquired	248.91	88.18	23.32	24.38	384.80
Government Land Acquired	109.55	48.44	22.99	6.93	187.93
Total Land Acquisition	358.47	136.63	46.31	31.31	572.74
Corridor Length (in km)	397.9	116.6	99.8	117.9	732.2

Major Impacts PAHs include PAHs losing their place of dwelling or their livelihood due to the project, while minor impacts PAHs include PAHs who lose only a small part of their land or assets and require only a one-time payment of cash or advance notice.

1.15 The project affects a number of community properties all along the corridors. 780 community drinking water facilities including wells, hand pumps and water supply taps are impacted. The project affects 288 bus shelters. 84 ponds that serve as community facilities for bathing and washing are impacted. A total of 279 places of worship are affected. These include temples, mosques, churches and small shrines. The contract package-wise distribution of community properties and facilities are presented in **Table 1.4**.

Table 1-4: Distribution of Affected Common Property Resources

			_	•			
		Contract Package					
Impact Categories	TN RSP	TNRSP	TNRSP	TN RSP	Project Total		
	01	02	03	04			
Well	10	5	1	10	26		
Water Supply Tap	395	137	18	15	565		
Hand Pump	170	16	1	2	189		
Bus Shelter	167	74	23	24	288		
Place Of Worship	188	62	15	14	279		

Impact Categories	TN RSP	TNRSP	TNRSP	TN RSP	Project Total
	01	02	03	04	
Pond	42	28	2	12	84
Pumping Station	6	0	0	3	9
TV/Radio Room	6	2	1	0	9
Motor Shed	7	2	0	1	10
Compound Wall Religious	12	0	0	0	12
Panchayat Buildings	10	3	0	1	14
Compound Wall Other Buildings	12	3	0	0	15
Other Community Building	6	4	0	5	15
School Building	12	3	0	1	16
Graveyard	7	7	2	0	16
Water Tank	8	4	1	5	18
Check Post	0	10	5	4	19
Other Government Buildings	16	0	6	1	23
Statue	20	5	0	5	30
Valve	9	10	13	13	45
Other Community Assets*	10	110	1	1	122
Total	1114	487	92	121	1804
Note: * Other Co	ommunity Asset	s include dust b	eans, compound	d walls, etc.	

1.16 The land requirement for the Ramanathapuram bypass (TNRSP -05) to be constructed in the Phase II of TNRSP is 36.28 hectares, according to the preliminary alignment suggested. The exact magnitude of social impacts and land acquisition will be worked out through a Resettlement Action Plan (RAP). Based on the preliminary alignment, broad R&R budget estimates have been provided in the overall R&R budget.

RESETTLEMENT ISSUES ALONG MAINTENANCE ROADS

- 1.17 There is no requirement of land acquisition along the maintenance roads. The treatments under maintenance works consist of pavement improvements entirely within the clear space available within the existing RoW. As part of the maintenance works,
 - No private buildings will be affected though they may lie in the RoW. The hard shoulders will be provided avoiding impacts on any private or public buildings, to the extent possible.
 - None of the roadside utilities, including but not limited to electricity lines, overhead telephone lines or underground water pipelines, will be affected.
 - Temporary land acquisition for movement of traffic during construction is not envisaged, as the traffic will move within the constrained sections when hard shoulders are being constructed.
- 1.18 To identify (if any) the environmental and social impacts along the maintenance roads, Environmental and Social Screening reports are being prepared. These will be available prior to obtaining the World Bank's approval for bid documents. In the event of any resettlement impacts identified, an action plan, in accordance with the provisions of the TNRSP R&R policy will be prepared prior to awarding the contract. The impacts will be mitigated prior to handing over of the respective stretches to the contractor. Broad estimates for implementing R&R provisions along maintenance roads are included in the R&R budget.

IMPACTS ON TRIBAL HOUSEHOLDS

1.19 The project corridors do not pass through any tribal district. Census revealed that there are four households belonging to Scheduled Tribe affected along the upgradation roads. Impacts to four households do not constitute Indigenous Peoples as defined in OD 4.20. These four tribal households do not live in groups. They do neither exhibit characteristics of Indigenous Peoples nor they are attached to ancestral territory. They are not identified by themselves or by others as Indigenous Peoples. They do not speak any tribal language. Moreover, they do not depend on subsistence-oriented production. In view of this, the need for preparation of a separate Indigenous Peoples Development Plan (IPDP) in accordance with OD 4.20 has not arised.

CONSULTATION PROCESS IN THE PROJECT

- 1.20 With a view to securing a better understanding of the perceptions, concerns and response of likely PAPs a comprehensive and planned program of consultation with communities was undertaken at different locations along project roads and along the alignments of all the bypasses. The outputs obtained from these meetings helped in formulating strategies for minimizing impacts. The consultation sessions conducted include:
 - Individual consultations with the PAPs during the Socio-Economic surveys;
 - 48 meetings with the local communities, with a participation of over 3,500 persons;

- District level public hearings in each of the 11 districts; and,
- Apex level meetings in form of stakeholder consultations, involving PAPs, NGOs and Government agencies.

IMPLEMENTATION PROGRAMME

- 1.21 The implementation of the improvements proposed apart from the 11.2 km long Ramanathapuram bypass is to be carried out in a single phase. The contractors for the upgradation routes have been selected and are expected to mobilize from September 2003. Road construction activities will be generally confined to months outside the monsoons. The construction period for the northern corridor has been planned for 42 months while the construction of the eastern corridor is to be completed within 36 months. Implementation of the maintenance routes will be initiated simultaneously with the upgradation works. The construction period for the maintenance works is envisaged to be 12 months.
- 1.22 The PIU, through Social Development Unit has initiated the LA process. The LA will be complete prior to the start of construction by the contractor on any section of the project roads. The compensation and assistance for the land and structures acquired will be disbursed as per the entitlement provisions of the R&R policy. Based on the magnitude of resettlement, and other technical considerations, the upgradation roads have been divided into 35 sections, which are to be implemented as first, second, third and fourth milestone stretches. As regards the provision of resettlement sites for the PAHs, it will be ensured that the resettlement sites for the sections to be included in the first year of construction in the project will be completed prior to the mobilization of the contractor. The various steps in the R&R implementation are presented in **Chapter 6** on implementation arrangements.

CHAPTER 2. MEASURES TO MINIMIZE RESETTLEMENT

2.1 As part of project preparation, efforts have been made by the PCC to reduce adverse social impacts on the communities. This was done by consideration of social concerns into the project design in addition to the conventional economic and engineering concerns. Changes were made in the designs to the extent feasible, thereby resulting in a reduction, if not elimination of impacts. This chapter describes such measures taken to minimize resettlement impacts in the project.

PROVISION OF BYPASSES TO AVOID SETTLEMENTS

Various urban locations along the corridors, which would result in considerable loss of social resources due to significant property acquisition, have been identified as bypass candidates. The resettlement impacts due to widening along the existing road as against the provision of a new bypass alignment were compared for each of the bypass candidates. Table 2.1 presents a comparison of the social impacts for the Thiruvannamalai bypass, as an example. Similar situations are also noted for other bypasses.

Table 2-1: Comparison of social impacts - bypass candidates

Bypass	Widening alo	ng existing alig	nment	Provision of a bypass			Remarks
	Land	Loss of	Loss of	Land	Loss of	Loss of	
	Acquisition	residence	business	Acquisition	residence	business	
	(Area ha)	(Nos)	(Nos)	(Area ha)	(Nos)	(Nos)	
Thiruvannamalai	1.00.00	250	390	31.71.50	2	5	
	Dry:	P 50	P- 145	Wet: 3.87.00	P-2	P-3	Though the comparison
	1.00.00	SP - 90	SP - 125	Dry: 24.35.00		SP-2	indicates a higher
		K - 110	K - 120	Govt:3.49.50			magnitude of land
							acquisition due to the
							provision of bypasses, the
							bypass option has been
							selected as the loss of
							livelihood through loss of
							business etc were minimal.
Note: P- Permanen	t, SP - Semi-per	l manent, K - K	utcha or Ten	nporary structures			business etc were minimal

2.3 The towns proposed to be bypassed are Chidambaram, Sirkazhi, Nagapattinam, Thiruthuraipundi, Muthupet, Arani, Polur, Thiruvannamalai, Thirukkovilur, Vriddhachalam, Kumbakonam, Ariyalur, Thiruvarur and Ramanathapuram. For each of these bypass locations, alternative alignments were developed and investigated in addition to the alignments that were planned by the local divisions of the HD. The alignment options were examined on the basis of existing and proposed traffic volumes, availability of vacant land, road safety, resettlement impacts, environmental resources etc. to finalize the alignment, which has the least impacts. The alignment finalization (**Table 22**) was done based on continuous interactions and investigations by the PIU and the Consultant teams.

Table 2-2: Bypass Sections

Sl. No	Contract Package	Bypass Location	Length (in km.)
1		Chidambaram Bypass	16.9
2		Sirkazhi Bypass	8.8
3		Arani Bypass	5.3
4		Polur Bypass	4.9
5	TNRSP -01	Thiruvannamalai Bypass	10.9
6	- 110103F -01	Thirukkovilur Bypass	4.4
7		Vriddhachalam Bypass	9.2
8		Thiruvarur Bypass	0.5
9		Ariyalur Bypass	7.6
10		Kumbakonam Bypass	8.8
11		Nagapattinam Bypass	10.2
12	TNRSP 02	Thiruthuraipundi Bypass	3.1
13		Muthupet Bypass	4.8
14	TNRSP 05	Ramanathapuram Bypass	11.2
		Total length	106.6

DESIGNING REALIGNMENTS OR MIN OR DEVIATIONS

Road deviations were worked out to avoid areas of intensive roadside encroachment or sections where the RoW availability is not sufficient to accommodate the proposed cross-section. These realignments / deviations in most cases have increased the land acquisition requirements, but have greatly reduced the impacts on the properties and the loss of livelihood of the people that would have resulted had the original road been upgraded. The realignments along the corridors are presented in **Table 2.3**.

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Contract	Corridor	No. of	Length of realignment
Package	Comdoi	realignments	section (in km)
	Polur-Chengam	12	4.8
	Thiruvannamalai-Thirukkovilur	2	0.250
TNRSP-01	Vriddhachalam-Jayamkondacholapuram	2	0.600
	Jayamkondacholapuram - Ariyalur	15	4.170
	Jayamkondacholapuram-Kumbakonam-Thiruvarur	5	0.500
TNRSP - 02	Nagapattinam-Kattumavadi	15	6.450
TNRSP - 03	Kattumavadi-Ramanathapuram	18	10.200
TNRSP - 04	Ramanathapuram-Tuticorin	10	5.700

Table 2-3: Realignments / Deviations

REDUCED CORRIDOR OF IMPACT (CoI) ALONG CONSTRICTED SECTIONS

- 2.5 The alternative cross-sections and improvement options have been worked out based on an economic analysis of the corridors as part of the feasibility studies. For sections that are likely to witness significant environmental and social impacts, the choice of adopting a narrower cross-section was explored to reduce the impacts. This reduction of cross-section was done in such a manner that it does not impede on the traffic flow or increase the congestion levels or accident risks³. Various other measures that have been tried out in urban sections include:
 - Provision of sidewalks over road side drains:
 - Slow-lane parking width to be reduced (up to 0.5 m as maximum of 2.5 m in other sections); and,
 - Retaining all structures beyond 1.0 to 1.5 m from the edge of the kerb.
- 2.6 By this, though the magnitude of resettlement has been reduced, there is a compromise in the pavement widths adopted, and in some cases they are narrower than the IRC standards (**Table 2.4**).

		l'able 2	-4: Recommen	ded Minimu	m Land Widths				
		Village	Distance from new c	Distance from new centre line (3)					
Source (1)	Strategy (2)	/	Minimum Corridor-o	of-Impact (in m)	Absolute Minimum	Absolute Minimum			
		Urban	Northern Corridor	Eastern	for Isolated	for Isolated Fixed			
		/Rural		Corridor	Buildings (in m)	Objects (in m)			
TNRSP	2LSS, 2LGS	Rural	13.5	11.5	9.5	9.5			
		Village	8.5	8.5	6.5	5.0			
		Urban	8.5	7.5	5.5	4.0			
	2LMR	Rural	13.5	11.5	7.5	5.0			
		Village	8.5	8.5	5.0	5.0			
		Urban	5.0	5.0	5.0	4.0			
IRC	SH	Rural	15.0	15.0					
		Urban	15.0	15.0					
	MDR	Rural	12.5	12.5					
		Urban	7.5	7.5					

Table 2-4: Recommended Minimum Land Widths

2.7 In compliance with the policy on minimizing resettlement, people living in the corridor between CoI and RoW will not be disturbed during the life time of the project (2 years from the close of World Bank's loan). If they will be affected for any work during this period, will be compensated / assisted in accordance with the policy adopted for the project.

MINIMISATION MEASURES DURING DESIGN FINALISATION

- 2.8 During the preparation of final designs, the PIU and PCC undertook further action to minimize involuntary resettlement. By adopting these measures, the impacts on structures along the upgradation corridors have been reduced considerably. The extent of minimization of impacts is presented in **Table 2.5**. This included:
 - Public consultation at resettlement hotspots;
 - Engineering review of the start and end points of the standard cross-section;

¹⁾ TNRSP, Feasibility Study Report; IRC, 1980

⁽²⁾ 2LSS, 2 Lane Sealed Shoulders; 2LGS, 2 Lane Gravel Shoulders; 2LMR, 2 Lane Minimum Realignment

³ Corridor-of-impact to be wider at intersections. Both the TNRSP Feasibility Study and the IRC Guidelines provide for wider corridors-of-impact at intersections, bends and sections with embankments.

³ By limiting the maximum intrusion of structures to 1m to the face of kerb, it is ensured that there exists at least a gap of 1.5 m between the edge of the shoulder and the structure.

- Review of individual buildings and structures within CoI but outside absolute minimum distance from centreline to determine whether retention is appropriate;
- Review of the detailed alignments for bypasses and deviations;
- Reducing road width or modifying design on section with high density of affected people; and
- Reducing the width of the RoW or CoI on certain sections as required.

Table 2-5: Reduction in Impacts on Structures

	_						
Reduction in Impacts	Contract Package						
	TNRSP-01	TNRSP-02	TNRSP-03	TNRSP-04			
Structures affected for a CoI of 27m	2785	1565	604	5216			
Structures affected for a constricted CoI at urban sections	2021	1043	403	3467			
Extent of minimisation	764	522	201	1749			
% of impacts minimised	37.80	50.00	49.82	50.45			

CHAPTER 3. LEGAL FRAMEWORK AND R&R POLICY

3.1 A Resettlement policy for TNRSP has been prepared in accordance with the WB Operational Policies for Involuntary Resettlement and the GoI/GoTN legislation pertaining to land acquisition and resettlement. This chapter details the legal provisions involved in the implementation of the R&R provisions in the project. The highlights, principles and provisions of the R&R policy are also detailed.

LEGAL FRAMEWORK FOR LAND ACQUISITION

- The Land Acquisition Act of 1894, amended by GoTN in 1996, guides all land acquisition in the state. As per the LA act, the District Collector will function as the Land Acquisition Officer on behalf of the Government. As has been the experience with similar development projects within the state and elsewhere, the LA process is time consuming and contributes to delays in the projects. A major cause of the delays in LA has been regarding the amount of compensation for the land and structures lost leading to legal proceedings. To overcome these difficulties during the implementation of TNRSP, the HD, GoTN vide G.O. Ms. No. 174 dated 25.09.2001 (refer **Annexure 3.1**) has empowered the District Collectors to acquire land through private negotiations with the PAPs. Only in cases where the mutual agreement cannot be reached about the purchase price, the provisions of the LA Act, 1894 will be invoked. The relevant provisions of the LA Act (applicable only for cases where the land is acquired as per the LA act) are summarized below.
 - Section 4(1) provides for notification to landowners⁴ about the interest of the Government to acquire the notified land;
 - Section 5(a) permits landowners to express their objections against such land acquisition;
 - Section 11 empowers the Collector to award all compensations;
 - Section 18 allows the land owner who has not accepted the award by the collector to approach the court (sub-court) to seek enhanced compensation;
 - Sections 23 provides matters apart from the market value, to be considered for the determination of compensation;
 - Section 24 provides for matters which are to be neglected in determining compensation;
 - In addition to the market value, a solatium of 30% on market value is allowed to be paid under section 23 (2);
 - Under section 25 of LA Act the compensation amount fixed by the court should not be lesser than the compensation awarded by the District Collector under section 11;
 - Section 28 empowers the court to order the District Collector to pay interest at 9% on the amount awarded by the court in excess of the compensation granted by the Collector;
 - Section 30 allows the District Collector to refer the case to the court in case of any disputes as to apportionment of the compensation, ownership etc;
 - Section 49 permits acquisition of part of house or building in the desire of the land/building owner; and,
 - Section 51 of Land Acquisition Act exempts the lands or the buildings acquired under this act from stamp duty and registration fees.

TAMIL NADU EN CROACHMENT ACT. 1905

3.3 The Tamil Nadu Encroachment Act provides for both an assessment and a penalty to be levied against illegal occupiers of publicly owned land, as well as the forcible eviction of such occupiers and forfeiture of their property, if any, subject only to service of a notice. This Act, framed in 1905 has not recognized the provision of any compensation for shifting squatters or encroachers. However, the R&R policy for the project provides for both resettlement assistance and compensation for the benefit of squatters and encroachers. As the present R&R provision envisages the betterment of the existing provisions, the PIU does not envisage any difficulties in implementing the R&R policy provisions for squatters and encroachers. To ensure that the provisions of the R&R policy shall be followed as against the provisions of TN Encroachments Act, guidelines for implementing R&R provisions will be issued (before 31st March 2003) to District Collectors and revenue authorities.

⁴ Notification should be published in two daily newspapers; one in the regional language and the other in English. The same should be published in the Tamil Nadu Government Gazette.

TAMIL NADU HIGHWAYS ACT, 2000

- 3.4 In relation to land and other property under the control of the highway authority, the Tamil Nadu Highways Act, 2000 has superseded the Tamil Nadu Encroachments Act 1905. The TN Highways Act differs from the TN Encroachments Act in:
 - The Highways Act recognizes the right of the illegal occupiers to their property unlike the Encroachment Act, and.
 - The Highways Act empowers the Government to exempt any land or other property under the control of highways authority from the exemption of the Act.
- 3.5 The following provisions of the Tamil Nadu Highways Act empowers the highway authority to take up measures to prevent any further encroachments onto the RoW:
 - Section 26 of the Highway Act of Tamil Nadu, 2002 provides for the prevention of unauthorized occupation of, and encroachment onto the highway and removal of encroachments.
 - Section 28 (1) of the Act empowers the highways authority to conduct checks and periodical inspection
 of highway boundaries with a view to ensure the prevention of unauthorized encroachments and the
 removal of such encroachments.
 - Section 28 (2) of the Act empowers the highway authority to remove without any notice, any structure encroaching the highway or in any area where the construction or development of a highway is undertaken or proposed to be undertaken.
 - Sections 47 and 48 of the Highway Act authorize the Highways Department to penalize the encroachments or illegal occupation of the highway land.

R&R REQUIREMENTS OF MoEF, GoI

- 3.6 The Ministry of Environment and Forests (MoEF), GoI has drafted the Environmental Guidelines for Rail/road/highway projects, MoEF, 1989. These guidelines require the following R&R related activities to be addressed in the EA/SA for the projects:
 - Profile of PAPs: The project should provide adequate information on settlements, population and households impacted.
 - **Livelihood Sources:** The project should provide information about the occupational pattern of the affected population along with average household income per annum.
 - **Employment in the Project:** The project should make necessary arrangement for creating employment opportunities during the construction period for the local people.
 - **R&R Issues:** The project should prepare an action plan to deal with the R & R issues due to the project. The plan should also include discussions on provisions of vocational training and other avenues for employment generation. In this regard, the project should furnish information on the following:
 - Population to be displaced.
 - Resettlement and Rehabilitation plan for the displaced population.
 - Agency/ authority responsible for the resettlement of project affected population.
 - Sites where the people are proposed to resettle.
 - Compensation packages.
 - Impacts on Tribal Households: The project should provide with necessary information relating ethnic minority groups getting affected and discuss the measures adopted for their rehabilitation.
- 3.7 The statutory clearance conditions laid in the MoEF clearance, pertaining to R&R implementation are:
 - The project-affected people should be adequately rehabilitated in accordance with the Rehabilitation policy approved by the GoTN and the details in this regard shall be furnished within three months.
 - Along the Eastern corridor, it should be ensured that only 27 m road width is acquired in rural areas and 17 m in urban areas as RoW. Specific locations where RoW in excess of 27 m is to be acquired should be identified and specific approval from the MoEF should be obtained for the same.

The proposed design and the R&R Action Plan for the project are in compliance with the statutory conditions of the MoEF. The CoI along the eastern corridor has been modified accordingly as 17m along urban sections and 27m along the rural sections. A copy of the final RAP document will be submitted to the MoEF, highlighting how the clearance conditions have been/will be complied. To provide an update of the R&R implementation, quarterly progress reports will be submitted to the MoEF.

G.O. RELATING TO R&R. TNRSP

- 3.9 To ensure that the provisions of the R&R policy that has been accepted for the project by the GoTN are effectively implemented, various mechanisms have been worked out through changes in the legal provisions which are summarized in the following sections.
- 3.10 Authorization of District Collectors to initiate land acquisition through private negotiation (G.O. Ms. No. 174 dated 25.09.2001): This G.O. authorizes the district collectors of the 11 districts along the TNRSP roads to initiate the land acquisition proceedings through private negotiation, on behalf of the project (Annexure 3.1).
- 3.11 **Resettlement Policy adopted by the Government of Tamil Nadu (G.O. Ms. No. 193 dated 10.08.1998:** The Social Impacts and Resettlement: Principles and Policy Framework for TNRSP has been prepared to reflect the policies of the Government of India and the World Bank towards involuntary resettlement. The GoTN has endorsed the policy document describing the principles and approaches to be followed in minimizing and mitigating the negative social and economic impacts caused by the project, vide G.O. Ms. No. 193(refer **Annexure 3.2**). These Principles and Policy Framework have formed the basis for the RAP preparation and implementation.
- 3.12 Tamil Nadu Road Sector Project Implementation Committees Constituted Orders Issued (G.O. Ms. No. 221 dated 19.12.2000): To achieve the objectives of the R&R policy framework of TNRSP and to accelerate the speedy implementation of the project, five committees three at the district levels and two at the state level have been constituted. These committees are to be entrusted responsibilities to look after the R&R aspects of the PAPs. This order by the GoTN also details out the members of each of these five committees, their functions and duration (refer Annexure 3.3)
- 3.13 Land Acquisition TNRSP Relaxing Conditions for Acquisition of Wetlands Orders Issued (G.O. Ms. No. 151 dated 07.09.2001): Of the total amount of land to be acquired for the project, 358.7 hectares are wetlands⁵ (irrigated agricultural lands). As per the conditions prescribed in G.O. Ms. No. 363, Revenue Department, dated 28.4.95, acquisition of wetlands for other purposes is not permitted. After careful examination it was inferred that this acquisition was unavoidable, after which condition for wetlands acquisition has been relaxed for this project as a special case through G.O. Ms. No. 151 dated 07.09.2001 (Annexure 3.4).
- 3.14 Government Order on Sanction of Rs. 49.5 Crore towards Land Acquisition (G.O. Ms. No. 59 dated 16.03.2001): This G.O. provides an administrative sanction for a sum of Rs. 49.5 crore to compensate the PAPs towards acquisition of 805 ha⁶ of land in accordance with the provisions of the R&R policy, by negotiations with the landowners (refer **Annexure 3.5**).
- 3.15 Government Order on Enhanced Payment of compensation through private negotiation (G.O. Ms. No. 40 dated 25.02.2003): This G.O. authorizes the District Collectors of 11 districts where the TNRSP is being implemented to fix up land value not less than 150% of the Guideline Value, if the market value works out less than that of the Guideline value at the time of private negotiations with the landowners (Annexure 3.6).
- 3.16 **Government Order on constituting a policy framework approved empowered committee (G.O. Ms. No. 184 dated 16.10.2002):** This G.O. provides for a constitution of an empowered committee to provide immediate guidance and approval of issues during project implementation, that are beyond the powers of the project authority **(Annexure 3.7)**.
- 3.17 **Government Order on creation of Special Revenue Staff (G.O. Ms. No. 174 dated 15.07.1998):** This G.O. provides with the sanction of creating Special Revenue Staff experienced in environmental and land acquisition issues, who will help and coordinate land acquisition activities for the project **(Annexure 3.8)**.

⁵ The land requirements of 358.7 ha of wetlands were worked out based on the preliminary designs, and were subsequently modified based on the final designs.

⁶ The LA requirements of 805ha were worked out based on the preliminary designs. This value provides an upper limit for the extent of land to be acquired in the project.

3.18 Government Order on sanction of constituting R&R Cell (G.O. Ms. No. 20 dated 30.01.2003): This G.O. accords sanction for constituting R&R Cell for the project that will oversee land acquisition and implementation of the Resettlement Action Plan (Annexure 3.9).

R&R POLICY FOR THE PROJECT

- 3.19 The GoTN, in accordance with the principles laid down in the Operational Directives of the World Bank and the policies of the GoI, has prepared the R&R policy for TNRSP. The Highways Department, in G.O. Ms. No. 193, accepted these Principles and Policy Framework as the basis for the RAP. This RAP document has been prepared on the basis of the policy (Annexure 3.2).
- 3.20 Principles of the Policy on Mitigation of Impacts: It is an integral policy of the project to mitigate all impacts to the extent possible and where this is not possible, PAPs will be compensated and assisted in reestablishing their homes and livelihoods. The principles of R&R policy are that:
 - Involuntary resettlement shall be avoided to the extent possible or minimized where feasible, exploring all viable alternative project designs.
 - Where displacement is unavoidable, people losing assets, livelihood or other resources shall be assisted in improving or at a minimum regaining their former status of living at no cost to themselves.
 - People's particiption shall be undertaken in planning and implementation of the project.
- 3.21 **Type of Impacts to be Addressed:** There are three broad categories of social and economic impacts, which require mitigation in this project. They include:
 - · Loss of assets, including lands and house,
 - Loss of livelihood or income opportunities, and,
 - Collective impacts on groups, such as loss of common property resources.
- 3.22 The first two categories represent direct project impacts on an identified population. Here, the affected people will be surveyed and registered, and project monitoring and evaluation will compare long-term impacts against baseline socioeconomic data. The third category represents an indirect impact, where group members need not be individually registered.
- 3.23 **Support Principles for Different Categories of Impacts:** R&R Policy of GoTN adopts in addition some support principles for different categories of impacts. The support principles are provided in **Table 3.1**.

Table 3-1: Support Principles for Categories of Impacts

Category of Impact	Support Principles
Loss of Assets	The project will therefore compensate and replace lost assets at their replacement cost
	The entitlement unit for such assistance is the household or family.
	A Land Market Value Survey would be done to establish the real replacement cost of assets to be required.
	The project will provide the option of compensation in kind as well as other support mechanisms to those
	deemed as vulnerable or at risk.
Loss of House and	Every effort will be made by the project to ensure that new housing is available before people are required
Shelter	to relocate.
	If it is found that clusters of people have to be relocated, the project will provide an option for new
	housing in a resettlement site approved by the affected people, with adequate infrastructure and utilities.
	If resettlement sites are developed as part of the project, the local "host population" will also be consulted
	about their views and needs, and be given appropriate support to reduce any negative impact caused by an
	influx of new people.
Loss of Livelihood or	Assistance will be given to the affected population to reestablish their livelihood and income, and to
Income	compensate for temporary losses.
Opportunities	All adult members of households affected in this way will be eligible for support.
	Where possible, project affected people will be given employment in opportunities created by the project,
	such as work with construction or maintenance. Longer-term earning opportunities will be provided
	through strategies such as vocational training, employment counseling, inclusion in income generating
	schemes, and access to credit.
Group Based	Through designs, provision of infrastructure, and other support mechanisms, the project will replace lost
Development	assets and minimize any negative impact on groups, particularly groups that are considered vulnerable.
Opportunities	
Targeted Support to	Vulnerable groups will be provided with more options and support mechanism than those not considered
Vulnerable Groups	vulnerable.

3.24 **Entitlement Framework:** The entitlement framework for this project has been prepared following the R&R Policy. The entitlements have been decided, as part of the mitigation measures to compensate the losses to the PAPs. The definitions regarding entitlements and the eligibility Criteria are presented as a separate section, Glossary of R&R terms. A summary entitlement matrix is provided in **Table 3.2** below. In TNRSP, following the World Bank policy on involuntary resettlement, the criteria for eligibility for compensation in case of project affected people are as follows:

- Those who have formal legal rights to land or other assets (including customary and traditional rights recognized under the laws of the country), and
- Those who do not have formal legal rights to land or other assets at the time of completion of census
 but have a claim to such legal rights provided that such claims are recognized under the laws of the
 country or become recognized through a process identified in the resettlement plan. Such rights could be
 derived from adverse possession, from continued possession of public lands without Government action
 for eviction (i.e., with the implicit leave of the Government) or from customary and traditional law and
 usage etc.
- The absence of legal title to land of other assets is not, in itself, a bar to compensation for lost assets or
 other resettlement assistance.
- Displaced persons irrespective of legal title holding are also entitled to compensation for loss of assets such as structures and crops and are eligible for receiving other resettlement assistances.

Table 3-	2: Summary	Entitlement Matrix
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Social Impacts and Resettlement: Summary Entitlement Matrix	1			6777		
	Land Acquisi		Inside Right of Way			
Impacts and assistance criteria	Vulnerable	Non-Vulnerable	Vulnerable	Non-Vulnerable		
Corridor of Impact: Loss of land and other assets and support given to f	amilies and ho	useholds				
Consultation, counseling regarding alternatives, and assistance in identifying new sites and opportunities	Yes	Yes	Yes	Yes		
2. Compensation for land at replacement cost, free of fees or other charges	Yes	Yes				
Advance notice to harvest non-perennial crops, or compensation for lost standing crop	Yes	Yes	Yes	Yes		
Compensation for perennial crops and trees, calculating as annual net product value multiplied by number of years required for new crop to start producing	Yes	Yes				
5. Replacement or compensation for structures and other non-land assets	Yes	Yes	Yes	Yes		
6. Rights to salvage materials from existing structures, trees, and other assets	Yes	Yes	Yes	Yes		
7. Assistance in accessing housing schemes, or other support to assist poor and vulnerable in reestablishing their homes	Yes		Yes			
8. Option of housing in resettlement sites in cases of cluster relocation	Yes	Yes	Yes	Yes		
9. Shifting assistance and transition stipends	Yes	Yes	Yes	Yes		
Corridor of Impact: Lost or diminished livelihood Support given to adult individuals	1	1	•	-		
10. Rehabilitation and assistance for lost or diminished livelihood	Yes	Yes	Yes	Yes		
11. Additional support mechanisms for vulnerable groups in reestablishing livelihood	Yes		Yes			
12. Employment opportunities in connection with project	Yes		Yes			
13. Any other impacts not yet identified, whether loss of assets or livelihood	ts not yet identified, whether loss of assets or Unforeseen impacts shall be documented and mitigated based on the principles agreed upon in this policy framework					
Indirect, group-oriented impacts in the vicinity of the road corridor Group oriented support will be given to mitigate negative impacts and e		· •	•			

ADDITIONAL ASSISTANCE TO VULNERABLE GROUPS

- 3.25 In addition to the entitlements to all affected PAPs /PAHs, the following additional provisions will be given to the vulnerable PAHs/PAPs:
 - Land purchase grant @ 25% of the total compensation received to vulnerable PAHs losing land;
 - An option of an alternative built house or shop at 1/3rd cost for vulnerable titleholder PAHs;
 - An alternative built house free of cost for vulnerable residential squatters;
 - An alternative built shop free of cost or an employment generation asset up to Rs.20,000/- for vulnerable squatters losing shops;
 - Subsistence allowance for six months for vulnerable squatters; and,
 - Training for self-employment opportunities to all adult members in vulnerable squatters.

DETAILED ENTITLEMENT MATRIX

3.26 The detailed entitlement matrix for the project is presented below (**Table 3.3**).

Table 3-3: Detailed Entitlement Matrix

Tona		ntitlement Matrix
	act Category / Entitlement oss of Private Property	Remarks
	loss of Private Property Loss of Land (agricultural or otherwise)	The land purchase grant will be available if alterative land is
(a) 1	Cash Compensation through private negotiations or in accordance	purchased and registered within one year of receiving the
1)	with the provisions of Land Acquisition Act, plus additional	compensation amount. The grant will be released on the
	amount of 13% towards cost of registration and taxes,	submission of copy of registered sale deed
2)	Land purchase grant @ 25% of total compensation received will be	submission of copy of registered sale dead
2)	available to those PAPs who loose more than 25% of their land	
	holding and left with less than minimum economic land holding	
	(less than 1 hectare of irrigated or 2 hectares of un-irrigated or	
2)	equivalent).	
3)	Subsistence allowance for six months equivalent to monthly	
	minimum wages will be paid to all those who loose more than 25%	
	of their land holding and left with less than minimum economic	
40	land holding.	
4)	In case of severance of agricultural land, an additional 25% of total	
41	compensation will be paid as severance allowance.	() () () () () () () () () () () () () (
	Loss of residential structure	(a) If more than one third of structure is affected, PAP has option
1)	Cash compensation at scheduled rates with out depreciation, plus	to offer for acquisition of entire structure.
	additional amount of 13% towards cost of registration and taxes;	(b) PAPs losing up to 20 sq. m of house will get a built house of 20
2)	Right to salvage affected materials;	sq. m and PAPs losing a house of more than 20 sq. m will get a
3)	Shifting assistance of Rs. 1000 for all those who loose complete	built house of 40 sq. m
	house;	(c) The cost of house to be charged is limited to two-thirds to non-
4)	Subsistence allowance for six months equivalent to monthly	vulnerable and one-third to vulnerable subject to maximum of
	minimum wages to all those who loose complete house	compensation amount received.
5)	An option of alternative built house of size between 20 sq. m-40	(d) Resettlement sites will be developed with basic amenities if
	sq. m of plinth depending on the size of house lost at cost.	more than 20 families are opted in a length of 5 km, otherwise
		houses will be built in the existing villages.
L		
(c) 1	Loss of commercial structure	(a) If more than one third of structure is affected, PAP has option
1)	Cash compensation at scheduled rates with out depreciation, plus	to offer for acquisition of entire structure.
	additional amount of 13% towards cost of registration and taxes,	(b) The cost of shop to be charged is limited to two-thirds to non-
2)	Right to salvage affected materials;	vulnerable and one third to vulnerable subject to maximum of
3)	Shifting assistance of Rs. 1000 for all those who loose complete	compensation amount received. The shops will be built either in
	structure;	resettlement site or adjacent to the road. Wherever required small
4)	Subsistence allowance for six months equivalent to monthly	shopping complexes will be built.
	minimum wages to all those who loose complete structure.	
5)	An option of alternative constructed shop of 9 sq. m of plinth area	
رد ا	at cost (or) employment generation asset worth up to Rs. 20,000;	
6)	Training for self-employment opportunities to all willing adult	
ال	members above 18 years.	
(A)	Impacts to tenants (residential and commercial)	
1)	Rental allowance for six months @ Rs. 1000 month	
2)	Shifting assistance of Rs. 1000	
3)	In case of agricultural tenants advance notice of 3 months to	
رد		
	harvest crop or market value of crop. Subsistence allowance for 3	
	months equivalent to minimum wages is available to those who	
	loose more than 0.5 ha of irrigated or 1 ha of un-irrigated or	
(-)	equivalent area	
	Impacts to standing crops and other properties	
1)	Non-perennial crops: Three months (90 days) advance	
	notification for the harvesting of standing crops (or) lump sum	
	equal to the market value of the standing crop lost	
2)	Perennial crops such as fruit trees, a lump sum compensation	
	payment equal to the capitalized value i.e., the net present value of	
	15 years of future net income from the production of the perennial	
	crops, at a discount rate of 12% per annum.	
3)	Loss of other properties such as irrigation wells will be	
	compensated at scheduled rates.	
	mpacts to squatters/Encroachers	
(a) 1	Impacts to Squatters	
1)	Loss of House: An alternative built house of 20 sq. m plinth area	
	for vulnerable and compensation at scheduled rates with out	
	depreciation for non vulnerable with 2 months notice to demolish	
	the affected structure	
2)	Loss of petty shop: An alternative built shop of 9 sq. m plinth	
	(OR) employment generation asset worth up to Rs. 20,000 for	
	vulnerable and compensation at scheduled rates with out	
	depreciation for non vulnerable with 2 months notice to demolish	
	affected structure	
3)	Right to salvage the affected materials;	
4)	Shifting assistance of Rs. 1000	
	Subsistence allowance for six months equivalent to monthly	
5)		
	minimum wages to vulnerable squatters	

Imr	act Category / Entitlement	Remarks
6)	Training for self employment opportunities to all adult members of	
-,	above 18 years among vulnerable families	
(b)	Impacts to encroachers	
1)	2 months notice to harvest standing crops or market value of	
	compensation for standing crops or demolish the encroached	
	structure;	
2)	Compensation at scheduled rates without depreciation for the	
	affected portion of the structures.	
III.	Loss of employment to agricultural and non agricultural workers	
Subs	sistence allowance for 3 months equivalent to monthly minimum	
wag	255,	
Eco	nomic rehabilitation assistance consisting of training and assistance	
	ourchase of assets up to Rs. 10,000.	
	Loss of Community Assets	
	ocation of community/cultural properties impacted in consultation	
	the community prior to demolition of impacted asset.	
	Inidentified Impacts	
	oreseen impacts will be documented and mitigated based on the	
	visions of the policy applicable for the project.	
N ot		
(1)	Vulnerable PAPs are those who are living below poverty line	
	(BPL), those who loose more than 25% of total land holding and	
	remaining land holding is less than minimum economic land	
	holding, SC/ST and women headed households;	
(2)	Only one subsistence and shifting allowance will be available in	
(0)	case of more than one impact is experienced by the household;	
(3)	The amounts of allowances will be revised annually. The figures	
	will be applicable until March 31, 2004.	
(4)	The minimum wages for each district will be adopted as per the	
(5)	minimum wages fixed by the District Collector.	
(5)	The unit of entitlement is at household level. For training, for self	
	employment opportunities and economic rehabilitation assistance	
	to the affected agricultural and non agricultural workers, this unit	
	of entitlement will be at individual level.	

CHAPTER 4. LAND ACQUISITION AND RESETTLEMENT IMPACTS

4.1 This chapter outlines the magnitude and extent of the various impact categories. These shall form a base for working out the R&R budget, in accordance with the provisions of the Entitlement Matrix.

LAND ACQUISITION ESTIMATES

4.2 TNRSP involves apart from clearing the existing RoW of squatters and encroachers, acquisition of lands along existing roads for widening and acquisition of fresh land for bypasses and realignments. Altogether 572.7 ha of land will be acquired for the project, of which 67% belongs to private owners and the rest is under governmental holding (**Table 4.1**). The land requirements along TNRSP-01 and TNRSP-02 are higher (86%) as compared to TNRSP 03 and 04 due to the large number of bypasses proposed. The details of land estimates along corridors and bypasses are provided in **Annexure 4.1**

Table 4-1: Land Acquisition Estimates

Type of Land	TNRS	P-01	TN RSP-02		TN RSP-03		TN RSP-04		Total	
	Area (ha)	PAHs								
Private Wet Land	174.4658	3537	65.9259	928	6.3400	259	2.4850	418	249.2167	5143
Private Dry Land	69.4498	2611	17.2605	827	15.9818	301	21.8403	242	124.5324	3981
Urban Land	5.0000	3572	5.0000	1211	1.0000	666	0.0600	403	11.0600	5852
Other (Government Land)	109.5544	-	48.4486	-	22.9955	-	6.9330	-	187.9315	
Total	358.4700	9720	136.635	2966	46.3173	1226	31.3183	1063	572.7406	14976

Land Acquisition for Bypasses

4.3 The project has proposed 13 bypasses (10 and 3 along TNRSP 01 and 02 respectively) in the first phase, for which 291.4 ha of land will be acquired. **Table 4.2** presents the land requirements for bypasses.

Table 4-2: Land Acquisition for Bypasses

Table 42 Dand Requisition to Bypasses								
Phase	Contract	N ame of the	Land Requirement (in	Households Impacted				
	Package	Bypass	ha)	_				
Phase I	TNRSP 01	Arani	18.3646	312				
		Polur	15.9419	112				
		Thiruvannamalai	32.9206	179				
		Thirukkovilur	10.6671	56				
		Ariyalur	26.9945	266				
		Vriddhachalam	29.7802	510				
		Kumbakonam	25.8400*	228				
		Thiruvarur	2.1073	0				
		Sirkazhi	28.4064	650				
		Chidambaram	49.2586	376				
	TNRSP 02	Nagapattinam	27.2594	92				
		Thiruthuraipundi	10.0236	49				
		Muthupet	13.8132	78				
	Total Phase	(13 Bypasses)	291.3774	2908				
Phase II	TNRSP 05	Ramanathapuram	36.2800	NA				
Note: * Mo	re than 80% of the la	nd for Kumbakonam Bypa	ss has been already acquired.					

4.4 The HD has initiated the land acquisition process for the Kumbakonam bypass in 1996. This bypass envisages acquisition of lands of about 25.84 ha in 10 villages. 20.80 ha of land required for the bypass has been already acquired. There are no legal cases outstanding in this regard. The remaining 5.04 ha of land required is being acquired in accordance with the provisions of the R&R policy for the project. A revised budgetary provision of INR 15 million has been obtained from GoTN.

SEVERANCE OF LAND ESTIMATES

4.5 There are cases of severance of land, especially along the bypasses and the realignments proposed. PAPs whose land will be severed have been identified based on the Land Plan Schedules (LPS). The extent of severance along the various contract packages is presented in **Table 4.3**. The entitlement framework for the project provides for an additional 25% severance allowance for land compensation, to compensate for the severance impacts.

Table 4-3: Severance of Land Estimates

Category	TN RSP-01	TN RSP- 02	TN RSP- 03	TN RSP- 04	Project Total
Severance of land (ha)	64.00	20.00	0	1.00	85.00

STRUCTURES ACQUISITION ESTIMATES

Apart from acquiring land, the project needs to acquire structures within the built-up areas along the corridors for widening and upgradation purposes, both within and outside the existing RoW. **Table 4.4** presents the requirement of built-up structures to be acquired. Regarding types of structures getting affected, the number of kutcha structures is maximum (2287). The numbers of semi-pucca and pucca structures are 673 and 466 respectively.

Table 4-4: Structures Acquired

Contract	Type of Structure	N umbers of Structures Affected						
Package		Residence	Commercial	Residence cum Commercial	Project Total			
TNRSP 01	Pucca	151	149	42	342			
	Semi-pucca	351	110	51	512			
	Kutcha	966	473	197	1636			
	Wells	9	30	0	39			
	Sub-total	1477	762	290	2529			
TNRSP 02	Pucca	36	30	8	74			
	Semi-pucca	57	25	19	101			
	Kutcha	328	98	58	484			
	Wells	1	0	0	1			
	Sub-total	422	153	85	660			
TNRSP 03	Pucca	3	7	0	10			
	Semi-pucca	18	15	7	40			
	Kutcha	54	45	13	112			
	Wells	1	0	0	1			
	Sub-total	76	67	20	163			
TNRSP 04	Pucca	8	28	4	40			
	Semi-pucca	13	5	2	20			
	Kutcha	25	28	2	55			
	Wells	0	0	0	0			
	Sub-total	46	61	8	115			
Overall	Pucca	198	214	54	466			
	Semi-pucca	439	155	79	673			
	Kutcha	1373	644	270	2287			
	Wells	11	30	0	41			
	Total	2021	1043	403	3467			

4.7 There is a need for acquiring 14.8 ha of built-up land under pucca, semi-pucca and kutcha structures of which TNRSP-01 alone requires 70% of such land. **Table 4.5** presents the requirement of built-up area for the project.

Table 4-5: Area under Structures

Built-up Area to be Acquired from	Major Impacted PAHs	TNRSP 01	TNRSP 02	TNRSP 03	TNRSP 04	Total
		(Area sq m)				
Residential	Kutcha	28536	11300	1761	612	42209
	Semi-pucca	22304	4906	1499	693	29402
	Pucca	10924	2348	287	406	13965
Commercial	Kutcha	11563	2729	1687	858	16837
	Semi-pucca	9586	3373	1730	245	14934
	Pucca	6792	1402	675	1408	10277
Residential cum Commercial	Kutcha	6320	3106	680	95	10201
	Semi-pucca	2613	1532	442	119	4706
	Pucca	4123	1217	64	235	5639
Overall Total		102761	31913	8825	4671	148170

EXTENT OF IMPACTS

- 4.8 Of the 14976 PAHs in the project, 8261PAHs are subject to major impacts. Contract package-wise maximum PAHs is found in TNRSP 01, whereas TNRSP 03 and 04 have minimum PAHs(less than 500).
- 4.9 The impacts on land and assets to be acquired include households subject to major and minor impacts. The existence / utility of the PAHs subject to minor impacts is not threatened. Consequently, it has been suggested in the R&R policy that these households are considered for one-time monetary compensation. On the other hand, the severely impacted households have no option other than being displaced. For these

groups, the project will provide compensation and other assistance as per the entitlement matrix for TNRSP.

4.10 The loss of assets involves impacts on (i) Agricultural lands (ii) Non-agricultural lands (iii) Residential structures (iv) Commercial structures and (v) Residential and commercial (Mixed) structures. The extent and magnitude of impacts for these losses are presented in **Table 4.6**.

Table 4-6: Summary of Assets Lost in the Project

Type of impact	Extent of		Contract	Package		Total
	impact	TN RSP-01	TN RSP-02	TN RSP-03	TN RSP-04	
Loss of Agricultural Land*	Major Impact	3338	844	246	366	4794
	Minor Impact	199	84	13	52	349
	Total	3536	926	256	414	5143
Loss of non-agricultural lands*	Major Impact	0	0	0	0	0
_	Minor Impact	2611	827	301	242	3981
	Total	2611	827	301	242	3981
Loss of residence*	Major Impact	1477	422	76	46	2021
	Minor Impact	478	262	134	82	956
	Total	1955	684	210	128	2977
Loss of commercial structures*	Major Impact	762	153	67	61	1043
	Minor Impact	426	233	334	189	1182
	Total	1188	386	401	250	2225
Loss of residential/commercial structures*	Major Impact	290	85	20	8	403
	Minor Impact	139	56	35	17	247
	Total	429	141	55	25	650
Note: * Number of losses includes owners, t	enants, encroachers ar	nd squatters.				

- 4.11 **Agricultural lands:** A total of 5143 households are losing agricultural land due to the project. Among these households, 4794 will be severely impacted.
- 4.12 **Non-agricultural lands:** A total of 3981 households are losing non-agricultural land due to the project. However, none of these households will be displaced nor will suffer from loss of livelihoods.
- 4.13 **Residential structures:** Though 2977 households are losing residences in parts or full, 2021 households will be displaced and 956 households will suffer partial impacts and need not move out of their residences.
- 4.14 **Commercial structure:** The number of households losing commercial establishments is 2225 of which almost 50% will suffer from displacement and complete business disruption.
- 4.15 **Residential-cum-commercial structure:** PAHs losing residence cum commercial structures due to the project are 650. More than 60% of these households will suffer from displacement and loss of livelihoods as well.

There are altogether 8039 cases of loss of livelihoods, of which 6240 are losses to households due to loss of agricultural land or commercial establishments under their possession. Moreover, there are 1799 cases of individual loss of employment owing to the displacement caused to their employers. All of these losses will be compensated following the provisions in the R & R Policy. In general, the entitlement framework for the project provides subsistence allowance to all the PAHs losing livelihoods. Further, the PAPs losing employment will be provided with economic rehabilitation assistance including monetary assistance and will also be eligible for training facilities, counseling, etc. The loss of livelihoods is presented in **Table 4.7**.

Table 4-7: Loss of Livelihoods

Loss of Livelihood	Contract Pack	Contract Package-wise Households								
	TNRSP-01	TNRSP-02	TNRSP-03	TNRSP-04	Overall					
Commercial Structure	762	153	67	61	1043					
Residence-cum-Commercial Structure	290	85	20	8	403					
Agricultural Land	3338	844	246	366	4794					
Sub-Total	4390	1082	333	435	6240					
Loss of Employment*	1486	249	49	15	1799					
Total	5876	1331	382	450	8039					
Note: * Loss of employment is counted for	r individual PA1	Ps. whereas the re	est are for PAHs.							

COLLECTIVE IMPACTS ON GROUPS

4.17 The project affects 1804 community assets and cultural properties all along the corridors. More than 1500 community assets are getting affected due to the project. These include community drinking water facilities, bus shelters, ponds and other community facilities and structures. 279 cultural properties belonging to different communities are also getting affected that include larger temples, mosques, churches and smaller shrines. A summary on distribution of all these community assets and cultural properties has been shown in **Table 4.8**.

Table 4-8: Community Resources lost in the Project

Type of loss	Contract Package								
Type of loss	TNRSP-01	TNRSP-02	TNRSP-03	TNRSP-04	Total				
Loss of cultural properties	188	62	15	14	279				
Loss of community assets	925	423	74	103	1525				
Total	1113	485	89	117	1804				

OWN ERSHIP PROFILE OF ASSETS LOST

4.18 Distribution of major affected households as per ownership status is shown in **Table 4.9**. More than 80% of the PAHs are owners while 15% of the affected households are illegal occupants of RoW, the encroachers and squatters. Major affected tenants constitute less than 5% of the PAHs. Squatters and encroachers getting affected by the project are 1045 and 1749 respectively. Amongst them 502 encroachers and 1385 squatters are severely impacted and getting displaced.

Table 49: Impacts on Title-holders and non-title holders in the Project

Table 4 5. Impacts on True noncers and non-duc																										
			TN	RSP ·	- 01			TN	RSP	- 02			TN	RSP	- 03			TN	RSP	- 04				Total	l	
- ,	Extent of Impact	ıer	Encroacher	Squatter	Tenant	Total	Owner	Encroacher	Squatter	Tenant	Total	Owner	Encroacher	Squatter	Tenant	Total	Owner	Encroacher	Squatter	Tenant	Total	Owner	Encroacher	Squatter	Tenant	Total
	Major	3268	12	1	57	3338	797	7	2	38	844	245	0	0	1	246	366	0	0	0	366	4676	19	3	96	4794
Agricultural Land	Minor	190	1	0	8	199	80	1	0	4	85	13	0	0	0	13	52	0	0	0	52	335	2	0	12	349
	Total	3458	13	1	65	3537	877	8	2	42	929	258	0	0	1	259	418	0	0	0	418	5011	21	3	108	5143
Non-	Major	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
agricultural	Minor	2388	94	0	129	2611	767	3	22	35	827	301	0	0	0	301	242	0	0	0	242	3698	97	22	164	3981
Land	Total	2388	94	0	129	2611	767	3	22	35	827	301	0	0	0	301	242	0	0	0	242	3698	97	22	164	3981
	Major	737	101	593	46	1477	222	45	143	12	422	12	36	28	0	76	18	20	8	0	46	989	202	772	58	2021
Residential Structures	Minor	262	26	146	44	478	132	59	46	25	262	18	93	11	12	134	38	37	2	5	82	450	215	205	86	956
	Total	999	127	739	90	1955	354	104	189	37	684	30	129	39	12	210	56	57	10	5	128	1439	417	977	144	2977
Commercial	Major	223	56	336	147	762	49	31	45	28	153	12	30	23	2	67	29	20	12	0	61	313	137	416	177	1043
Structures	Minor	148	6	42	230	426	40	50	38	105	233	28	153	13	140	334	14	73	7	95	189	230	282	100	570	1182
	Total	371	62	378	377	1188	89	81	83	133	386	40	183	36	142	401	43	93	19	95	250	543	419	516	747	2225
Residential	Major	103	19	137	31	290	39	18	26	2	85	2	10	8	0	20	5	2	1	0	8	149	49	172	33	403
cum Commercial	Minor	62	10	46	21	139	26	13	7	10	56	7	13	5	10	35	6	6	1	4	17	101	42	59	45	247
Structures	Total	165	29	183	52	429	65	31	33	12	141	9	23	13	10	55	11	8	2	4	25	250	91	231	78	650
Tota	1	7381	325	1301	713	9720	2152	227	329	259	2967	638	335	88	165	1226	770	158	31	104	1063	10941	1045	1749	1241	14976

FIXING OF COMPENSATION FOR PRIVATE NEGOTIATIONS

- 4.19 The compensation for the land to be acquired will be paid through direct negotiation with the landowners (**Annexure 4.2**). The fixing of compensation will involve the following steps:
 - The concerned Tehsildar will carry out a scrutiny of land prices (based on recent transactions of similar lands) registered for the preceding one year, around locations wherever the lands are to be acquired. Also, the corresponding guideline value for the land will be collected from the respective offices of the Sub-Registrar.
 - The District Level negotiation committee under the chairmanship of the District Collector will carry out
 negotiations with the individual landowners based on the guideline value and the open market value. In
 order to represent the real replacement cost towards the payment of compensation, the negotiated
 compensation shall not be less than the guideline value approved by the Registration department. To
 ensure that the negotiated price of compensation is not lesser than the guideline value, TNRSP provides
 for a minimum negotiated price of compensation of at least 150% of the Guideline Value. (as per G.O.
 Ms.No.40 dated 25.02.03)
 - In the event of dissatisfaction over the value with the negotiation committee, the landowner has the option of representing his case to the State Level Committee.
- 4.20 The guideline value fixed based on the land type, productivity and irrigation sources available and presents a more realistic value as against the registered value, which is vulnerable to manipulations. Therefore, guideline value has been adopted for the project. The GoTN updates the guideline values once in three years for rural areas and annually in urban areas. To update guideline values more than one year old on the date of negotiation, an increase of 5% per annum will be paid. In addition to this, an additional 13% will be

- paid upfront to meet the cost of registration and stamp duty irrespective of whether the PAP repurchases the lost asset.
- 4.21 In cases where the PAP has been compensated prior to the G.O Ms. No 40 dated 25.02.03, on enhanced payment of compensation, the difference resulting in following the new criteria will be paid. These payments are expected to be disbursed by June 30th 2003.
- 4.22 **Structure Value:** For the project affected structures, replacement values are estimated based on the current Schedule of Rates of the Public Works Department. The estimation will be finalized by the District Private Negotiation Committee in which the Divisional Engineers (HD) will assist the District Collector in estimating the value of the structure. Any other assets attached to the land in the portion to be acquired will be replaced in accordance with the values obtained from Public Works Department (building). The depreciation of these structures will not be considered and the structure value will be fixed as what is required to construct a new structure.
- 4.23 **Tree Value:** For any tree attached to the land to be acquired, the value of fruit bearing trees will be estimated by the Additional Director (AD) Horticulture and timber trees will be estimated by the Divisional Forest Officer (DFO).

PRESENT STATUS OF LAND ACQUISITION FOR TNRSP

4.24 Land acquisition for the project is under progress. Lands from private owners, both wet and dry, are being acquired in all the 11 districts through the process of private negotiation. As on 10th March 2003, private negotiations have been finalized for around 77.9 ha. Of the 77.9ha, 22.41 ha of private land has been already registered for 834 PAHs. Apart from these, 16.55 ha of government land have been transferred. The present status of district-wise land acquisition has been presented in **Annexure 4.3 in Volume II** of RAP document. The status of land acquisition for the first milestone stretches is presented in **Chapter 6** on Implementation arrangements.

CHAPTER 5. BASELINE SOCIO-ECONOMIC CHARACTERISTICS

5.1 This chapter presents the socio-economic features of the project districts and an analysis of baseline socio-economic characteristics of the Project Affected Persons (PAPs). Apart from providing the socio-economic background for the project, the baseline characteristics provide an insight on developing indicators for monitoring and evaluation of the R&R measures and actions to be taken up.

POPULATION CHARACTERISTICS OF THE PROJECT DISTRICTS

- The key social features of Tamil Nadu include its impressive control on the population growth rate, continuing urbanization, a complex social organization characterized by strong cultural traditions and a distinctive rural landscape. The population is predominantly rural with only one-third living in urban areas. As per the provisional results of the Census of India 2001, the population of Tamil Nadu stood at 62,110,839 (the sixth position among the States and Union territories). The decennial growth rate of population over the period 1981-91 was 15.39%, the second lowest in the country. This has further reduced to 11.19% as against all India decadal growth rate of population 21.34% during 1991-2001.
- 5.3 The upgradation works are to be taken up in 11 of the 29 districts of the state, which comprise 40% of the state population. The population characteristics of the project districts are presented in **Annexure 5.1 in Volume II** of this document.
- 5.4 **Sex ratio:** The sex ratio (i.e., the number of females per thousand males) of population in the State has improved from 974 in the previous census to 986 in the 2001 census.
- 5.5 **Literacy:** The literacy rate in the State has increased to 73.47% during 2001 census when compared to 62.66% during 1991 Census. Tuticorin has highest literacy (63%) while Vellore is the least literate district (38%). The districts with comparatively low literacy rates are Tiruvannamalai, Cuddalore and Perambalur.
- Backwardness: A steady population migration from rural areas to large cities is witnessed due to lack of economic opportunities due to which lesser population increases are witnessed in districts farther from Chennai (Kanyakumari, Tuticorin and Ramanathapuram). In general, the project roads are in slow growth districts and are well away from major industrial centres and serve backward parts of the state. Tuticorin is the most developed district amongst the 11 project districts, having the highest literacy rate and a lowest population growth rate and a very high urban population (41%).
- Urbanization: The urban population in the state stood at 34.2% as per 1991 census. The major urban centres apart from Chennai are Coimbatore, Salem, Trichy and Madurai. The project roads lie well away from these large cities. The project roads terminate at the bypasses of Dindigul, Tuticorin and Tirunelveli. These large towns till date have been the major industrial centres. The project roads have been identified to serve smaller urban centres with populations of 20,000 to 1,00,000. These towns are typically administrative or market centres. The project roads also include roads along the eastern coast. The eastern coast has several towns, which are relatively inaccessible and backward. The project aims at improving connectivity to these settlements. In general, the districts through which the project corridors pass are predominantly rural with mostly rural population, except Thiruvannamalai, Tuticorin and Vellore having considerable urban population to the tune of 50%, 41% and 31% respectively.
- Scheduled Tribes and Scheduled Castes: The Scheduled Tribes population of Tamil Nadu accounts for just 1% of the population. Salem, Nilgiris and Karur are districts with significant tribal populations. The upgradation roads do not pass through any tribal dominated pockets. All the districts have sizeable Scheduled Caste (SC) population (around 20%) while the highest and lowest concentration of SC are found in Villupuram / Cuddalore (27%) and Pudukottai (16%). Majority of the project districts shows scarce Scheduled Tribe (ST) population less than 1% while only Thiruvannamalai District has 3% of ST.

CENSUS OF THE PROJECT AFFECTED POPULATION

- A 100% census of all households, structures, community assets and landowners along bypasses falling within a uniform CoI of 27m, was conducted in 1998. These information collected were subsequently updated through a census of a modified Corridor of Impact (CoI) in 2001-02, wherein a varying CoI of 15m, 17m and 23 m were adopted for the urban, village and rural sections respectively. By these, the properties outside the modified CoI and within the CoI that were surveyed earlier were filtered and the database of the PAPs updated. The census of the landowners impacted along the existing roads have been carried out by the PIU between April October 2002. The profile of the PAPs has been presented in **Annexure 5.2** of Volume II of the RAP document. The dates of surveys for the various project packages are presented in **Table 16 of Annexure 5.2** of Volume II of the RAP document.
- 5.10 Structured formats were prepared on which the data was recorded separately for the household records and the community assets lost. Information collected included inventory of assets lost, ownership profile,

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household information, etc. in general. Information on demographic and social characteristics including caste, tribe, income level, gender of head of household etc. were collected to determine the vulnerability of the project affected persons.

5.11 During the surveys, each structure affected was evaluated for the physical condition, size of the structure and extent of impact. Accordingly, structures that were found unviable after acquisition of land required for the project were categorized as major impacts, while those structures that will be still usable, though a portion is impacted, have been categorized as minor impacts. As regards the agricultural lands affected, a PAP is considered to suffer major impacts if more than 25% of his land is being acquired for the project.

IDENTIFICATION OF ENTITLED PERSONS

- 5.12 All non-titleholders including squatters and encroachers existing on the date of census within the CoI have been surveyed. Though there has been no conscious effort to prevent any further encroachment onto the CoI, it is observed that there has been no significant increase in the number of squatters and encroachers since then. Therefore, no significant deviation in the number of non-titleholders from the surveyed population is envisaged.
- 5.13 All people (including titleholders and non-titleholders) available on the date of joint verification by the NGO will be eligible for entitlements in accordance with the R&R policy provisions. The list of entitled persons will be available for verification in the office of the Divisional Engineer (Highways) and at the Taluka offices along the project corridors. Wide publicity regarding the availability of the list will be done through notices in prominent places as the Village Panchayat offices and the Block Development Offices. The dissemination of the list will be done by 10th of April 2003, and clarification regarding the non-eligibility for assistance for those who come after the announcement will be described.
- 5.14 Any further encroachment onto the CoI will be prevented through regular monitoring of the project roads by the Divisional Engineers of the project in co-ordination with the regular Divisional Engineers.

KEY SOCIO-ECONOMIC BASELINE CHARACTERISTICS

As the key socio-economic information related to income, occupation and source of livelihood collected during the census, is more than two years old in certain cases, it requires updating. Also, the information collected is not complete on certain key indicators such as (a) Average monthly per capita expenditure; (b) Average per capita income; (c) Number of earners per family; (d) Average land holding size; (e) Livestock ownership; (f) Average yield of crops; (g) Access to basic amenities as water supply, electricity, sanitation etc and (h) Asset ownership. The Terms of Reference of the NGOs implementing the RAP has been modified to collect and update the baseline data required. A format for collecting updated socio-economic information has been provided in **Annexure 5.3**. The updated baseline will form a benchmark for evaluation.

The key baseline socio-economic characteristics have been worked out based on an analysis of the census survey data. The indicators worked out include those related to income, occupation, land holding, house type and access to basic amenities. The key characteristics of the various indicators are presented in **Table 5.1**

Table 5-1: Key Socio-economic Baseline Characteristics

]	Key Socio-economic Baseline Indicators	Project Values
Income	Proportion of PAHs Below Poverty Line	67.25%
Occupation	Proportion of cultivators	47.25%
	Proportion of agricultural labor and casual workers	36.25%
	Proportion of self employed	2.35%
	Proportion of salaried	8.75%
Land Holding	Proportion of agricultural holding below 1ha	71.75%
_	Proportion of agricultural holding 1.1 to 2 ha	10.00%
	Proportion of agricultural holding 2.1 to 5 ha	9.00%
	Proportion of agricultural holding above 5 ha	9.25%
House Type	Proportion of PAHs having pucca house	11.25%
	Proportion of PAHs having semi-pucca house	25.75%
	Proportion of PAHs having kutcha house	64.50%

DEMOGRAPHIC AND SOCIO-ECONOMIC PROFILE

5.17 **Sex ratio:** Gender analysis of the PAPs reveals a sex ratio much lower, 8677 compared to the State average of 986 females per 1000 males. This ratio is not a representative of these districts and the characteristics of the corridors vary significantly.

⁷ This can be attributed to the absentee landlords, for about 800 households, where only the head of the households (usually the male member) is taken into account.

- Religion: Data on religious groups were collected to identify religious minorities amongst the PAHs. By religion, majority of the PAHs are Hindus (86%) followed by Muslims (9%). The Muslim population is higher along the eastern corridor with the packages TNRSP -02, 03 and 04 accounting for 13%, 43% and 21% respectively. Along the northern corridor, the Muslim population accounts for just 5% of the total PAHs.
- 5.19 **Literacy:** 78% of the PAPs are literate. All the cornidors have a literacy rate higher than the state average (73.47% according to 2001 census). The women literacy is 70% as against the state figure of 51.3%. Only 6% of the PAPs are exposed to higher education. TNRSP 02 has the highest literacy rates (83.5%) possibly due to the availability and access to quality educational facilities and proximity to major settlements as Nagapattinam, Pudukottai, Thanjavur and Thiruvarur.
- Age-group Classification of PAPs: The PAPs were classified into three categories, less than 18 years (children and dependent population), 18 to 60 years (economically independent / working population) and above 60 years (elderly and dependent population). About 70% of the PAPs fall within the age group of 18-60, i.e., the adult working population, which implies significant impact on livelihoods due to the project. The elderly population accounts for 8% of the PAPs, slightly higher than the state average of 7.83% according to 1991 census.
- 5.21 **Occupation Profile:** The occupation profile of the population reveals that agriculture is the predominant activity with 54% of the working population amongst the PAPs engaged in agricultural pursuits, 20% of which is cultivators and the remaining 34 % are agricultural laborers. 8% of the affected households are involved in commercial activities for their livelihood. The occupation profile of the PAHs is presented in **Table 5.2** below.

Table 5-2: Occupation Pattern along Upgradation Roads

		1 9 19									
S.N o	Occupation	TNRS	P 01	TNRS	P 02	TNRS	P 03	TNRS	P 04	Tota	al
		Number	%								
1	Cultivation	2,901	12.36	811	13.48	164	10.01	354	18.40	4,209	12.74
2	Agricultural labour	5,943	25.33	706	11.73	143	8.71	411	21.38	7,162	21.67
3	Casual labour	1,767	7.53	215	3.57	73	4.45	167	8.68	2,216	6.71
4	Private sector salaried	680	2.90	248	4.12	39	2.38	41	2.11	1,002	3.03
5	Government sector salaried	638	2.72	165	2.74	31	1.92	31	1.60	861	2.61
6	Household shop	1,778	7.58	166	2.76	66	4.02	2	0.11	2,016	6.10
7	Other workforce	1,032	4.40	366	6.09	146	8.90	141	7.33		5.14
8	Unemployed	1,215	5.18	348	5.79	108	6.58	37	1.92	1,717	5.20
9	Not in workforce ⁸	7513	32.01	2991	49.73	868	53.04	740	38.48	12161	36.80
	Total	23468	100.00	6016	100.00	1636	100.00	1924	100.00	33044	100.00

- 5.22 **Income Levels:** An analysis for the classification by income of the various social groups reveal that 65.7% of the PAHs fall below the Poverty lines for the respective urban and rural categories. Amongst the 10779 rural households surveyed, 66% were found to be BPL households, while for the 605 urban households surveyed, 55% of the households were below poverty line.
- 5.23 **Social Groups:** About 10% of the PAHs belong to Schedule Castes, which is far lesser compared with the state average of 19.18%. Scheduled Tribes population subject to major impacts is negligible, with only 4 tribal households impacted. The PAHs by social categories is presented in **Table 5.3**.

Table 5-3: PAHs by Social Category

S. No		N umber of PAH's Contract Package wise										
5. NO	Social category	TN RSP-01	TN RSP-02	TN RSP-03	TN RSP-04	Overall						
1	Scheduled Caste	605	170	36	46	857						
2	Scheduled Tribe	3	1	0	0	4						
3	MBC/Denotified community	2381	374	84	77	2895						
4	Backward class	2665	928	287	347	4252						
5	Forward class	213	31	1	10	253						
	Total	5867	1504	409	481	8261						

PROFILE OF THE VULNERABLE POPULATION

A vulnerability criteria of the PAPs has been ascertained in the R&R policy for the project. Vulnerable group includes Scheduled Castes (SC), Scheduled Tribes (ST), poor (BPL) people and women headed households (WHH). Moreover, landless people, mentally and physically handicapped people, children and elderly are also considered vulnerable. 68% of the surveyed population belongs to vulnerable category. The unit of entitlement for vulnerable people is the household in general, and individual particularly in case of livelihood restoration.

⁸ This category includes apart from PAPs below 18 years and PAPs above 60 years, those PAPs whose details have not been collected during the surveys (either not available or not willing to respond)

5.25 Provisions for assistance and special entitlements to these vulnerable groups have been worked out in the project. **Table 5.4** presents the distribution of vulnerable households along the contract packages.

Table 5-4: Number of PAHs under Vulnerable Categories

Households under Vulnerable Category	Contract Package Pro							
	TN RSP-01	TN RSP-02	TN RSP-03	TN RSP-04	Total			
Women Headed Households	685	190	42	55	972			
Scheduled Castes	670	208	44	40	962			
Scheduled Tribes	3	1	0	0	4			
BPL Households including Landless Households	2700	493	215	300	3708			
Households having Handicapped Persons*	12	11	4	1	28			
Total	4058	892	301	395	5646			

Note: * This number has not been counted for the total since all handicapped persons have been already considered for different categories under vulnerable group.

About two-thirds⁹ of the vulnerable households fall below the poverty line. Among severely affected vulnerable households the major share is constituted of BPL households (65.82%), followed by women headed households (19.12%) and Scheduled Caste households (15.00%). However, the impact on Scheduled Tribe households is negligible (0.60%). It is to be mentioned here that 86.83% affected vulnerable households are found in Contract Packages 01 and 02. There are 28 displaced households headed by handicapped persons and thus falling under the vulnerable group.

5.27 The type of losses for the various vulnerable categories is presented in **Table 5.5**. Impacts on agricultural lands account for 38% of the total major impacts, while residential, commercial and mixed land uses account for 25%, 7.8% and 3.8% respectively.

Table 5-5: Type of Losses for Various Vulnerable Categories

	_			-JPC					 								
o o	TN RSP - 01 TN RSP - 02					TN RSP - 03				TN RSP - 04							
Z.	Type of Loss	ST	8	WHH	BPL	ST	8	WHH	BPL	ST	sc	WHH	BPL	$\mathbf{S}\mathbf{I}$	sc	WHH	BPL
1	Residence	0	248	184	784	1	137	41	154	0	12	5	39	0	15	9	21
2	Business & residence	2	15	28	151	0	7	10	34	0	4	1	7	0	1	0	4
3	Business	0	52	25	325	0	17	2	53	0	5	4	27	0	4	3	24
4	Agriculture	1	355	448	1440	0	47	137	252	0	23	32	142	0	20	43	25 1
	Total	3	670	685	2700	1	208	190	493	0	44	42	215	0	40	55	30
																	0

- 5.28 **Literacy:** The literacy levels of the PAPs belonging to vulnerable categories (other than PAPs belonging to BPL households) were found to be far lesser than the literacy rates of the entire PAPs. As against the literacy levels of 78% for the entire PAPs, the literates amongst the ST, SC, WHH and BPL households were 60%, 65%, 56% and 83.32% respectively.
- 5.29 Occupational Profile: The occupational profile of the vulnerable PAPs does not vary significantly from the non-vulnerable PAPs. Cultivators and agricultural laborers account for 53% of the PAHs, and is quite similar to the 54% of the total PAPs. The unemployed PAPs amongst the vulnerable population constitute less than 1%. The occupation profile of the various vulnerable groups for the project packages is presented in Table 13 of Annexure 5.2.

TRIBAL HOUSEHOLDS

A total of 4 Scheduled Tribes (ST) households, belonging to Irular and Malaikuruvan tribes, are subject to major impacts. Though inadequate, information reveals that they are undergoing a process of social transformation to suit the present living conditions of the mainstream society. All the four households are along the rural sections, 3 of them along TNRSP-01 and one along TNRSP-02. There are 24 PAPs in the 4 ST households impacted, with a literacy rate of 50%. There is one person employed in the private sector. 6 of the 18 PAPs in the working age group are involved in primary activities, as cultivators and agriculture labourers, while 5 of them are involved in non-traditional activities. Thus, these four households do not fall within the category of Indigenous Peoples as defined in OD 4.20 of the World Bank that stresses on close attachment to ancestral territory and natural resources, social and cultural identity distinct from the

⁹ This excludes PAHs belonging to Scheduled Castes, Scheduled Tribes, women headed households and handicaps. These groups qualify to be a vulnerable group irrespective of their income levels and are therefore not inventoried in the BPL households. The profile of the ST, WHH are analysed and presented separately in sections 3.2.5 and 3.2.6.

¹⁰ For details see **Annexure 5.4 in Vol. II** of RAP Document)

dominant society, presence of customary social and political institutions, etc. The four tribal households are already identified in the vulnerable category of PAHs and therefore will be eligible for all entitlements due to the vulnerable group as mentioned in the RAP. Therefore, the preparation of a separate Indigenous Peoples Development Plan (IPDP) as per the World Bank OD 4.20 on Indigenous Peoples is not required and hence not prepared.

WOMEN HEADED HOUSEHOLDS

5.31 Women headed households constitute a total of 977 households. 40% of the women are involved in primary activities both as cultivators and agricultural laborers while another 35% are not in workforce, i.e., includes persons above the working age of 60.

PUBLIC CONSULTATIONS DURING DESIGN

Consultation with the communities and the various stakeholders including the Governmental and Nongovernmental organizations along the project roads has been conducted as an integral part of the project
preparation. The consultation process has been immensely helpful for disseminating the project
information among the potential PAPs. Stakeholders' workshops were held at apex, district and village
levels to disseminate and discuss pre-final plan of the project. Altogether 48 public consultation meetings
were held where R&R related issues were discussed. Approximately 3500 participants attended the meetings
with 11% representation from women. **Table 5.6** explains how the suggestions through public
consultations have been used in addressing relevant aspects of the project. Details of public consultation
meetings are appended as **Annexure 5.5 in Volume II** of RAP document.

S.No	Locations	to the Issues Raised in Puble R&R Issues Pertaining to Designs	Responses				
3.NO		R&R Issues Pertaining to Designs	Responses				
	Consultation at Village Level Cuddalore District: Vadugampadi, Puthuchataram Ramanathapuram District: Tondi, Devipattinam,Idampadal, Sikkal Tuticorin District: Vembar, Sayalkudi, Kulathur Thiruvannamalai District: Kalambur, TimiriMillathragar,Thiruvannamalai Viluppuram District: P.M.Puthur, Lakshmipuram	 Demand for detouring the stretch passing through Idampadal Settlement A proposal was made for the provision of bypass at Sikkal A section of participants opposed for providing bypass at Vembar. A proposal was made for bypass at Sayalkudi and Millath Nagar to avoid the impacts. A Section of the participants opposed to provide a bypass at Sayalkudi which will result in loss of livelihood. A representation was made from the nearby villages of Kulathur to take up the road passing through Kallurani-Kulathur The participants requested to avoid the impact on 100 years old temple at Kadakadi Avoiding the impact on aged trees and the Pilliyar temple at Kolakudi Bus stand was proposed in Lakshmipuram 	The stretch passing through Idampadal town has been realigned Provision of bypass is not a viable option due to economic reasons. The proposed alignment is touching Vembar settlement and the widening will be along the existing alignment. At Sayalkudi widening will be made along the existing by providing a cross section of minimum Col and land Acquisition. Bypass for smaller stretches like Millathnagar is not feasible due to economic reasons. Those villagers demand is not feasible road are not part of the project corridor due to economic and environmental reasons. During construction the impact on the temple will be avoided to the possible extent, other wise it will be relocated. Agreed to conserve the temple and trees to the extent possible at the time of construction. Otherwise they will be replaced.				
2.	Public Consultation at Bypass locations		-				
	Arani Polur Thiruwannamalai, Ariyalur Chidambaram Nagapattinam Viruthachalam Thiruthuraipundi Sirkazhi Muthupet	 The participants requested to avoid the impacts on 2 ponds located in Polur bypass. Alternative alignment was suggested for Muthupet Bypass. At Chidambaram an Alternative alignment and new bus stand adjacent to the bypass was proposed. The participants requested to start the alignment at Vergikkal and terminate at Hurunai Engineering College. The participants requested to modify the alignment of Nagapatiinam bypass to minimise the impacts. Demand for providing bypass at 	The storage capacity of the pond will be increased to mitigate the impacts. The length of the alternative option is longer then the proposed alignment and involves construction of new bridge. Economically its not a not a viable option. Alternative alignment will increase the length of the bypass. New bus stand can not be included in this project. The suggestions for Thrivannamalai bypass have been incorporated.				

S.No	Locations	R&R Issues Pertaining to Designs	Responses
		Arcot town The Stretch between Kallurani-Kulathur should be included in the project	required places to minimise the impacts at the time of construction The stretch passing through Arcot town is maintained by NH, which can not be included as part this project. Upgrading the kallurani – Kulathur stretch is not a viable option due to environmental and economic reasons.
3.	Consultation at District Level Nagapattinam, Thiruvarur, Thanjavur,	The road connecting to	Hence the stretch has been taken
	Cuddalur, Pudukottai, Ramanthapuram, Tutirorin,Vellore, Cuddalore and Villupuram	Parangipettai to Killai was proposed to include as part of the project at Cuddalore.	under NHAI the improvement of the corridor can't be taken as part of the project.
4.	Public Consultations During Ecologically Se	nsitive Area Identification Survey	
	Cuddalore Nagapattinam Thiruvarur Pudukkottai Ramantbapuram Tuticorin	Requested to take the bypass alignment closer to the settlements The participants asked to provide bypass for Sendamangalam Punnaikayal and Kayalpattinam settlement portions.	Provision of bypasses closer to the settlement will dissolve its purpose. The stretches passing through Sendamangalam, Punnaikayal and Kayalpattinam are not falling in the project conidors and not a viable option.
5.	Stakeholders Workshop		-
	Chennai Thiruvannamalai Ramanathapuram	The PAPs of Jayamkondam requested to realign the alignment passing through Jayamkondam market area to avoid the impact on 150 shops. The PAPs whose land had been acquired for the Thiruvannamalai District Collectorate requested for shifting the alignment on the western side and demanded for special assistance. Demand for taking up the alignment through Keelakarai and Ervadi Towns The participants requested to include the corridor connecting Kallurani and Kulathur as part of the project.	The widening option along the existing alignment was proposed after considering the minimization of impacts. Bypassing of this stretch is economically not feasible. The demand for taking on the western side is not a viable option. This will result in increase of length and cost. The proposal for taking alignment through Keelakarai and Ervadi are not feasible due to environmental and economic reasons. Kallurani-Kulathur stretches are dropped due to economic and environmental reasons. It will be improved by the state government financial assistance by the Highways Department.

CHAPTER 6. IMPLEMENTATION PLAN

SOCIAL DEVELOPMENT UNIT WITHIN PIU

- The PIU is responsible for implementing the RAP in accordance with the provisions of the R&R policy. The PIU has built in certain organizational and institutional capacity, by the creation of a Social Development Unit (SDU) to ensure effective implementation of RAP in a timely and appropriate manner.
- The major responsibilities of the SDU include (i) Acquisition of land required for the project and (ii) Resettlement and Rehabilitation of the PAHs. Two distinct but interacting and mutually supporting units (one each for land acquisition and rehabilitation activities) within the SDU will carry out these activities. An officer of the rank of a Joint Project Director (JPD) has been deputed from the revenue department to coordinate the implementation activities related to Land Acquisition and R&R in the SDU. Apart from the internal staff of the PIU, the SDU will be staffed with officials deputed from various line agencies as the Revenue Department, Rural Development etc. These officials will be inducted into the PIU for the complete duration of the project implementation.
- On issues related to land acquisition at the PIU HQ, the JPD (SDU) will be assisted by a LAO of the rank of a Deputy collector from the Revenue Department and supported by an Assistant Divisional Engineer and two Assistant Engineers in technical matters as alignment changes or improvements. These will be in addition to six Field officials of the rank of Tehsildars who have been deputed for the various districts along the corridors for carrying out the land acquisition besides regular tasks in all Districts.
- An externally procured R&R Specialist and two Assistant Engineers at the PIU will facilitate the work of NGOs for R&R implementation. Extension officers, one each for the project districts will be deputed from the Department of Rural Development, throughout the duration of the project implementation. These officers will co-ordinate with the NGOs and ensure that the livelihood restoration and other entitlements suggested are provided to the PAPs. An officer of the HD of the rank of a DE (for each district) will be entrusted responsibility of supervision of the activities of these extension officers and to provide guidance on the engineering activities.
- The SDU will be responsible for co-ordination of resettlement with other project components and other government agencies. It will establish liaison with the state and district levels departments to facilitate PAPs access to the various RAP provisions under the chairmanship of the District Collector. The roles and responsibilities, including the administrative and financial powers of the staff within the SDU is presented in **Annexure 6.1 in Volume II** of RAP document.

R&R IMPLEMENTATION COMMITTEES

- To accelerate the speedy implementation of the R&R provisions of the project, an Apex / State Level Committee and 11 District Level Committees (for each of the districts the project roads pass through) have been constituted. These committees are entrusted responsibilities to look after implementation of RAP. The members of these committees, their roles, responsibilities and functions are outlined in G.O No. 221 dated 19-12-2000 (Annexure 3.3 in Volume II of RAP Document).
- 6.7 **State / Apex Level Committee:** The State / Apex Level Committee has been constituted to carry out a periodic review of the implementation of the RAP. The committee is to meet once in six months to review implementation, to take decisions on R&R issues received from the district authorities and for grievance redressal. The committee comprises of:
 - Secretary (Highways) Chairperson;
 - Secretary (Revenue) Member;
 - Project Director (Tamil Nadu Road Sector Project) Member Secretary; and,
 - One representative of State level NGO.
- The selection of the NGO representative will be done from amongst the NGOs involved in R&R activities in the state. The Project Director, TNRSP will shortlist three NGOs and finalize the representative after a discussion within the committee. To ensure transparency, opinions (through written communication by the 15th of March) of NGOs who have expressed their interest in the R&R implementation will be sought prior to the selection. Based on the opinions received from the NGOs by the 25th of March, the nomination of NGOs in the State Level committee will be completed by the 7th May 2003. The selected NGO representative will be provided an honorarium for participation and providing inputs in the committee.

- 6.9 **District Level Committees (DLC):** District level (resettlement and rehabilitation) committees for each of the project districts headed by the respective District Collectors has been constituted for coordinating the implementation of the RAP and to redress the grievances. In the event of non-availability of the District Collector for chairing the DLC, the District Revenue Officer (DRO) of the district will chair the DLC. A core committee comprising the following officials and representative of a district level NGO will meet every month.
 - District Collector Chairperson;
 - District Revenue Officer;
 - Project Officer (DRDA);
 - Divisional Engineer (HD) Member Convenor;
 - · Tehsildars, and,
 - One representative of a district level NGO.
- 6.10 The District Collector will nominate a representative of a NGO from amongst the list of NGOs working in the field of social development and rehabilitation in the district. To ensure transparency, opinions (through written communication by the 15th of March) of NGOs who have expressed their interest in the R&R implementation will be sought prior to the selection. Based on the opinions received from the NGOs by the 25th of March, the nomination of NGOs in the District Level committee will be completed by the 7th May 2003. The selected NGO representative will be provided an honorarium for participation and providing inputs in the committee.
- 6.11 The DLCs will continue to function, for the benefit of the PAPs during the entire life of the project. To ensure that the grievances are redressed quickly, it has been suggested that the PAPs can approach the DLCs, which are to meet every month, identify the grievances and represent them to the Collector.

EXTERNAL AGENCIES INVOLVED IN RAP IMPLEMENTATION

- 6.12 The implementation of the R&R provisions will be carried out by external NGOs with experience in similar development projects. To monitor the effectiveness of the R&R implementation by the NGO, internal monitoring and external evaluation mechanisms have been suggested. Internal monitoring will be taken up by the SDU. The external evaluation activities will be carried out through an Impact Evaluation Agency.
- 6.13 To assist the PIU in the implementation of the RAP, four NGOs will be procured.
 - NGO-1: TNRSP-01 (North)
 - NGO -2: TNRSP -01 (South)
 - NGO -3: TNRSP -02
 - NGO -4: TNRSP 03 and TNRSP 04.
- 6.14 Expressions of Interest have been obtained and fourteen NGOs have been shortlisted. The prequalification of these short-listed NGOs is to be completed by March 2003 and the NGOs are expected to mobilize from the 15th of April 2003.
- 6.15 The NGOs are expected to play a key role in the implementation of the RAP, the final verification of PAPs, establishment of support mechanisms and disbursement of monetary benefits and to ensure that the PAPs receive all the entitlements as per the R&R policy of the project. The Terms of Reference (ToR) for the NGOs to be procured is presented in **Annexure 6.2 in Volume II** of RAP document.
- The HD will engage an external impact evaluation agency who will verify the compliance of the NGOs contracted for the R&R component with the targets and objectives of the project and that the PAPs are being compensated fairly and in timely fashion. The agency shall evaluate the R&R activities to ensure compliance with the R&R policy and provide necessary directions to the SDU to make mid-course corrections to the implementation schedule, if required. The impact evaluation agency shall carry out an annual evaluation of the R&R implementation apart from the end evaluation. The draft Terms of Reference (ToR) for the External Impact Evaluation Agency to be procured is presented in **Annexure 6.3 in Volume II** of RAP document.

TRAINING AND CAPACITY BUILDING

6.17 The SDU of the PIU has been developed using manpower from the highways, revenue and other state government departments. Though these officials are familiar with the process of land acquisition in accordance with the provisions of the Land Acquisition Act, 1894, they do not possess experience of R&R implementation of a project of such magnitude. Therefore, a provision for an outsourced R&R Specialist within SDU is made to tackle the issues concerned with the RAP targets and schedules. The R&R Specialist is expected to sensitize the members of SDU in particular and the entire HD staff in general regarding the

social issues related with highway development and coordinate training for the NGOs on the implementation issues.

- 6.18 The outsourced R&R Specialist shall, based on interactions with the SDU and the implementing NGOs, assess the training needs for the various target groups and work out training modules specifically suited to these groups. Training modules have been outlined and presented in **Annexure 6.4 in Volume II** of RAP document. The proposed modules include topics such as participatory rural appraisal, micro planning, community consultation, livelihoods generation, etc.
- 6.19 Agencies with required skill and efficiency will be identified to impart necessary training to the staff and implementing NGO personnel. Apart from these training programmes by the agency, opportunities for external training programmes for the staff and NGO personnel will be encouraged. The internal training will focus on project specific activities as the R&R Policy and RAP implementation issues while the training for other activities will be imparted through external training as and when opportunities arise.

DATABASE MANAGEMENT

- A database will be established to record, update, retrieve, and monitor the Land acquisition and R&R implementation. The details collected from census and joint verification surveys will be compiled. An external Database Management Specialist shall establish the database. Apart from the establishment of a database, the outsourced specialist shall be entrusted responsibility for training the Social Development Unit staff on the management, updating and retrieval of the database. The key tasks involved in the database establishment will involve:
 - Establishing input formats
 - Designing outputs for periodical reports and other analytical requirements.
 - Training of PIU staffs and other field level staffs
 - Responsible for modifying the input and output formats to the project requirement.

The database shall provide the following outputs:

- Aid the NGOs in finalizing the entitlements of each PAPs and PAHs.
- Tracking the status of R&R implementation
- Provide for decision making at the PIU.
- Monitor and regulate the land acquisition, distribution of compensation and assistance, grievance redressal and financial progress.
- The module will have analytical options for producing reports for periodical progress and status reports generation for all the LA and R&R components. The macro level analytical options will be available for packages, corridors, and up to, the individual PAPs. The DBMS will be established as a user-friendly system for use by the entire SDU. While the retrieval of the information stored will be possible by all SDU staff, the responsibility of modification and updation of the data shall be vested with the Database Specialist. The database at the PIU will be updated with the periodical data supplied from the district levels.

LIVELIHOOD LOSSES IN THE PROJECT

6.22 Livelihood losses in the project include both land based and non-land based economic activities. Land based economic activities include households losing economic pursuits or resources on which they are solely dependent for their income. Apart from the loss of livelihood as a household, the project involves the loss of individual livelihoods as in the case of PAPs losing employment for closure of business of their employers due to the project.

INCOME RESTORATION (IR) SCHEMES

- The R&R policy for the project provides for income restoration activities to the PAPs with an objective that no PAP shall be worse off than before the project. To compensate for the loss of livelihoods, assistance will be given to the affected persons to reestablish their livelihoods and income, as per the provisions of the entitlement matrix for various impact categories. The provisions towards livelihood restoration for the persons impacted are presented in **Table 3.1** The categories of the livelihood losses as a result of land and property acquisition include:
 - Loss of agricultural land
 - Loss of commercial establishments and
 - Loss of livelihood as employees
- 6.24 **Land Based Income Restoration Schemes:** People losing land-based livelihoods will be trained in raising alternative crops like cash crops or commercial vegetables for better income earning. Moderate

technical know-how, necessary implements, seeds, fertilizers, pesticides, etc. could be provided to them as assistance. The project will encourage the formation of self-help groups (SHG) among the PAPs to develop new marketing channels for the produces.

- Non-land Based Income Restoration Schemes: Persons losing non-land based economic activities will be assisted in seeking loans from lead banks of the region to reestablish their business or service professions. Persons willing to go for alternative livelihoods will be provided with counseling and training assistance. As an option, provisions will be made for resettlement sites where shops may be provided for reestablishing their livelihoods. Provisions for upgradation of existing skills of the PAPs through training will be made. Training for skill development of the PAPs can be imparted through the local Industrial training institutes or any other agency as identified suitable by the NGO implementing the RAP.
- 6.26 **Income Restoration for Loss of** Livelihoods **as Employees:** Persons losing employment due to dislocation of their employers' shops will be considered at par with all other entitled persons above 18 years of age for assistance to restore their livelihoods.

IMPLEMENTATION OF IR SCHEMES

- 6.27 To restore the livelihood losses due to the project, TNRSP will work as a facilitator to the PAPs in their enterprises in active collaboration with the DoRD. In this regard, the SDU has been staffed with officials both at the PIU and the field levels from the DoRD, with prior experience in such projects. The SDU will coordinate and monitor the process of livelihood restoration for the project-affected persons. The costs of implementing livelihood restoration schemes for the eligible PAPs have been included in the budgetary provisions.
- 6.28 The NGOs entrusted the responsibility of RAP implementation will support the SDU in the implementation of the livelihood restoration activities. The supporting role that the NGO has to perform to enable the SDU carry out the livelihood restoration of the PAPs includes:
 - Identification of locally suitable income generating or enterprise development activities for sustainable economic life in consultation with the project affected people.
 - Establishing linkages for skill development, credit availability and marketing.
 - Arranging training as per choice of the target group population.
 - Designing alternative livelihood schemes as per the felt needs of the target group population that will be
 prioritized through a participatory process.
 - Testing these options for their viability against availability of skill, raw materials and available appropriate technology.
 - Helping PAPs to choose suitable alternative livelihood schemes, where training on skill development, capital assistance and assistance in the form of forward-backward linkages can be provided for making these pursuits sustainable for the beneficiaries.
 - Assisting beneficiaries in availing institutional credit facilities for enterprise development or income
 generating schemes. For this, the NGOs should contact and convince the local NABARD¹¹, SIDBI¹²
 officers for financing the economic ventures by the beneficiaries.

Ensuring that the grants received for such purpose from the project will be used for skill development training to upgrade existing skills of entitled persons, purchase of small-scale capital assets for them, etc.

30

¹¹ National Bank for Rural Development.

¹² Small Industries Development Bank of India.

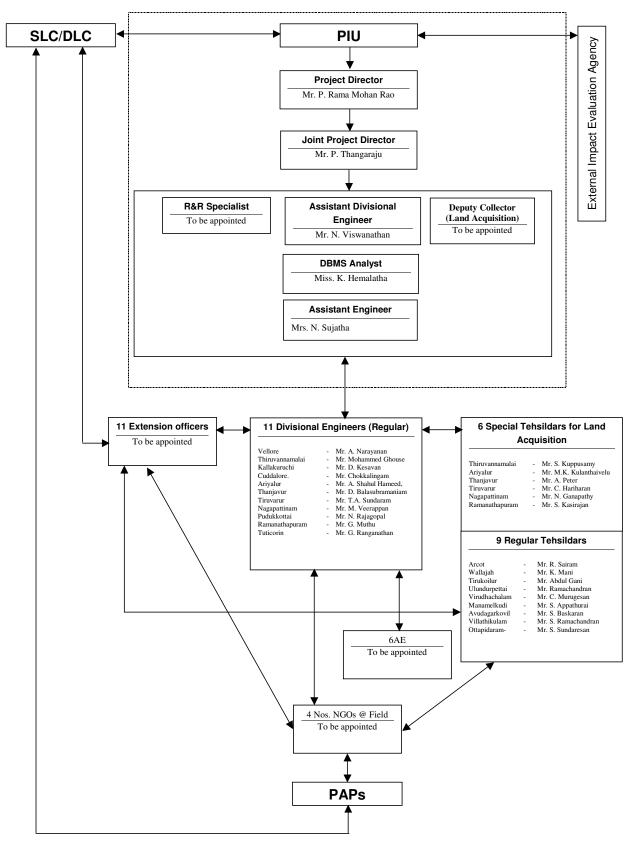


Figure 6.1: R & R IMPLEMENTATION ARRANGEMENTS

MONITORING LIVELIHOOD RESTORATION

6.29 The SDU of the PIU, will carry out a periodic monitoring of the effective implementation of the IR schemes suggested in the project. In addition to the internal monitoring, the external impact evaluation agency will undertake a periodic evaluation of these schemes. The ToR for the evaluation agency has been drafted to include a periodic monitoring (annual review and end review) of the implementation. Based on the observations of the impact evaluation agency, appropriate corrective actions will be taken up during implementation.

RESETTLEMENT SITES

- 6.30 The R&R policy states, "If it is found that clusters of people (more than 20 PAHs) have to be relocated, the project will provide options for new housing in a resettlement site approved by affected people, with adequate infrastructure and utilities".
- 6.31 The requirement for resettlement sites will be arrived at based on the options exercised by the PAPs during the Joint Verification survey by the NGO. This will form the basis for deciding the suitable location and extent of facilities required in each of the resettlement sites. The site selection process¹³ for the resettlement sites along all first milestone stretches has been completed. The acquisition and development of these sites will be completed prior to the handing over of the lands to the contractors.
- 6.32 During the project preparation stage, the PIU carried out an exercise of identification¹⁴ of potential resettlement sites, with assistance from the PCC. Extensive field investigations were carried out with the revenue officials in the districts to identify availability of government lands¹⁵. These sites were further evaluated for their suitability on the bases of:
 - Distance from the existing place of residence / business
 - Proximity to the project road and nature of access to the site
 - Availability of facilities, as water, electricity etc.
- 6.33 For resettlement hotspots, where suitable government lands are not available or the Government lands identified are not acceptable to the communities, suitable private lands are being identified. These private lands will be acquired through direct negotiations. To avoid any significant impacts on these landowners, the PIU shall ensure that the properties do not belong to vulnerable groups or are marginalized due to the selling of the land to the Government. For the acquisition of the resettlement sites, the provisions of the TNRSP R&R policy shall be adopted. The Willingness of the owner to part with the land through direct negotiations has been a deciding criterion for selection. Accordingly 60 resettlement site locations were selected for 31 resettlement hotspots. The existing land use category and ownership of the 60 locations that have been identified for resettlement sites are presented in **Table 6.1**

Table 6-1: Resettlement Site Details

Contract Package	Description	No. of	Area Req.	Ownership Classification and Land Type
rackage		Locations	(IIA)	Private Land (Vacant / Waste)
	Arcot-Polur-Elavanasur	9	0.45	22
	Polur-Chengam	10	0.5	11
TNRSP-01	Vriddhachalam-Jayamkondacholapuram- Thiruvarur	4	0.2	10
	Jayamkondacholapuram-Ariyalur	3	0.15	10
	Kumbakonam bypass	1	0	0
TNRSP - 02	Nagapattinam-Kattumavadi	15	0.75	25
TNRSP - 03	Kattumavadi-Ramanathapuram	14	0.7	22
TNRSP - 04	Ramanathapuram-Tuticorin	4	0.2	8
Total		60	2.95	108

¹³ The site selection is to be taken up based on an evaluation of the sites selected based on the criteria worked out. The evaluation is being carried out by the respective LA Tehsildars at the districts.

¹⁴ These have been based on the responses of the PAPs during the census survey and will be subject to modification based on the options exercised during the joint verification survey.

¹⁵ To avoid secondary resettlement, it has been worked out that the resettlement sites will be developed on government lands.

¹⁶ In case of any vulnerable person being impacted due to the acquisition for these resettlement sites, the provisions of R&R policy shall apply.

6.34 Based on the resettlement site identification criteria worked out during the independent review, each of these sites will be evaluated by the PIU for assessing their suitability. The guidelines for the evaluation and final selection for resettlement sites have been appended in **Annexure 6.5 in Volume II** of RAP document.

SELECTION OF RESETTLEMENT SITES

- 6.35 The PIU, through the local revenue officials have initiated consultations with the community on the acceptance of the resettlement sites. The details of the site are discussed with the PAPs for obtaining their perceptions on the site identified. At certain locations, the PAPs have been provided with alternative locations within the village to choose from. Wherever the sites identified were not acceptable to the PAPs, alternative locations are explored. Further, during implementation it is proposed that the NGOs to be entrusted with the responsibility of RAP implementation will carry out an acceptance survey of the PAPs prior to the finalization of the site.
- 6.36 Once the PAPs are willing to relocate to the identified resettlement sites, the NGO shall carry out consultations with the host community to ascertain the perceived impacts due to locating the resettlement sites, and obtain their acceptance towards the development of resettlement sites.

DEVELOPMENT OF RESETTLEMENT SITES

- Development of resettlement sites and replacement of community assets lost in the project are to be carried out by Contractors to be procured (through NCB), exclusively for resettlement civil works. Two contractors, one for TNRSP -01 and the other for TNRSP -02,03 and 04 will be procured. These contractors will be mobilized from April 2003. The development of resettlement sites and the resettlement of PAPs will be completed prior to the commencement of works by the civil contractor. The HD is committed that no displacement of PAP willing to relocate to the resettlement site will be done prior to setting up of the resettlement site, complete with all amenities and basic infrastructure facilities.
- 6.38 The resettlement sites that need to be developed in the project can be classified broadly into:
 - Sites housing less than 20 PAHs
 - Sites housing 20-50 PAHs
 - Sites housing 50-100 PAHs
- 6.39 Each of the PAH willing to relocate for residential purposes will be allotted a land parcel measuring 3 cents (approximately 120 sq m). The infrastructure requirements and typical design layout for the various resettlement site categories are presented in **Annexure 6.6 of Volume II** of this document. The layout and design of the resettlement sites shall conform at least to the minimum standards and specifications for housing the Economic Weaker Sections (EWS).
- The status of the identification and selection of resettlement sites along the entire upgradation stretches are presented in **Annexure 6.7 in Volume II** of RAP document. The resettlement sites identified along the first milestone stretches are presented in Table 6.4.

ENVIRONMENTAL MANAGEMENT IN RESETTLEMENT SITES

A generic Environmental Management Plan (EMP) for resettlement sites has been prepared taking into consideration all relevant environmental factors and information available for the selected sites (See **Annexure 6.8 in Volume II** of RAP document for information format for EMP of Resettlement sites). The provisions in the EMP for resettlement sites shall be strictly adhered to during the development of the resettlement sites.

HANDING OVER MECHANISM OF RESETTLEMENT SITES

After developing and completing all construction works of the resettlement sites, these will be handed over to local Panchayats for further maintenance by the PIU. The Panchayat President (Executive Officer) for the Village Panchayats and the Executive Officer for the Town Panchayats will be entrusted responsibilities for further maintenance of the resettlement sites and community assets developed by the project. Till the time of completion of construction (for a period of three years), the Extension officer shall carry out a monthly visit to these resettlement sites and report on the same to the concerned Block Development Officers and the Project Officer, DRDA for necessary action. Significant issues if any, will be forwarded to the District Level Committees for discussion. Further, the resettled PAPs will have the option of representing their grievances to the District Level Committee through the NGOs implementing the RAP.

Figure 6.2: Implementation Schedule for RAP

S.N o	Task	Jan 03	Feb 03	Mar 03	Apr 03	May 03	Jun' 03	Jul 03	Aug 03	Sep 03	Oct 03	N ov 03	Dec ' 03	Jan0 4	Feb 04	Mar 04	Apr 04	May 04	Jun' 04	Jul 04	Aug 04	Sep 04	Oct 04	N ov 04	Dec ' 04	Jan 05	Till Project Completion
1	Full staffing of SDU			<																							
2	Mobilization of NGOs				<																						
3	Joint verification and issue of ID cards					<																					
4	Completion of land acquisition																										
5	Shifting of people to alternate resettlement sites / houses/shops																										
6	Dissemination of list of entitled persons				≤																						
7	Payment of cash allowances																										
8	Training for self-employment opportunities																										
9	Reconstruction of community assets																										
10	Mobilization of impact evaluation agency																≤										
11	Mobilisation of contractors for resettlement site development works				≤																						
12	Handing over of resettlement sites and community assets to local bodies																										
13	Handing over sites to contractors for civil works																										
14	Selection of NGO representatives in DLC/SLC					≤																					1
15	Finalising estimating of impacts in all milestone stretches				\leq																						
16	Commencement of civil construction works																										,

≤ Overall Project Milestones

- 1st Milestone
- 2nd Milestone
- 3rd Milestone
- 4th Milestone

R&R IMPLEMENTATION PROCEDURE

- Requisite implementation procedures have been developed by the SDU to carry out the resettlement and rehabilitation of PAPs located within CoI of the project corridors. The implementation of RAP will involve the following activities:
 - Finalization of cut-off dates and notification for clearance of encroachments and squatters from RoW/acquisition of private properties.
 - Verification of properties of PAPs, estimation of losses and distribution of Identity Cards (Annexure 6.9 in Volume II of RAP document) to EPs.
 - Preparation of PAPs for relocation / rehabilitation, and,
 - · Relocation and resettlement of PAPs.
- 6.44 The PAPs will be served with a sufficient notice to vacate their properties prior to the commencement of the civil works. The civil construction works will be initiated for the construction package where the land acquisition process is completed, the PAPs resettled and the CoI is free from any encumbrances.

READINESS FOR RAP IMPLEMENTATION

6.45 Based on the extent of resettlement and land acquisition impacts target dates, for handing over of the site to contractors has been worked out. The upgradation roads have been classified into four milestone stretches. The links as part of each of the milestones are presented in **Table 6.2** below.

Table 6-2 Section-wise Schedules for Handing of Stretches to Contractors

Mile stones				Length
	1	TNRSP 01 Section 1	Arani - Polur	20.60
	2	TNRSP 01 Section 2	Tirukovilur - Ulundurpet	28.70
1	3	TNRSP 01 Section 3	Jayankondam - Kumbakonam	39.50
1	4	TNRSP 02	Manora - Kattumavadi	17.80
	5	TNRSP 03	Tirupalakudi - Ramanathapuram	18.00
	6	TNRSP 04	Ramanathapuram - Edambadal	29.10
			Total Length	153.7
		TNRSP 01 Section 1	Polur - Tiruvannamalai	24.70
		TNRSP 01 Section 2	Polur Bypass	4.90
	3	TNRSP 01 Section 2	Tiruvannamalai - Tirukkoilur	27.90
		TNRSP 01 Section 2	Tirukkoilur Bypass	4.40
		TNRSP 01 Section 2	Kumbakonam Bypass	8.80
2		TNRSP 01 Section 2	Sirkazhi Bypass	8.80
		TNRSP 02	Muthupet - Manora	21.90
	8	TNRSP 02	Muthupet Bypass	4.80
		TNRSP 03	Tondi - Tirupalakudi	27.00
	10	TNRSP 04	Sayalkudi - Kulathur	38.20
			Total Length	171.4
		TNRSP 01 Section 1	Arcot - Arani	24.60
		TNRSP 01 Section 3		5.30
		TNRSP 01 Section 2	Vridhachalam - Jayankondam	30.40
		TNRSP 01 Section 3		9.20
	5	TNRSP 01 Section 3	Tiruvannamalai Bypass	10.90
3		TNRSP 01 Section 3	Kumbakonam - Tiruvarur	35.50
J		TNRSP 01 Section 3	Tiruvarur Bypass	0.50
		TNRSP 02	Tiruthuraippoondi - Muthupet	21.90
		TNRSP 02	Tiruthuraippoondi Bypass	3.10
		TNRSP 03	Mimisal - Tondi	23.30
	11	TNRSP 04	Kulathur - Tuticorin	21.50
			Total Length	186.2
		TNRSP 01 Section 1	Chengam - Polur	45.10
		TNRSP 01 Section 2	Chidambaram Bypass	16.90
		TNRSP 01 Section 3	Ariyalur - Jayankondam	43.60
	4	TNRSP 01 Section 4	Ariyalur Bypass	7.60
4		TNRSP 02	Nagapattinam - Tiruthuraippoondi	
		TNRSP 02	Nagapattinam Bypass	10.20
		TNRSP 03	Kattumavadi - Mimisal	31.50
	8	TNRSP 04	Edambadal - Sayalkudi	29.10
	-		Total Length	220.9

6.46 The commencement of works for the first milestone stretches will be from the October 2003. The second, third and fourth milestone stretches will commence after 9, 12 and 18 months after the start of the first milestone stretches. The SDU has initiated the land acquisition and resettlement activities related to all impacts associated with first milestone stretches, for all the contract packages. The following major

activities pertaining to land acquisition and R&R demonstrate the readiness of implementation of the PIU of the R&R provisions in the project.

- Land plan schedule has been completed for the 153.7 km of first milestone stretches, including the bypasses.
- Acquisition of land through negotiations with private landowners has been initiated through the field officers in the districts. 4.83 ha of the 26.55 ha private land acquisition along the first milestone stretches has been acquired through private negotiations by the PIU till date.
- Valuation of replacement cost of structures is being carried out based on the PWD schedule of rates.
 The valuation of structures is in progress for the first milestone stretches.
- **Replacement of utilities** is being initiated in consultation with the respective line agencies as the electricity board, telephones department etc. Consent has been obtained from these departments for the shifting of utility lines, and will be carried out as deposit works by the respective departments.
- **Resettlement sites, identification and selection** have been initiated. A total of 60 resettlement sites has been identified by the PIU. The finalization of sites has been done based on the environmental and social criteria for identification and selection for TNRSP-01 and TNRSP-02. The site finalization of the other two packages is in progress.
- Relocation of community assets has been entrusted to the NGOs implementing the R&R provisions.
- Expression of Interests has been obtained from the NGOs for R&R implementation. The shortlisted NGOs have been invited to submit technical proposals. The NGOs are expected to mobilize by the 15th April 2003.
- **Deployment of Social Development Unit** will be complete by March 2003. These include the deployment of the field level positions and the outsourced R&R expert for the project.

DETAILS OF FIRST MILESTONE OF COMPLETION OF R&R ACTIVITIES AND HANDING OVER SITES TO CONTRACTOR

It will be ensured by the PIU that all impacts related to resettlement and rehabilitation including payment of compensation along each of the first milestone stretches will be completed prior to handing over of stretches to the contractor. A certificate to this effect will be sent to the World Bank prior to handing over of respective road stretch to the contractor. The contractor will issue a receipt that the respective stretch has been obtained free of encumbrances. This is to ensure that once the roads are handed over, it is the responsibility of the contractor to protect the lands from future encroachments. The details of resettlement and land acquisition impacts along these project stretches is presented in **Annexure 6.10 in Volume II** of RAP document. The land acquisition and resettlement impacts along the first milestone upgradation roads are worked out. The land acquisition and resettlement impacts along the first milestone stretches are presented in Table 6.3. The identification of extent of impacts along the other milestone stretches will be completed by 10th April 2003.

Table 6-3: Land Acquisition and Resettlement Impacts in first milestone stretches

No.	Details	Target	Progress
1	Total Length of Kms.	153.70	-
2	Private land acquisition (in Ha)	26.55	4.83
3	Transfer of Government Land in (Ha)	26.73	12.45
4	No. of title holders eligible for compensation for loss of private Land	1660	275
5	No. of title holders eligible for compensation for loss of structure	164	-
6	No. of title holders eligible for compensation for loss of other asset	566	-
7	No. of title holders requiring resetlement	129	-
8	No.of Squatters requiring resettlement (Vulnerable)	58	-
9	No. of Squatters (Non vulnerable) paid compensation for loss of structure (House and or Shop)	15	-
10	No. of private land owners provided alternative shop plot	22	-
12	No. of squatter provided alternative shop plot	10	-
13	No.of Squatters served notices and shifted away from Col	27	-
14	No. of Encroachers eligible for payment of compensation for loss of structure (House and or shop)	12	-
15	No. of common properties re-constructed	212	-

The figures arrived are tentative. The figure furnished will be finalised during the joint verification at Field level by the P.I.U. Staff before N.G.O.'s are in position.

Package	Link	Resettlement Site at	Survey No	Extent of	Ownership	No of PAPs
		Village		Land ha	Classification	
TNRSP 01	Arani - Polur	Kasthampadi	374 /5	0.46.50	Private	18
	Tirukovilur - Ulundurpet	Eriyur	313/ 4B	0.05.70		12
			313/7	0.05.00	Private	
	Jeyamkondam - Kumbakonam	Kovilacheri	79/2		Private	30
			155/1			
			18/ 6A	0.08.00		
			18/6B	0.08.00		
			33/ 3 0.15.00			
			33/ 2A	0.16.50		
			33/ 2B	0.14.00		
		T.Vadakadi	85 / 1	0.57.50	Private	24
		Tirupanandal	294/3	0.09.50	Private	30
			294/4	1.00.50		
TNRSP 02	Manora - Kattumavadi	-	-	-	-	5
TNRSP 03	Tirupalakudi - Ramanathapuram	-	-	-		
TNRSP 04	Ramanathapuram - Edampadal	-	-	-	-	

Table 6-4: Resettlement sites identified along First Milestone stretches

IMPLEMENTATION SCHEDULE FOR R & R ACTIVITIES

The activities considered to be undertaken in the implementation of RAP are presented in **Figure 6.2** with necessary sequencing of the activities. There will be scope for updating the schedule during the progress of the implementation.

RELOCATION OF COMMON PROPERTY RESOURCES

- The R&R policy and the entitlement provisions for TNRSP suggest relocation of all community facilities and cultural properties impacted. All common property resources as hand pumps, water-points, public taps wells, cultural properties and other community assets will be replaced. The site for relocating these assets lost will be in consultation with the affected people who are potential users, by the implementing NGOs. All such properties need to be relocated before the commencement of the civil construction works. A timetable for relocation of community properties and facilities has been provided in the implementation schedule of the RAP. The project authorities will be responsible for constructing all such affected assets and after construction those will be handed over to the concerned agencies / departments for maintenance.
- A total of 45 common property resource sites have been identified for conservation and enhancement in the project for which specific enhancement designs have been prepared. The enhancement works have been proposed keeping in mind the benefits of both local communities as well as road users. Selection of sites suitable for enhancement has been carried out based on four factors.
 - Importance to the local communities,
 - Religious significance,
 - Historical importance, and
 - Scope for enhancement.
- 6.51 The importance of the site to the local people and its historical significance has been identified through extensive discussions with the local communities coupled with general observations on the sites and structures. The scope for enhancement included the possibility of any further improvement, availability of space for enhancements and likely benefits to the local communities as well as the road users. The concepts of enhancement have been derived from the suggestions forwarded by the people. Extensive community consultations were carried out on each of the enhancement sites.
- In case sites with religious importance, the enhancements are suggested on the basis of the usage. There are sites along the project corridor, which have high historical significance, but are neglected. Enhancement measures for these sites are proposed to increase public awareness, which may in turn lead to conservation of these structures, by the concerned authorities. The sites having good scenic beauty and ample space for parking or sitting are conceived as potential stopovers. Shading and pleasant views are considered important in such places. The presence of ponds near such stopovers is considered preferable as it not only gives a pleasant view but also provides refreshing cool breeze. The incidental spaces resulting by the realignment of the road is proposed to be developed as landscaped green areas to improve the visual quality of the road.

PLAN FOR CONTINUED PARTICIPATION

6.53 Follow up-consultation sessions have been planned prior to the commencement of construction. Regional stakeholder workshops are to be conducted one each for the upgradation corridors, wherein the PAPs will

be explained as to how the issues raised during the earlier consultation sessions have been or not addressed in the final designs.

INFORMATION DISCLOSURE

- 6.54 The RAP document has been disclosed for public access and will be made available in the following places in addition to the PIU.
 - Tamil Nadu State Government Library at Chennai
 - District libraries of the 11 districts along the corridors
 - TNRSP web site: www.tnrsp.com
 - In the Panchayat offices along the project roads a printed copy of summary of RAP document in Tamil
 for reference.
- 6.55 The RAP document will also be available at the World Bank Info Shop at Washington DC and New Delhi as per the Disclosure Requirements of BP 17.50 of the WB.
- 6.56 To provide information on the fixation of negotiation prices for land acquisition in the project and to explain the various entitlement options in the project, brochures have been prepared in Tamil and will be available to all PAPs prior to negotiations. An English version of the brochure is attached in **Appendix 6.11 in volume II** of this report.

COMMUNITY PARTICIPATION DURING IMPLEMENTATION OF RAP

- 6.57 During implementation of RAP, as a follow-up of public consultations during preparation stage continued participation in three rounds has been envisaged in conjunction with the RAP implementation as mentioned below.
 - The first round of consultations will take care of disseminating information on finalized entitlement
 packages and options for each category of PAPs. This will involve explaining the detailed entitlement
 matrix to the PAPs and soliciting their support and cooperation in the process of RAP implementation.
 This will also finalize agreement on the group entitlements following the project policy.
 - The second round of consultation will involve reaching agreements on compensation and assistances as per entitlement framework of the project at PAP level, finalizing list of entitled persons (EPs) and issuance of identity cards to EPs indicating his / her entitlement package.
 - The third round of consultation will take place only after disbursement of compensation and assistance amounts when the actual process of resettlement begins.
- Apart from these three rounds of consultations, implementing NGOs will have to involve the PAPs in every aspect of the process, throughout the period of implementation of the RAP.

GRIEVAN CE REDRESS MECHAN ISM

TNRSP has worked out institutional arrangements for redressing the grievances of the PAPs in the project. The HD, GoTN with reference to GO Ms. No. 221 dated 19. 12. 2000 has constituted two committees, one at the district level and the other at the state level for overseeing the progress of resettlement and rehabilitation of PAPs and also to redress the grievances. The members of these committees, their functions are discussed in section 6.1 of this chapter. The duration of these committees is five years. The NGO implementing the RAP shall represent the grievances of the PAPs to the Grievance Committees. The GRC will hear complaints from PAPs and facilitate solutions, and the process as a whole, will promote conflict resolution through mediation. The GRC/ DLC will solve the issue within one month from the date of registration of any case in the GRC / DLC.

(a) Functions of the Grievance Redress Committee / District Level Committee

- 6.60 The functions of the GRC are as follows:
 - To provide support to PAPs on problems arising out of land acquisition, property acquisition, and eligibility for entitlements provided in RAP, compensation and assistance as per R & R Policy.
 - To record the grievances of the PAPs, categorize and prioritize them and provide solutions within a
 - To inform PIU of serious cases within an appropriate time frame.
 - To report to the aggrieved parties about the developments regarding their grievances and decisions of the PIU.
- 6.61 The GRC / DLC will meet every month on a pre-fixed date during implementation of RAP. The committee will suggest corrective measures at the field level itself and fix responsibilities for

implementation of its decisions. The committee will deliver their decisions within a month from the registration of the case and will submit a report on the monthly meeting to the Apex level committee. Those issues requiring approval from the Apex level committee will be forwarded for further action and redressal.

(b) Functions of the State Level Committee

The responsibility for periodic review of the RAP lies with the State Level Committee. The SLC will meet once in six months for reviewing the monthly proceedings of the DLCs and for guiding them in speedy implementation of the R&R provisions. Direct representations to the SLC, if any, from the PAPs will be forwarded to the DLC for necessary action and report.

INTERNAL MONITORING AND REPORTING

- RAP implementation will be closely monitored to provide officials at SDU with an effective basis for assessing resettlement progress and identifying potential difficulties and problem areas. Monitoring will be carried out by appropriate specialists within the SDU and reported regularly to the Project Director on a quarterly basis. The internal monitoring will involve the following tasks:
 - Administrative monitoring to ensure that implementation is on schedule and problems are dealt with on a timely basis.
 - Socio-economic monitoring during and after the relocation process utilizing the baseline information
 established by the socio-economic survey of PAPs undertaken during project preparation to ensure that
 people are settled and recovering.
 - Overall monitoring whether recovery has indeed taken place successfully and in time.

Data from the baseline socio-economic surveys undertaken during the project preparation stage will provide the benchmark for the Monitoring process to assess the progress and success of the resettlement and rehabilitation programme. However, Monitoring process will also include the following:

- Communication and reactions from PAPs.
- Information from PAPs on entitlements, options, alternative developments and relocation timetables.
- Visits by PAPs to potential resettlement sites.
- Valuation of properties
- Usage of grievance redress mechanism.
- Disbursement of compensation and assistance amounts.
- Trends in retail and residential land markets in old and new communities of PAPs.
- Monitoring will also cover the physical progress of project provided resettlement sites. This will include preparation of the land, construction of community facilities, provision of infrastructure, construction of houses, plantation of wood lots and other necessities before the PAPs arrive at the new resettlement location. It will also cover the relocation of the PAHs and their belongings to the new sites and allocation of the replacement assets. Quarterly reports will be prepared by the SDU on the progress of the resettlement site provisions.
- 6.65 **Internal Monitoring Indicators:** The indicators for achievement of objectives under the resettlement and rehabilitation programme are of two kinds as stated below:
 - Process Indicators Indicating project inputs, expenditure, staff deployment, etc.
 - Output Indicators Indicating results in terms of numbers of affected people compensated and resettled, training imparted, credit disbursed, etc.
- 6.66 **Monitoring Indicators for Physical Progress:** A standard format with internal Monitoring indicators for physical progress of the project has been presented in **Table 6.5** below:

Table 6-5: Monitoring Indicators for Physical Progress

Sl.	Monitoring Indicators for	Implementation	Revised	Progress	Cumulative	% against					
No	Physical Progress	Target	Implementation	this	Progress	Revised					
	•	, and the second	Target	Quarter		Implementation					
			J			Target					
Note	Note: The detailed format with implementation targets has been presented in Annexure 6.12 in Volume II of RAP document.										

6.67 **Monitoring Indicators for Financial Progress:** A standard format with internal Monitoring indicators for financial progress of the project has been presented in **Table 6.6** below:

Table 6-6: Monitoring Indicators for Financial Progress

SI.	Monitoring Indicators for	Implementation	Revised	Progress	Cumulative	% against					
No	Financial Progress	Target (Rs. Million)	Implementation	this	Progress	Revised					
	<u> </u>		Target	Quarter	Ü	Implementation					
			_			Target					
Note	Note: The detailed format with implementation targets has been presented in Annexure 6.13 in Volume II of RAP document.										

- 6.68 Internal monitoring will track the physical and financial indicators as mentioned in **Tables 6.5** and **6.6**. Internal monitoring will be carried out by the SDU of the PIU. Quarterly progress report shall be prepared and submitted to the PIU reporting actual achievements against the targets fixed with reasons for shortfalls, if any.
- Reporting: All monitoring reports will have to be compiled within fifteen days at the end of each month. The first task of the NGOs will be to ensure that all entitled persons, whether an individual, a household or a community, receive the entitlements due to them. The filled up formats will be compiled, analyzed and results will be sent to the SDU for review. After reviewing the internal reports for a quarter the SDU will prepare the quarterly report at the end of that quarter and send to the Project Director for his assessment on the quarterly progress of implementation of the RAP.

EXTERNAL IMPACT EVALUATION AND REPORTING

- 6.70 The main objectives of the Impact Evaluation to be carried out by an external Impact Evaluation Agency have been mentioned below:
 - To assess whether the PAPs have improved their living standards, in terms of income, housing condition, access to basic amenities, ownership of land and material assets;
 - · To monitor the schedules and achievement of targets; and
 - To evaluate whether the outcomes of social development objectives of the project are being achieved.
- An external Impact Evaluation Agency with prior experience in resettlement and rehabilitation or other social development programmes will be engaged to carry out the evaluation of the implementation of the RAP. ToR for the external Impact Evaluation Consultant has been appended in the **Annexure 6.3 in Volume II** of the consolidated RAP report.
- 6.72 This external agency will evaluate the implementation process every year during the life of the project. All PAPs who have spent more than 6 months after receiving compensation will be considered for impact evaluation during a year. Any problems encountered will be assessed and necessary changes will be recommended to the PIU for consideration. The external impact evaluation will emphasize on assessment of achievements of the project targets and the change in quality of life of the PAPs. For carrying out the evaluation assignment, the agency will develop the necessary evaluation indicators. All evaluations are expected to be done on the basis of selective indicators. After the implementation of the project, the agency will carry out an end-term evaluation to assess the effectiveness of the implementation of the R&R provisions.
- 6.73 **Indicators for external Impact Evaluation:** The external impact evaluation will be made on the issues as mentioned below:
 - Restoration of income levels of the PAPs;
 - Changes and shifts in occupational pattern;
 - Changes in asset ownership;
 - · Changes in types of housing of PAPs; and,
 - Assessing PAPs' access to amenities, such as water, electricity, transportation, etc.

A standard format with indicators for impact evaluation has been presented in **Table 6.7** below.

Table 6-7: Indicators for Impact Evaluation

	Impact Evaluation Indicators	Pre-Project Baseline Values	Annual Evaluation	End-of-the-Project Evaluation
1.	ANNUAL INCOME			
2.	OCCUPATION			
3.	LAND HOLDING			
4.	MATERIAL ASSETS			
5.	ACCESS TO BASIC AMENITIES			
6.	HOUSE TYPE			
Not	e: The detailed format with pre-project bas	eline values has been presented in	Annexure 6.14 in Volun	ne II of RAP document.

6.74 Assessment of Quality of Life The rationale behind having a comprehensive RAP is to improve the standard of living of PAPs or to restore, at the least, their pre-project standard of living. To assess the changes brought about in the quality of life by the project, objective as well as subjective indicators of quality of life has been developed. An illustrative list of such indicators has been provided in Table 6.8 below.

Table 6-8: Indicators for Assessing Changes in Quality of Life

	of Assessing Changes in Squarty of the
Objective Indicators	Subjective Indicators
% of project affected households below poverty line	Income
% of Scheduled Tribe households below poverty line	Household income, personal income
% of Scheduled Caste households below poverty line	Availability of income opportunity, formal and informal income, primary and
% of Women headed households below poverty line	secondary income
% change in employment rate	Employment
% change in women employment rate	Present employment
% of kutcha houses	Opportunity for employment
% of houses having separate kitchen	Security of employment
% of houses having separate toilets	House
% of houses having water connection	Condition of house, size of house
% of houses having electricity connection	Location of house
Household asset ownership in %	Water supply
Television, refrigerator, radio, mixer, grinder	Source of water supply
Bicycle, bullock cart, two wheeler, car	Quality of water available
Cooking gas	
	Sanitation
	Sanitary condition in the vicinity of the house
	Sanitary condition in the area
	Fuel and energy
	Fuel availability, expense on fuel
	Availability of regular electricity
	Access to market
	Accessibility to market
	Post project market condition (both physical and business)
	Transportation
	Condition of road
	Safety for pedestrians and other road users

- 6.75 The external Impact Evaluation Agency, being independent of the project may modify, add, eliminate or combine these indicators as needed. The key baseline socio-economic indicators based on the census of the PAPs have been appended in **Annexure 6.14 in Volume II** of RAP Document.
- The external Impact Evaluation Agency will submit annual evaluation reports to the PIU. The agency is expected to come out with a comparative analysis with reference to pre-project and post-project scenarios. In the process of such comparison, if the agency finds out changes, it will be necessary on the part of the agency to explain the reasons thereto. Moreover, if the agency finds out any shortcoming in the existing plan of actions, it should include its recommendations with the implementation details and procedures.
- 6.77 The SDU after receiving report from the external Impact Evaluation Agency would review the same within fifteen days. Within a week thereafter, the SDU will submit a review report with recommendations to the PIU. The PIU is authorized to initiate necessary contingency management or corrective actions, if required and if so recommended.

GENDER ISSUE IN THE PROJECT

- 6.78 Realizing the need for addressing gender issues, the R&R policy for TNRSP has included women headed households as vulnerable. These households will be entitled to all assistance for the vulnerable categories. In addition, the impacts on women in the project will be assessed during implementation through the NGO implementing the RAP. The addressal of issues related to women has been included in the NGO Terms of Reference. The R&R specialist will provide guidance to the NGO in carrying out the assessment. The broad methodology to be followed is as follows:
 - Identify the women headed households and make an inventory of the socio-economic status of women of the study area in general during the joint verification survey,
 - From the data collected, prepare a profile of the women PAPs including an inventory on the concerns and preferences of women of the study area, especially on the livelihood sources, decision making etc,
 - Consultations will be conducted by the NGO representatives identifying the needs and the resource requirements for addressing the needs
 - Based on these, the women PAPs will be encouraged to form self-help groups and will be given priority
 in availing institutional credit facilities for enterprise development or income generating activities.

R&R COST AND BUDGET

6.79 The cost for implementation of RAP has been worked out in accordance with R&R policy approved by GoTN; and based on the information from socio-economic survey data. The costs for compensation of various losses have been worked out equal to replacement value based on the market rate and the PWD's schedule of rates. The property owners subject to minor impacts will be provided only compensation for loss of their properties. Other assistance as per the R&R Policy provisions will be provided for the PAPs having major impact due to the project.

UNIT COSTS

- 6.80 The basics of arriving at the unit costs and the budget for the project have been presented below
 - Cost of compensation for agriculture lands: For the acquisition of the land for the project GoTN has approved Rs 2 million per hectare for urban land, Rs 0.3 million per hectare for wet agriculture land and Rs 0.1 million per hectare for dry land.
 - Cost of compensation for building: The rates are proposed in accordance with the replacement values recommended in schedule of rates of PWD. For the pucca structures it is Rs.4000 per sq m, and for semi-pucca structures it is Rs 3000 per sq m. For kutcha residential structures a lump sum of Rs 36,000 has been provided which is estimated as per minimum housing programme implemented by different welfare agencies established by the state and central Governments. The average unit size is considered as 20 sq m for temporary structures. For the replacement of kutcha commercial structures, the rate of compensation will be Rs 30,000 per unit for an area of 9 sq m. The construction cost will be mutually contributed by the PIU and EPs. From the vulnerable 1/3 of the construction cost will be received and from the non-vulnerable 2/3 of the construction cost will be collected from the non-vulnerable PAHs, The rest on cost will be contributed by PIU, In the cost estimates Rs. 24,000 for residential structures and Rs. 20,000 for shops have been considered.
 - **Fees and charges**: An additional 13 % will be paid upfront to meet the costs of registration and stamp duty irrespective of whether they repurchase the lost asset.
 - **Shifting allowance**: One time shifting allowance of Rs. 1000 is to be paid to all eligible PAHs who are required to shift or resettle from their residences/commercial establishments.
 - Subsistence allowance: All the eligible PAHs entitled for subsistence allowances of Rs. 11550 on the basis of minimum wage of Rs. 77 per day for six months (25 working days/month) from the date of their assets have been taken for the project.
 - Rental allowances: The project-affected tenants will be provided with rental allowance of Rs 1000 per household from the date of acquisition of asset for a period of six months.
 - Employment training for PAPs: The PAPs lose their primary source of income due to loss of their business and employment in agriculture and non agriculture sectors will be paid lump sum of Rs 2000 per annum for EPs for three years as assistance for income generating programme and vocational training programme. The PAPs above 18 years are eligible for receiving this assistance from the vulnerable PAPs and PAPs losing their business.
 - Loss of yield from non-perennial crops A lump sum of Rs. 6.5 million has been provided for the compensation of the loss of perennial crops. Package one has been provided with Rs. 3 millions, packages 2,3&4 are provided with Rs. 1 million each and Rs 0.5 million for package 5
 - Assistance for loss of Employment: The agriculture and non-agriculture labours, who are losing their livelihood due to the loss of employment, will be provided Rs 10,000 as assistance for employment training and purchase of materials to establish income sources.
 - Loss of yield from perennial crops: For compensation of the loss of perennial crops and yields, a lump sum of Rs 1 million has been provided for each package.
 - Compensation for the community assets lost: Due to the project many community assets along the
 roadside are affected. The unit costs for the community assets are provided in the following Table 6.9.
 The detail cost estimates for community assets has been provided by package-wise in Annexure 6.15.

Table 6-9: Unit Rates for Community Assets

Community Assets	Unit Rate (in Rs)	Community Assets	Unit Rate (in Rs)
Well	100000	School Building*	100000
Water supply tap	5000	Graveyard	5000
Hand pump	25000	Water Tank	45000
Place of worship	30,000	Check Post	10000
TV/Radio Room	5000	Other Government Buildings	50000
Motor Shed & Bore Well & Pump Shed	5000	Statue	10000

Community Assets	Unit Rate (in Rs)	Community Assets	Unit Rate (in Rs)				
Compound Wall_ religious *	20000	Other Community Assets	5000				
Panchayat Buildings	100000	Other Community Building*	100000				
Compound Wall_ Other Buildings*	20000	Compound Wall_ Other Buildings*	20000				
Note: * The extent of impacts will be estimated during implementation. Presently lump sum amounts have been considered as cost of compensation.							

- **Ponds:** The costs for strengthening of the pond embankments and other measures on ponds to mitigates the impacts are added in engineering cost. The ponds impacted and viable for enhancements are included in the EMP. The cost for mitigation and enhancement of these ponds is included in the BOQ.
- **Bus shelter:** The cost for compensation of the bus shelter is added in the engineering cost, which is treated as roadside furniture.
- **Utility relocation cost:** The costs for relocation of the utility are included in the Engineering cost as part of the site clearance cost. This includes the cost of electric line, telephone lines, water supply network, etc.
- The cost for development of resettlement site: The cost for developing resettlement site for 20-50 PAHs and 50-100 PAHs categories are worked out. The details of cost have been provided in EMP for resettlement site. These include the cost of various infrastructures availed in the resettlement site. For the cost estimate purpose lump sum of Rs 8 million has been provided.
- **NGOs for the implementation of R&R:** The costs are worked out on the basis of number of Household affected. The cost worked out to be RS22.62 millions for the entire project.
- External Impact Evaluation agency: The cost for engaging the external impact evaluation agency has been worked out as lump sum to the tune of Rs 2.0 million for contract package TNRSP-01 and Rs 1.0 million each for TNRSP-02, 03 and 04.
- Unidentified impacts: To mitigate the impacts, which have not been identified during the census survey will
 be compensated with the additional allocation of 10% of the R&R cost. Ramanathapuram bypass alignment is
 yet to be finalized and the exact impacts needs to be worked out after social impact assessment study. To
 mitigate the impacts tentative provision of Rs 17.29 has been made. The estimated land to be acquisition is
 36.2 ha, of which a maximum of the lands passes through non-agriculture unproductive land, small patches of
 agriculture lands are likely to be impacted, however the cost has been estimated at the rates of agriculture
 lands considering expenses involved in providing other assistances.
- The following **Table 6.10** presents the overall budget with costs for all R&R components (for details refer **Annexure 6.16 in Volume II** of the document). Broad estimates for the budget for Phase II of TNRSP (Ramanathapuram bypass) and the resettlement costs along the maintenance roads are included.

Table 6-10: Summary of R&R Budget (INR Million)

Items	TNRSP-01	TNRSP-02	TNRSP-03	TNRSP-04	TNRSP-05	Total
Land Acquisition	290.50	82.95	21.36	15.66	10.99	421.46
R&R assistance	255.50	91.59	26.86	26.33	6.30	338.41
Consultancies (NGO Services, impact evaluation, Training, etc.)	15.1	6.4	5.98	8.15	0.0	35.62
R&R goods	2	2	2	2	0	8
R&R works, including resettlement sites development and relocation of community assets	57.66	25.44	11.08	12.62	0	106.8
Operating costs (salary of SDU)						28.85
Contingency 10% for un-quantified impacts	62.076	20.838	6.728	6.476	1.729	93.914
Total	681.836	227.218	71.008	67.236	14.019	1033.054