

**Public Works Department
Government of Rajasthan
INDIA**

**Rajasthan State Highways Project
Project Coordinating Consultancy (PCC)**

RESETTLEMENT ACTION PLAN



RP- 25



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**LOUIS BERGER INTERNATIONAL, INC., USA
BCEOM, French Consulting Group
in association with
Consulting Engineering Services (I) Ltd.
Engineering Consultants India**



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RESETTLEMENT ACTION PLAN

I. INTRODUCTION AND PROJECT DESCRIPTION

1.1 Introduction

The Government of Rajasthan (GOR) is preparing the Rajasthan State Highways Project with assistance from the World Bank. The aim of the project is to improve the performance of the State's road transport network by improving road conditions and capacity, and to improve the State's capacity to plan, develop and maintain the Rajasthan roads network. The Public Works Department (PWD) of the State of Rajasthan contracted the Project Coordinating Consultants (PCC) services to select a number of roads to be rehabilitated over several phases- Phase-I, LA, and II, and to assist project preparation.

A selection of approximately 1500-km of roads will be upgraded in the project. Road segments selected for improvement are detailed in Table 1.1 and depicted in the map provided in Figure 1.1. These roads will be improved through rehabilitation with raising of formation levels, pavement strengthening, and widening and realignment where necessary. A number of bypasses will also be built.

This Resettlement Action Plan describes the principles and approach to be followed in minimizing and mitigating negative social and economic impacts caused by the project, including displacement. It provides a detailed and time-bound plan for mitigation of social impacts, including resettlement and rehabilitation of persons affected by Phase-I of the project, and the principles and procedures that will govern impact mitigation, resettlement and rehabilitation in subsequent project Phases.

This RAP contains the details and results of census and baseline socio-economic surveys of the potentially affected population undertaken in preparation of the project. It identifies categories of expected project impacts, including loss of property and assets, loss of livelihood, and other social and economic impacts on groups and roadside communities.

This RAP reviews pertinent Government of India (GOI), GOR, and World Bank policies and the legal framework under which impacts will be addressed and resettlement carried out. It identifies the criteria by which project-affected persons (PAPs), families, households, groups and communities will be defined and entitled to compensation and project assistance. It establishes, for each category of project impact, the specific entitlements that will be provided to those adversely affected.

This RAP has been prepared on the basis of provisions contained in *Government of Rajasthan Rehabilitation and Resettlement Policy of Rajasthan - Draft of the Policy for Rehabilitation & Resettlement of Persons Displaced or affected by Projects in Rajasthan*, and on those contained in the World Bank-proposed *Rajasthan State Highways Project, Social Impacts and Resettlement: Principles and Policy Framework and World Bank OD 4.20 and 4.30*.

Government of India laws and guidelines require that assets lost through the exercise of Eminent Domain be compensated at market value, and that displaced people be assisted in reestablishing their homes and livelihoods. Similar principles apply in all World Bank financed projects. The Bank's policy is described in Operational Directive 4.30 on Involuntary Resettlement. This policy document states that addressing potential involuntary resettlement is an integral part of project design that should be dealt with from the earliest stages of project preparation.

Both GOR and World Bank guidelines related to resettlement aim at achieving the following overall goals:

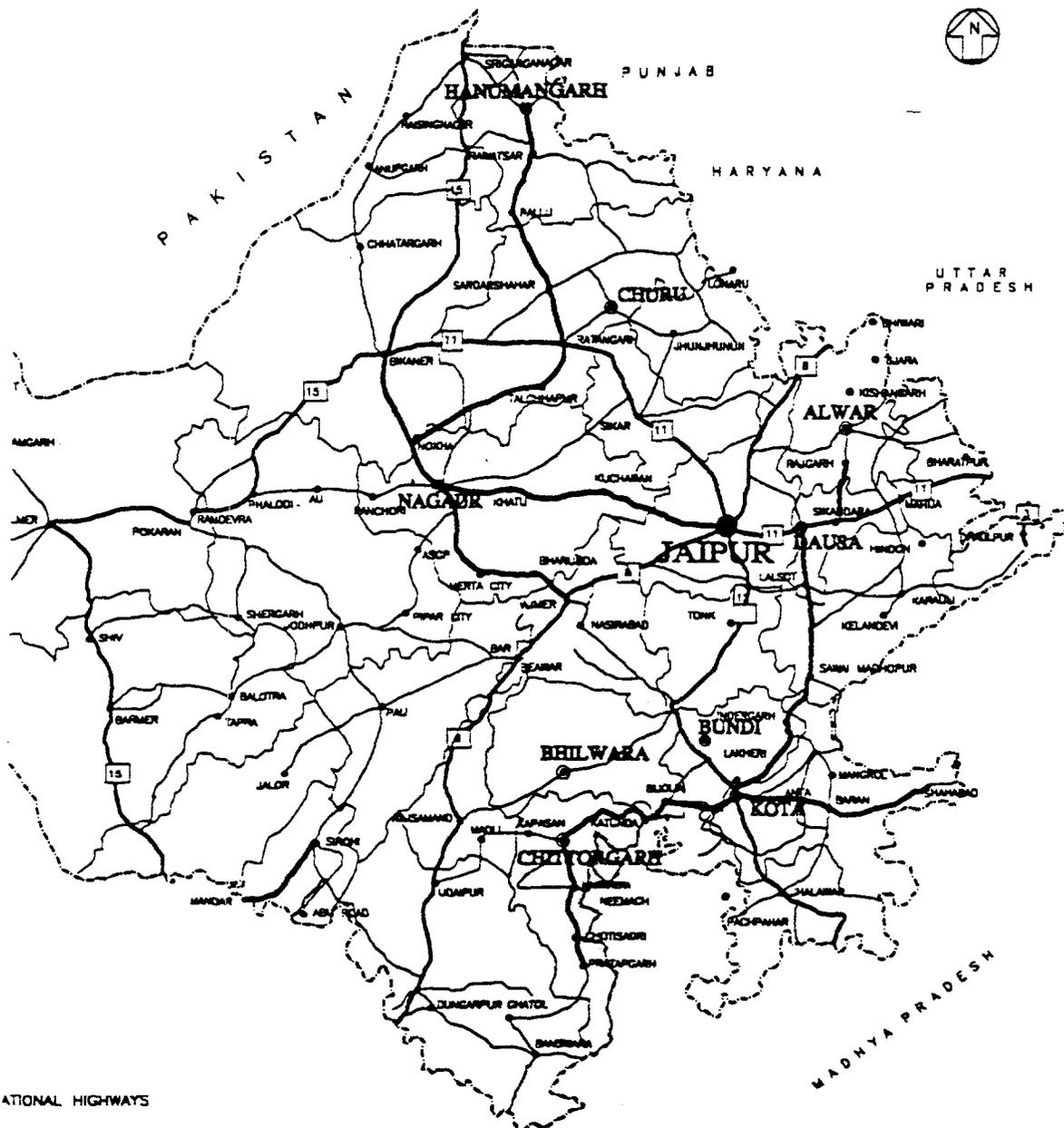
- Involuntary resettlement shall be avoided or minimized where feasible, exploring all viable alternative project designs; and
- Where displacement is unavoidable, people losing assets, livelihood or other resources shall be assisted in improving or at a minimum regaining their former status of living at no cost to themselves.

TABLE 1-1
DETAILS OF PROJECT ROADS

Phase and Alignment Number	Corridor Name	Road Designations	Length (km)
Phase I			
Alignment 1	Jaisur-Kuchaman- Nagaur	SH 2A	228
Alignment 3	Kota- Bunoia- Chittorgarh	MDR 41, SH 9	176
		Sub Total	404
Phase I A			
Alignment 4	Ratangarh-Sikanera	SH 25	35
Alignment 5	Kota- Indergarh	SH 33	72
Alignment 2	Kota-Anta- Baran	SH 17	72
Alignment 9	Ratangarh- Pailu- Hanumangarh	SH 7	189
		Sub Total	371
Phase II			
Alignment 3	Chittorgarh-Nimoshera (4 Lanes)	SH4	33
Alignment 4	Dausa - Sawai Madhopur	SH 29	96
Phase and Alignment Number			
Alignment 4	Sawai Madhopur- Indergarh	SH 29, SH 30	39
Alignment 6	Sirohi-Mandar-Dessa	SH 27	71
Alignment 7	Nagaur-MertaCity-Ajmer	SH 39, SH 21, SH18	158
Alignment 2	Baran - Shahbad	SH17	80
Alignment 8	Nagaur - Bikaner	SH3	110
Alignment 11	Ratangarh-Talchaper-Nokha	SH7, SH20	143
		Sub total	730
		Total	1505

This RAP describes and documents the process of consultation and social assessment carried out during project preparation. It identifies project stakeholders and details measures taken to

RAJASTHAN
ROAD MAP



- NATIONAL HIGHWAYS
- PHASE 1 ROADS
- PHASE 2 ROADS
- PHASE 1 A ROADS
- STATE BOUNDARY
- DISTRICT BOUNDARY
- DISTRICT HEADQUARTER
- STATE CAPITAL

PHASE 1, 1A & 2 ROADS

FIG : 1.1

age informed public participation in project planning including PAP involvement in RAP implementation.

RAP details restoration strategies and economic rehabilitation measures responsive to displacement-induced property and income loss. It addresses impoverishment risks and provides property and income restoration options and alternatives attractive to PAPs, particularly those in vulnerable groups.

Although the project is not expected to produce sufficient displacement to require development of community relocation sites, this RAP also provides principles and procedures for participatory selection, procurement, planning and design, and development should these become necessary in later project phases.

RAP describes the institutional and organizational mechanisms required to undertake the resettlement program. It identifies the institutions responsible for delivering specified elements and describes the composition and functions of the project resettlement unit that will be established by PWD to coordinate RAP implementation across agencies and jurisdictions. It also provides a timetable for staffing this unit, a plan for training and staff development within the unit and affiliated implementers, and recommendations for improving long-term capacity of resettlement institutions in Rajasthan and PWD.

This RAP provides a detailed implementation schedule listing the chronological steps that will be taken to effect resettlement, rehabilitation, and mitigation. It also describes the linkages between resettlement implementation and initiation of civil works for each project component.

This RAP estimates project resettlement, rehabilitation, and mitigation costs; identifies associated financial responsibility and authority; and indicates how these expenses are incorporated in overall project costs. It provides an itemized budget for resettlement implementation including administrative expense, monitoring and contingencies and identifies components to be funded by the World Bank.

Finally, this RAP establishes provisions for redressing PAP grievances and for monitoring and evaluation of RAP implementation. The grievance process specifies procedures for registering and addressing complaints including appeal mechanisms and recourse to civil courts. Internal monitoring and external evaluation mechanisms, methodology, and indicators are provided and associated institutional, financial, and reporting arrangements are specified, including processes for assuring integration of feedback into RAP implementation.

This RAP provides actual figures on numbers of project affected persons and those entitled to RAP compensation and/or assistance for Phase-I of the project and estimates for Phases 1A and 2. With completion of field census and surveys and delineation of actual impact corridors, the actual number of project-affected persons entitled to RAP compensation and/or assistance will also be given for Phase-1A. Similarly, land acquisition estimates for the project are provided on the basis of actual Phase-1 requirements and best estimates of Phase-1A. This RAP is a 'living'

ment and will be revised in successive iterations over the life of the project. Implementation of RAP is a prerequisite for commencement of civil works under the project.

Project Description

The project is based on a Strategic Options Study carried out for PWD by RITES India, Ltd. in July 1995. This study identified approximately 2500 km of high priority roads for possible upgrading covering more than 20 districts. These 2500 km of State Highways (SH) and Major District Roads (MDR) consist of 11 major links. These roads are characterized by reduced carriageway width and/or pavement deterioration resulting in capacity and movement constraints.

The project is under consideration for World Bank financing and techno-economic feasibility studies are currently being finalized by the PCC, together with social and environmental impact assessments, have determined the final selection of about 1500 km to be included in the project. Proposed road improvements will mainly consist of rehabilitation, including raising the pavement level, widening to two-lane from the existing single- and intermediate-lane width, and pavement strengthening. Road stretches crossing urban areas may also require upgrading to a full lane divided cross-section and/or provision for drainage, sidewalks and parking. Generally, the project will be improved to State Highway Standards, consisting of rehabilitation, plus earthworks and widening of structures to accommodate a 7 meter-wide carriageway, 2.5 meter shoulders and drainage.

Improvements proposed under the project are mainly along existing roads and most of the pavement works will be confined to the existing Rights-of-Ways. In several instances, as discussed in Section 1.5 below, insufficient Right-of-Way (ROW) exists to accommodate proposed improvements and additional ROW will need to be acquired through acquisition of private and other lands. In a number of cases, realignments and/or new alignments including bypasses that will also require land acquisition are under consideration.

The project is expected to result in lower transport costs for freight and passengers of motorized and non-motorized vehicles, improved road transport corridors and road network connectivity, improved management of road sector institutions, and enhanced maintenance of priority roads.

The benefits identified in economic analysis include savings in vehicle operating costs: time savings for passengers and goods in transit; and savings in road maintenance costs. All links selected for inclusion in the project demonstrated high Internal Rates of Return in project sensitivity studies. Although such benefits were not quantified, the project is also expected to alleviate development constraints in agriculture, commerce, education, health, social services, and public safety and contribute to general expansion and diversification of development activities.

Estimated project costs are Rs. 2104 Crores (US\$ 501 million) which would require a loan of US\$ 363 million from the IBRD. The project will be implemented by the Rajasthan Public Works Department over a 5-year period. A project Implementation Unit has been established to

monitor and evaluate the work of the PCC during project preparation and to assist PWD during implementation. An empowered Implementation and Tender committee has been established to oversee procurement actions. Financial management of project accounts and external auditing will be developed to monitor each project component and its compliance with the loan agreement.

3.3 The Resettlement Action Plan

This document comprises the Resettlement and Rehabilitation Action Plan (RAP) of the Rajasthan State Highways Project (RSHP). It has been prepared by the RSHP Project Coordinating Consultants (PCC) in collaboration with the Government of Rajasthan (GOR) Public Works Department (PWD).

This RAP will be submitted by PWD to the Rajasthan State Pollution Control Board (SPCB) and GOI Ministry of Forest and Environment (MOEF) in compliance with GOI environmental clearance requirements. Although it has been prepared as a 'stand-alone' document, it is an important component of the project's comprehensive Environmental Management Action Plan (EMAP) presented in the Sectoral Environmental Assessment (SEA) and the Environmental Impact Statements prepared for the project's Phase-1 alignments.

GOI environmental clearance of the 404-km of highway improvements contained in Phase-1 of the project was requested in March 1998. When approved, this RAP will be forwarded to SPCB and MOEF as a supplement to this pending application and the GOI-required detailed Environmental Impact Statements (EISs) of the project's Phase-1 roads. This RAP contains all requested resettlement-related information and documentation required for GOI environmental clearance of Phase-1 of the project. Supplemented by Addenda covering subsequent project Phases, it will also provide the basis for clearance of Phase-1A and Phase-2 for which additional applications for GOI environmental clearance will be submitted when Phase-1A Phase-2 detailed designs are complete.

This RAP satisfies MOEF Special Order 60 (1994) requirements for a Rehabilitation Master Plan when more than 1000 persons are affected. It includes the relocation-related mitigation measures recommended by Section 6.3 of the 1989 MOEF Guidelines and provides the work plan, schedule, personnel and resource budget, and monitoring specifications necessary to implement them. Updated with additional census and survey data, this RAP will also cover subsequent Phases of the project.

For the project's Phase-1 roads, this RAP and associated PAP databases and strip maps provides exact numbers, identities, and socio-economic characteristics of the project-affected population for the complete 404 kms. of Phase I. It also provides estimates for subsequent project Phases based on detailed survey of 189 kms. of Phase I A (50% of 371 kms of Phase IA roads) and based on preliminary designs and initial studies for the remainder of the project. During project implementation, additional studies will be undertaken to update the Action Plan, in coordination with project design efforts.

This RAP also details the land the project will actually require for Phase I. Pending census and socio-economic surveys and final alignments and designs, tentative estimates for numbers of APs and extent of land acquisition are provided for Phase-1A and 2.

In the event that the project involves displacement, land acquisition, or loss of assets to establish borrow sites, quarries, or other facilities, provisions of this RAP shall apply to all affected persons.

The following tasks will be carried out in Phase-1A and 2:

- completion of PAP census and survey, Right-of-Way determination, and delineation of project impact corridors;
- verification of the Entitled Persons and the amount of their compensation and assistance;
- consultation with Entitled Persons on their entitlements; and,
- implementation of resettlement, relocation and rehabilitation.

As these tasks are completed, Addenda will be prepared updating this RAP with the latest information and the outcome of outstanding tasks.

This RAP will be implemented by Rajasthan PWD with limited assistance from the PCC, other government agencies, and non-governmental- and community-based organizations (NGOs, BOs.). Orders establishing a Project Implementation Unit (PIU) have been issued and initial staffing of the PIU including officers from Revenue and Forestry Departments was completed in April 1998.

4 Project Components

As introduced above, the project is divided into several stages and phases and has multiple components. A design stage began in January 1997 with feasibility studies, social and environmental screening, preparation of preliminary designs, and selection of roads to be provided under the project. Phased preparation of social and environmental assessments, detailed engineering designs, and construction contract specifications of the roads selected has followed. A construction stage of the project is scheduled to begin in late 1998 and continue over five-year period ending in 2003.

In addition to engineering design and project preparation, the project includes social and environmental assessments and major institutional development and maintenance components. Cost estimates of the project's main components are shown below and details of each are provided in the subsections that follow.

**Table 1-2
Major Project Components**

Major Project Components	Indicative Project Costs Rs. Crores (US\$ million)
1. Widening and/or strengthening of 1500 km of SHs and MDRs	1575 (375)
2. Periodic maintenance of strategic SHs and MDRs	185 (44)
3. Design and Supervision	163 (38.8)
4. Institutional Strengthening	29 (6.9)
5. Land Acquisition and R&R	64 (15.2)
6. Pre-Investment Study	16 (3.8)
Total	2032 (483.8)

4.1 Feasibility Study and Detailed Engineering Design

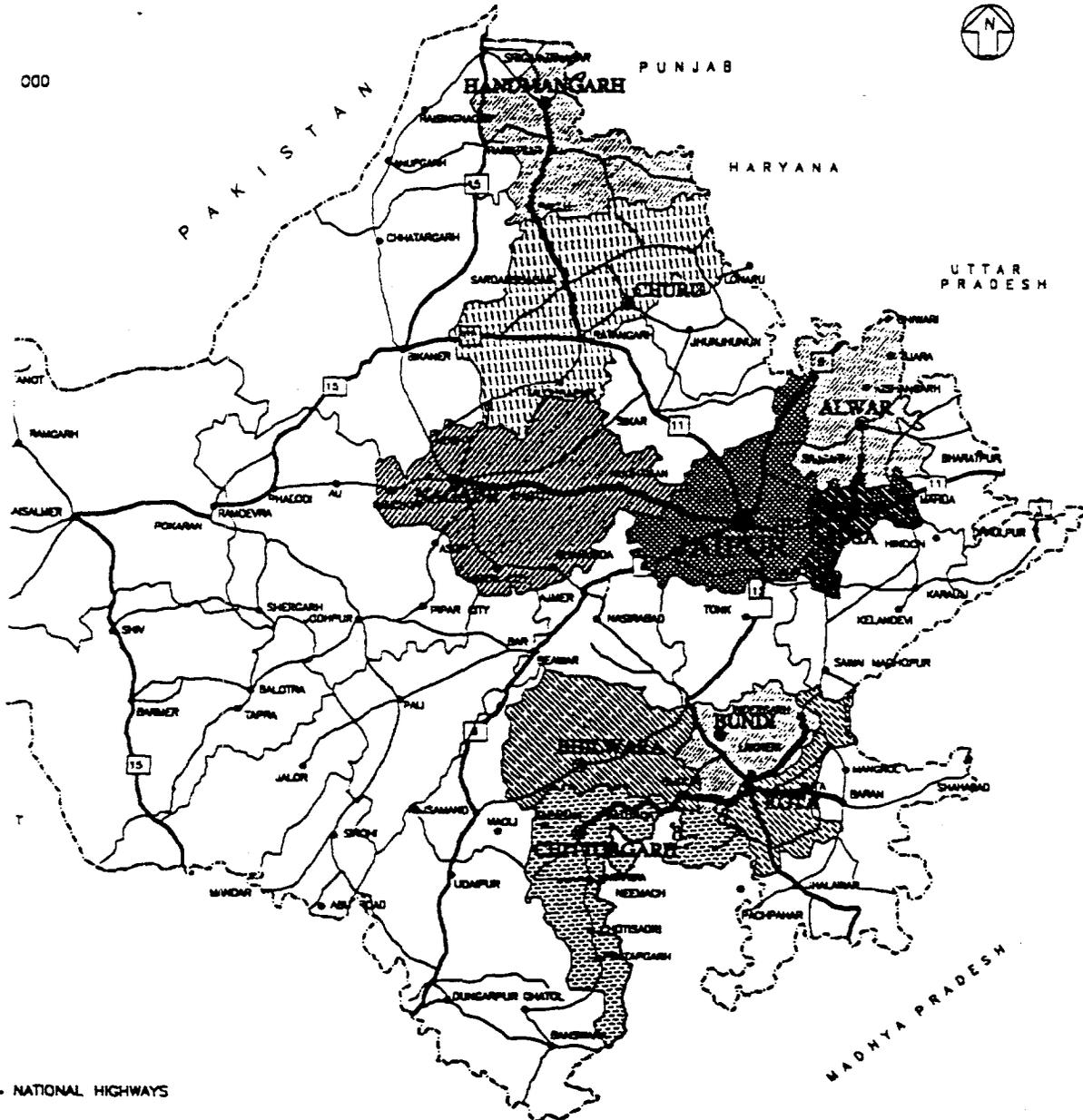
The project's design stage is divided into three major phases:

- Phase-1 includes the feasibility study of 2500 km of selected State Highways (SHs) and Major District Roads (MDRs): selection of 1500 km of SHs and MDRs for detailed engineering; detailed engineering of 404 km of high priority roads; and management and monitoring support to PWD.
- Phase-1A includes detailed engineering design for 371 km of high priority roads and continuing management and monitoring support,
- Phase-2 includes detailed engineering for the remaining approximately 750 km of high priority roads and continuing management and monitoring support.

Phase 1 technical and economic feasibility studies have been completed and draft results have been submitted. Phase-1 detailed engineering is completed for two important links: Link 1, Jaipur - Nagaur (235km); and Link 3, Kota - Bijolia - Chittorgarh (169 km)..

In an extension of Phase-1, referred to as Phase-1A, detailed engineering design of an additional 371 km of priority roads has been initiated. Phase-1A roads include: Link 2, Kota - Baran (72 km); Link 4, Rajgarh - Sikandra (38 km); Link 5, Kota - Indergarh (72 km); and Link 9, Ratangarh - Hanumangarh (189 km). Detailed design of the approximately 750-km remainder will be undertaken later as Phase-2 of the project. The details of the project roads for Phase I and 1A are given in the table below and indicated in Figure 1-2.

RAJASTHAN
ROAD MAP



- NATIONAL HIGHWAYS
- PHASE 1 ROADS
- PHASE 1 A ROADS
- STATE BOUNDARY
- DISTRICT BOUNDARY
- DISTRICT HEADQUARTER
- STATE CAPITAL

PHASE 1 & 1A ROADS WITH DISTRICTS

FIG : 1.2

TABLE 1-3
DETAILS OF PROJECT ROADS

Phase and Alignment Number	Corridor Name	Road Designations	Length (km)
Phase I			
Alignment 1	Jaipur-Kuchaman- Nagaur	SH 2A	228
Alignment 3	Kota- Bijolia- Chittorgarh	MDR 41, SH 9	176
		Sub Total	404
Phase I A			
Alignment 4	Rajgarh-Sikandra	SH 25	38
Alignment 5	Kota- Indergarh	SH 33	72
Alignment 2	Kota-Anta- Baran	SH 17	72
Alignment 9	Ratangarh- Pallu- Hanumangarh	SH 7	189
		Sub Total	371
Phase II			
Alignment 3	Chittorgarh-Nimbahera (4 Lanes)	SH 4	33
Alignment 4	Dausa - Sawai Madhopur	SH 29	96
Alignment 4	Sawai Madhopur- Indergarh	SH 29, SH 30	39
Alignment 6	Sirohi-Mandar-Dessa	SH 27	71
Alignment 7	Nagaur-Merta City-Ajmer	SH 39, SH 21, SH 18	153
Alignment 2	Baran - Shahbad	SH 17	80
Alignment 8	Nagaur - Bikaner	SH 3	110
Alignment 11	Ratangarh-Talchaper-Nokha	SH 7, SH 20	143
		Sub total	730
		Total	1505

The design stage and project preparation began with PCC mobilization in January 1997. Techno-economic feasibility studies have been completed. A draft Feasibility Study Report was submitted in June 1997 and revised in response to World Bank review and comments in October 1997, February 1998, and July 1998.

Four construction contracts will be let for the Phase-I roads. Link 1, Jaipur to Nagaur, has been divided into two construction packages. Contract 1 consists of the 109-km Jaipur to Kuchaman section. Contract 2 consists of the 116-km Kuchaman to Nagaur section. Link 3, Kota to Chittorgarh, has also been divided into two packages. Contract 3 consists of the 68-km Kota to Bijolia section. Contract 4 consists of the 80-km Bijolia to Chittorgarh section. Bid documents for Phase-I are completed and those for Phase IA are expected to be completed by September 1998. Construction contracts are expected to be completed by January 31 1999 for Phase I and March 15 1999 for Phase IA.

Advertisements for supervision consultants and contractors have been issued and contractor pre-qualification papers have been provided to interested parties. Preparation of bid documents for the contract and Request for Proposals (RFP) documents for the construction supervision consultancy is underway. The supervision consultancy is expected to be in place by October 1998.

equalification of Phase-1 construction contractors was completed by April 1998. Bids for Phase-1 construction contracts are to be completed and evaluated by mid-October 1998.

4.2 Social Assessment

Social and environmental assessment of the project has been an important component of project preparation. Preliminary assessment results were considered with technical and economic feasibility findings in the final selection of roads to be rehabilitated and up-graded. The assessments also contributed to engineering design and resulted in the preparation of social and environmental action plans governing project implementation and the resettlement and rehabilitation of those who may be displaced or suffer loss of assets and/or income as a result of road improvements.

The project's social impacts and resettlement component included assessment of social impacts of the project and development of appropriate mitigation plans as required. Social assessment is carried out in close coordination with environmental assessment and action planning and included consultation and participation among project stakeholders, local communities and potentially affected groups.

The social impact assessment and resettlement planning component had five main elements:

- Early screening and social impact assessment as part of project feasibility studies;
- Public consultation
- Preparation of resettlement and rehabilitation entitlements framework
- Census and baseline socio-economic survey of the potentially affected population; and
- Preparation of a time-bound Resettlement Action Plan (RAP)

Social screening was undertaken in conjunction with project feasibility studies and the selection of roads to be included in the project. It provided important inputs and guidance to engineering designs.

A full census was undertaken to register and document the status of the potentially affected population within the project impact area, their assets, and sources of livelihood. This census is complete for the Phase-1 roads and has been initiated for Phase 1-A. It provides the basis for establishing a cut-off date for determining who may be entitled to relocation assistance or other benefits from the project.

A detailed socio-economic survey of a sample of the potentially affected population was also carried out in conjunction with the Phase-1 and 1-A census. This survey provides a baseline against which mitigation measures and support will be measured and includes comprehensive examination of people's assets, incomes, important cultural or religious networks or sites, and other sources of support such as common property resources. Analysis of survey results examined the needs and resources of different groups and individuals, including intra-household and gender analysis.

Preparation of this RAP has been undertaken within the project's social assessment component. A key element of the RAP is a policy framework for resettlement containing categories of impacts and their corresponding entitlements. This RAP provides detailed guidance on how to implement provisions in the policy framework, including institutional arrangements and budgets based on enumeration of project-affected people and the entitlements to be provided under the framework.

1.5 Need for resettlement and rehabilitation in the project

The detailed studies undertaken in preparation of the project show extensive occupancy of project roadside areas, including densely settled village and urban communities. Road-widening and the other improvements proposed will impact residences, businesses, religious shrines and structures, agricultural lands, public buildings, and infrastructure.

Most of the infrastructure work planned for the project will take place within the established public Right-of-Way (ROW). However, along a significant portion of alignments included in the project, ROW to accommodate the highway improvements proposed is not present, not sufficient, or not available. Before the project can be implemented, land must be taken by PWD to establish, extend, or reestablish public ROW.

ROW must be established primarily in cases of new bypasses where it does not yet exist. In other instances, where ROW for the roads to be improved was never legally acquired or officially transferred to PWD, it must also be established. Segments of the alignments proposed for improvement predate the GOR and PWD 'inherited' rather than formally acquired the land upon which the existing road rests. In other cases, the current road was established over existing tracks and pathways through villages. Only the minimum width required for the actual roadway was paved and houses were left standing. Agricultural lands outside the village were acquired and compensated – but only for the actual roadway, not a greater width to establish a ROW. Revenue records frequently indicate no ROW per se and show either private holdings with no indication of the road, or existing carriageways immediately abutted by private land.

ROW must be extended where it is currently confined only to the existing carriageway or is too narrow for proposed highway improvements. Extensions of ROW are also necessary where minor alignment adjustments have shifted centerlines or straightened curves. ROW extensions will require either legal acquisition of private lands or land transfers within and between governments. Where established ROWs are present, they are, in many instances, too narrow for the scale of highway improvements proposed by the project.

ROW must be reestablished where it is encumbered and unavailable to the project. PWD, in effect, must repossess the ROW and take back public lands which have been privately occupied and put into use. Typically, this means the removal of squatters and encroachers

Resettlement and social and economic rehabilitation will be necessary; first, because much of the additional land required for project ROW is occupied and/or used; and, second, because the

extent of land required, in some cases, will render continued occupation and current land uses impossible.

Resettlement will be required only where residential and residential/commercial buildings must either be fully demolished or taken to the extent that they are rendered uninhabitable. Displaced residents of these buildings will be resettled. Similarly affected businesses and other public and religious buildings and structures will be relocated.

Rehabilitation will be required where resettlement, relocation, or other project impacts result in lost livelihood or income. In these cases, it will be necessary to restore the economic status of affected persons to at least pre-project levels.

In most cases, the project will not require full demolishing or the taking of residential or commercial structures to the extent that either resettlement or relocation will be necessary. Generally, only a narrow strip of several meters or less will be affected. Frequently, this means that only a compound wall or fence, yard, extending awning, or sign must be removed. In some cases, small portions of roadside dwellings and businesses will be taken. Only rarely will it be necessary to take entire residential or commercial structures. In all cases, however, compensation and/or assistance will be provided depending on the status and extent of the property taken.

As introduced above, much roadside occupancy occurs on private land, and where public ROW exists it is not free of encumbrances. Holders of adjacent properties have extended residential and commercial buildings and agricultural cropping into the ROW and heavily encroached upon the public land. Others have maintained pre-existing residency and use or moved into the ROW erecting permanent or temporary structures used for residential or business purposes, and, in some instances, cultivating the land.

Affected private landowners are entitled, under law, to compensation. While tenants, squatters and encroachers are not entitled to legal compensation for land they have occupied, the project will give targeted support to ensure that they are able to maintain shelter and livelihood.

The project requires land additional to that beneath the existing pavement to accommodate the highway improvements that are proposed. In most cases, the land required is immediately adjacent to the current carriageway and is needed for road-widening, slide slopes of raised formation levels, and drainage ditches. Improved junctions and intersections, new bridge approaches, and minor alignment adjustments to improve geometrics such as curve-straightening also require additional land. Where more substantial realignments or new alignments including bypasses are planned and the new road will diverge from the existing one, larger amounts of land are needed.

The additional land required by the project falls under several classifications:

- public land owned by the State Government and administered by PWD as Right-of-Way (ROW) for the existing road;

- public land owned by the State Government and administered by other Departments such as Forest or Revenue;
- public land held by the Central Government under control of the military;
- public land owned by villages or other local governments; and
- private land.

Public Right-of-Way held by PWD is the lawfully acquired corridor of land established to permit the free and unobstructed transit of the State's highways and roads and other public infrastructure such as power and telecommunication transmission lines and pipelines. It is public property dedicated exclusively to these uses. Land within the ROW required for the project does not need to be acquired by purchase; it already belongs to the Government and is under PWD jurisdiction.

The public lands held by other GOR Departments that the project requires include Forest and Revenue lands of several types. Among the Forest lands are Reserved and Protected forests. Although the state retains title to these lands, the Forest Department controls them. PWD does not need to purchase these lands; they belong to the Government. For the project, it requires transfer of such land to PWD jurisdiction.

Public lands held by the GOR Revenue Department include those with the general designation of Revenue lands and others specifically designated as *Gairmumkin* or *Savaichak*. *Gairmumkin* lands are those historically allotted to roadways, generally former katcha tracks, and reserved for that usage. *Savaichak* are lands under Revenue Department jurisdiction that remain allotable. As with Forest lands, PWD must obtain these lands, when necessary for the project, through intra-governmental transfer.

Public lands held by the military include various lands under the jurisdiction of the armed forces as military reservations. Again, as these lands are already public, they do not have to be purchased for the project, but must be transferred to PWD jurisdiction as ROW.

Public lands held by villages or other local governments include common grazing areas and other lands under panchayat jurisdiction and lands under the jurisdiction of Urban and Municipal Development Corporations or other local authorities. Where the project requires lands under these jurisdictions, PWD will also have to effect its transfer.

Private lands are those owned by individuals. Generally, ownership of these lands is recognized by legal title, a *patta*. Where privately held land is required for the project it must be legally acquired by PWD on behalf of the GOR under terms and procedures of the GOI Land Acquisition Act (LAA) as amended in 1984.

In some cases, private lands may be held without legal titles when ownership is traditional or communal, as in the case of some tribal lands, or when land reforms have awarded lands to tenants but legal title has yet to be issued. Where untitled private lands or common property with traditional usufruct rights may be required by the project, as in the case of *Bhoodan* lands, for

example; PWD must also acquire them through purchase, applying the same principles, provisions, and protections provided to title-holders by the LAA.

Legal boundaries and property rights related to public and private land have great bearing on both project land acquisition requirements and the provisions of this RAP. Project-affected private landowners are entitled, under law, to compensation. Displaced squatters and encroachers are entitled, within the RAP, to support and assistance. In cases where Government is unable to prove ownership and a ROW and residents can demonstrate legal title, proper compensation under law must be paid to those losing land or assets. Where Government is unable to prove ownership and residents lack title, the presumption must be that the land is not the Government's. In these cases compensation must be paid to those displaced or affected whether or not they possess title and they should not be categorized as squatters or encroachers.

The status of public ROW on each of the four construction contract packages that comprise the Phase-I project roads is shown in Tables 1-4 to 1-8.

Table 1-4
PHASE I - CONTRACT 1 - JAIPUR TO NAGPUR
STATUS OF PUBLIC RIGHT WAY

No	Chainage		Length (in metres)	Area available (in metres)	Width available (in metres)	Area available within COI (in sq. m)	Width required (in metres)	Additional width required (in metres)	Area to be acquired (in sq. m.)
	From	To							
	01	6900	6900	0	24.4	138000.0	20	0	0
	7200	27000	19800	0	24.4	396000.0	20	0	0
	27000	34700	7700	0	0	0.0	20	20	154000
	34700	45350	10650	0	26	217000.0	20	0	0
	47750	51500	3750	0	0	0.0	20	20	75000
	53300	53850	550	0	0	0.0	20	20	51000
	56050	60050	4000	92000	0	0.0	20	20	80000
	61150	61750	600	13800	0	0.0	20	20	12000
	61900	63600	1700	51000	0	0.0	20	20	34000
	63600	66600	3000	90000	30	60000.0	20	0	0
	66600	66930	330	9900	23	6600.0	20	0	0
	67000	68200	1200	36000	23	24000.0	20	0	0
	68200	74000	5800	133400	30	116000.0	20	0	0
	74200	74400	200	6000	30	4000.0	20	0	0
	74400	78200	3800	114000	30	76000.0	20	0	0
	78200	79200	1000	30000	23	20000.0	20	0	0
	79200	81500	2300	69000	30	46000.0	20	0	0
	81500	82000	500	15000	23	10000.0	20	0	0
	82000	84280	2280	68400	30	45600.0	20	0	0
	84500	88400	3900	0	30	78000.0	20	0	0
	93900	97650	3750	0	30	75000.0	20	0	0
	99200	104600	5400	0	30	108000.0	20	0	0
Total area to be acquired =									406000
									40.60 Hectares

Table 1-5
 PHASE 1 - CONTRACT - 2 KUCHAMAN TO NAGOUR
 STATUS OF PUBLIC RIGHT OF WAY

S. No	Chainage		Length (in metres)	Width available (in metres)	Area available within COI (in metres)	Width required (in metres)	Additional width required (in metres)	Area to be acquired (in sq.m.)
	From	To						
1	0	2450	2450	20	49000	20	0	0
2	2650	6200	3550	20	71000	20	0	0
3	6200	6400	200	30	4000	20	0	0
4	6400	6700	300	20	6000	20	0	0
5	8000	12500	4500	30	90000	20	0	0
6	13000	3500	500	6	10000	20	14	7000
7	13500	18500	5000	30	100000	20	0	0
8	18300	18700	200	10	4000	20	10	2000
9	18700	24500	5800	30	116000	20	0	0
10	24730	34500	9770	30	195400	20	0	0
11	34500	34700	200	15	4000	20	5	1000
12	35250	35700	1450	0	0	20	20	29000
13	35700	40500	5100	0	0	20	20	102000
14	41000	41150	150	6	3000	20	14	2100
15	41150	41400	250	12	5000	20	8	2000
16	41400	41600	200	8	4000	20	12	2400
17	41600	43400	1800	0	0	20	20	36000
18	43400	44300	900	26	18000	20	0	0
19	44300	47500	3200	22	64000	20	0	0
20	47500	47900	400	20	8000	20	0	0
21	47900	48050	150	18	3000	20	2	300
22	48050	51350	3300	24	66000	20	0	0
23	51350	51650	300	0	0	20	20	6000
24	51650	52200	550	20	11000	20	0	0
25	52200	52400	200	12	4000	20	8	1600
26	54150	64000	9850	30	197000	20	0	0
27	64000	78050	14050	30	281000	20	0	0
28	78400	88000	9600	30	192000	20	0	0
29	88000	100000	12000	30	240000	20	0	0
30	100000	110000	10000	30	200000	20	0	0
31	110000	116060	6060	30	121200	20	0	0
Total area to be acquired =								191400

19.14 Hectares

Table 1-6
 PHASE 1 - CONTRACT 3: KOTA- BIJOLIA
 CONTRACT - 3

S. No	Chainage		Length (in metres)	Area available within COI (in metres)	Width available (in metres)	Width required (in metres)	Additional width required (in metres)	Area to be acquired (in sq.m.)
	From	To						
1	0	1150	1150	18400	16	20	4	4600
2	1400	1500	100	1600	16	20	4	400
3	1750	2500	750	18000	16	20	4	3000
4	2500	3000	500	16000	12	20	8	4000
5	3000	3700	700	0	16	20	4	2800
6	3900	4000	100	0	16	20	4	400
7	4000	5000	1000	0	20	20	0	0
8	5000	5500	500	0	24	20	0	0
9	5500	6000	500	0	32	20	0	0
10	6000	10300	4300	0	0	20	20	36000
11	10450	17650	7200	0	0	20	20	144000
12	17750	17800	50	1500	0	20	20	1000
13	17950	26000	8050	241500	0	20	20	161000
14	26000	33250	7250	217500	0	20	20	145000
15	33350	35000	1650	0	0	20	20	33000
16	35000	37900	2900	0	30	20	0	0
17	37950	39000	1050	0	30	20	0	0
18	39000	50500	11500	0	30	20	0	0
19	51600	59000	7400	0	30	20	0	0
20	62650	66700	4050	0	0	20	20	31000
21	66950	67850	900	0	0	20	20	18000
Total area to be acquired =								684200
								68.42 Hectares

Table 1.8
Rajasthan State Highways Project
LIST OF REALIGNMENTS AND BYE-PASSES

S. No.	CHAINAGE		LENGTH (meters)	AREA REQUIRED (sq. m.)	AREA REQUIRED (sq. m.)	PURPOSE	LINK	CONTRACT
	From	To						
LINK -1								
Contract 1								
1	6900	7200	300	6000	9000	Geometric	1 (Jaipur-Nagaur)	1 (Jaipur-Kuchaman)
2	45550	45750	200	4000	6000	Geometric	1 (Jaipur-Nagaur)	1 (Jaipur-Kuchaman)
3	51500	53200	1700	36000	54000	Manda bye-pass	1 (Jaipur-Nagaur)	1 (Jaipur-Kuchaman)
4	55850	56500	700	4000	6000	Geometric	1 (Jaipur-Nagaur)	1 (Jaipur-Kuchaman)
5	60050	61150	1100	22000	33000	Bhadwa bye-pass	1 (Jaipur-Nagaur)	1 (Jaipur-Kuchaman)
6	61750	61900	150	3000	4500	Geometric	1 (Jaipur-Nagaur)	1 (Jaipur-Kuchaman)
7	66920	67000	80	1400	2100	Geometric	1 (Jaipur-Nagaur)	1 (Jaipur-Kuchaman)
8	72800	73600	800	16000	24000	Lohrana bye-pass	1 (Jaipur-Nagaur)	1 (Jaipur-Kuchaman)
9	74000	74200	200	4000	6000	Geometric	1 (Jaipur-Nagaur)	1 (Jaipur-Kuchaman)
10	84290	84500	210	4400	6600	Geometric	1 (Jaipur-Nagaur)	1 (Jaipur-Kuchaman)
11	88400	93900	5500	110000	165000	Nawa bye-pass	1 (Jaipur-Nagaur)	1 (Jaipur-Kuchaman)
12	97850	99200	1350	31000	46500	Meerhn bye-pass	1 (Jaipur-Nagaur)	1 (Jaipur-Kuchaman)
Sub total				241800	362700			
Contract 2								
13	2450	2550	100	4000	6000	Geometric	1 (Jaipur-Nagaur)	2 (Kuchaman-Nagaur)
14	6700	8000	1300	26000	39000	Banwala bye-pass	1 (Jaipur-Nagaur)	2 (Kuchaman-Nagaur)
15	12500	13000	500	10000	15000	Budsu bye-pass	1 (Jaipur-Nagaur)	2 (Kuchaman-Nagaur)
16	24500	24700	200	4000	6000	Geometric	1 (Jaipur-Nagaur)	2 (Kuchaman-Nagaur)
17	35250	35700	450	9000	13500	Geometric	1 (Jaipur-Nagaur)	2 (Kuchaman-Nagaur)
18	40800	41000	200	4000	6000	Geometric	1 (Jaipur-Nagaur)	2 (Kuchaman-Nagaur)
19	52400	54150	1750	35000	52500	Chhoni Khatu bye-pass	1 (Jaipur-Nagaur)	2 (Kuchaman-Nagaur)
20	78050	78400	350	7000	10500	Geometric	1 (Jaipur-Nagaur)	2 (Kuchaman-Nagaur)
Sub total				105000	157500			
LINK -1 Total				346800	520200			
LINK -3								
Contract -3								
21	1150	1400	250	5000	7500	Geometric	3 (Kota-Chittorgam)	3 (Kota-Bhoka)
22	1500	1750	250	5000	7500	Geometric	3 (Kota-Chittorgam)	3 (Kota-Bhoka)
23	3700	3900	200	4000	6000	Geometric	3 (Kota-Chittorgam)	3 (Kota-Bhoka)
24	10300	10450	150	3000	4500	Geometric	3 (Kota-Chittorgam)	3 (Kota-Bhoka)
25	17650	17750	100	2000	3000	Geometric	3 (Kota-Chittorgam)	3 (Kota-Bhoka)
26	17800	17950	150	3000	4500	Geometric	3 (Kota-Chittorgam)	3 (Kota-Bhoka)
27	33250	33350	100	2000	3000	Geometric	3 (Kota-Chittorgam)	3 (Kota-Bhoka)
28	60100	60500	400	8000	12000	Deogarh bye-pass	3 (Kota-Chittorgam)	3 (Kota-Bhoka)
29	61800	62850	1050	16000	24000	Gowindpura bye-pass	3 (Kota-Chittorgam)	3 (Kota-Bhoka)
30	66700	66950	250	5000	7500	Geometric	3 (Kota-Chittorgam)	3 (Kota-Bhoka)
Sub total				53000	79500			
Contract 4								
31	18400	18500	100	2000	3000	Geometric	3 (Kota-Chittorgam)	4 (Bhola-Chittorgam)
32	31900	32200	300	6000	9000	Geometric	3 (Kota-Chittorgam)	4 (Bhola-Chittorgam)
33	32350	32600	250	5000	7500	Geometric	3 (Kota-Chittorgam)	4 (Bhola-Chittorgam)
34	46000	46250	250	5000	7500	Geometric	3 (Kota-Chittorgam)	4 (Bhola-Chittorgam)
35	50500	51600	1100	22000	33000	Tejpur bye-pass	3 (Kota-Chittorgam)	4 (Bhola-Chittorgam)
36	78900	79200	300	6000	9000	Geometric	3 (Kota-Chittorgam)	4 (Bhola-Chittorgam)
37	84950	85650	700	14000	21000	Baidenra bye-pass	3 (Kota-Chittorgam)	4 (Bhola-Chittorgam)
Sub total				60000	90000			
LINK-3 total				113000	169500			
PHASE-I			77900	459800	689700			

1.6 Land Acquisition Estimates

As introduced above, land acquisition for the project is necessary for road widening and other improvements to design cross sections such as better drainage. Additional land is also needed for the many minor alignment adjustments for curve straightening, new bridge approaches, intersection redesign and other upgrades planned to improve engineering, user-safety, and traffic flow. Phase-1 designs also contain several more extensive realignments and several new alignments for bypasses. It is expected that subsequent Phases of the project will incorporate similar design features.

In all, Phase-1 includes several dozen minor alignment adjustments totaling 5.69-km and twelve (12) bypasses, totaling 17.30-km. Altogether, bypasses and realignments total 22.99-km, about 6% of the 404-km of roadways to be improved. Most of these alignment changes will require establishment or extension of public ROW.

Land acquisitions required by the Phase-1 of the project are shown in Table 1-10. This Table also provides land acquisition estimates for the entire project on the basis of Phase-1 data and experience to date. Estimates assume that successive project phases will apply similar designs and encounter similar ROW and roadside conditions. Estimates of the land required for Phase-1A realignments and bypasses are based on current preliminary designs and extrapolated from final Phase-1 designs for Phase-2.

These estimates assume establishment of ROW to GOI State Highway Standard (30-m) on new bypasses and realignments, and limited land acquisition for ROW extension within the project's Corridor of Impact (20-m) in existing sections. This approach is specified in the *Rajasthan State Highways Project, Social Impacts and Resettlement; Principles and Policy Framework* recommended by the World Bank. It recognizes that establishing, extending to, or making available a full ROW along existing alignments may be impractical under Indian conditions and, perhaps, unnecessary. Where this option is less constrained and still possible, as in new bypasses and alignments, it is obviously preferable for safety and other reasons.

In the case of Phase-1, the total design length of improvements proposed to the 404-km of existing roadway is 388.98 km. Of this a 20-m corridor will be applied for 365.99 km of road length and a 30-m corridor will be established for 22.99 kms of bypasses and alignments. This is explained in the table below.

Table 1-9
LENGTH OF PHASE 1 ROADS

Corridor width in mts.	Length in Kms.
20 m	365.99
30 m	22.99
TOTAL LENGTH	388.98

A 20-m corridor will therefore be required along the 365.99-km of existing roadway included in the project and a 30-m corridor will be established for 22.99-km of bypasses and alignments. Altogether, the ROW that will be required totals 800.95-ha. Of this total, PWD is currently in possession of only 556.02-ha.

Of the remainder (243.38-ha) necessary for the project; 89.2-ha are public lands that must be transferred from other government agencies such as Forest and Revenue Departments and the military. Private land that needs to be purchased for bypasses and realignments totals 68.97-ha. Other private land that needs to be purchased to establish or extend ROW along existing sections totals 85.21-ha. This includes 34.81-ha along existing roadways (assuming an existing width of 5-m) over which the PWD has possession but no legal ownership. It is possible that PWD will not have to purchase these existing roadways themselves, but will need to establish legal recognition of possession and acquire adjacent properties within the impact corridor. Thus, private lands that must be acquired through purchase under the Land Acquisition Act (LAA) total 154.18-ha.

Land acquisition, resettlement, and rehabilitation requirements, procedures, and entitlements are fully detailed in the RAP. Based on Phase-1 experience to date, the land acquisition requirements of the 1500-km total project will be substantial. Because much of this land is currently occupied, significant resettlement and rehabilitation will also be required. ROW conditions, settlement pattern, and historical factors in Rajasthan suggest that the scale of these project components is likely to exceed that of similar projects in other Indian States.

Land acquisition of the scale indicated will be costly in government and project resources and time. LAA-associated compensation and additional project assistance necessary to assure provision of replacement value for land and other lost assets will be expensive.

During the census and socio-economic survey it was found that some PAP households hold *patta* documenting land ownership on PWD land. These *patta* include those issued by Panchayats and others issued by reputed land owners, individuals claiming to be the owner of the land. Such PAPs and associated claims will be dealt with on a case by case basis by the PIU with assistance from the Revenue Department as required, and the project will verify and resolve actual ownership prior to relocation.

Prompt resolution of ROW and tenure uncertainties will require policy clarifications and, in some cases, legal rulings. The potential for property-related disputes is high and will demand careful attention on a case by case basis to expedite claims settlement and avoid project delays.

The RAP is responsive to these circumstances and anticipates the difficulties of land acquisition and resettlement in the Rajasthan context. It recognizes the high risk that the project may lose momentum if land acquisition is protracted and resettlement falters. Its provisions and implementing mechanisms address these risks and provide practical solutions to prospective problems.

Table 1-10
PROJECT LAND ACQUISITION AND TRANSFER ESTIMATES

Phase and Length of Existing Segments	Private Land Acquisition Under LAA (hectares)			Total (hectares)
	Bypasses and Re-alignments	Other private land	Public Land Transfers (hectares)	
Phase 1 (404-km)	68.97	85.21 (includes 34.81-ha of existing road over which PWD has no legal rights)	39.2	243.38
Phase 1-A (371-km)	25.30	2.31	18.00	46.11
Phase 2 (750-km)	91.71	76.31	114.09	282.61
Entire Project (1500-km)	186.48	172.21	210.94	569.64

1.7 Magnitude of Displacement

Displacement under the project will be limited to the corridor required for the improved road and its safety zone. This corridor is referred to as the corridor of impact (COI). Within this corridor, there can be no structures or hindrances. In this project, the COI is defined as the full construction width of proposed improvements including a small safety zone on either side where necessary. The COI varies in width depending on designs. Typical design cross-sections for rural areas have COIs of approximately 20-m. In congested areas, reduced-width urban cross-sections typically have COIs of approximately 12 to 15-m.

The advantage of this COI approach is that such a corridor is much easier to maintain free of encumbrances than the full ROW, which may exceed 30-m. Since the density of structures and other encroachments is least closer to the center line of the road, the need for resettlement is significantly reduced over what would be required if the entire ROW were to be cleared with corresponding savings in cost and efforts. "

A condition for this approach is that people will be allowed to remain within the ROW as long as they are outside the Corridor of Impact. The project will therefore ensure that those outside the Corridor of Impact are not displaced. If they are made to move during the lifetime of the project or within the loan period, they will be considered eligible for the support mechanisms available to people affected by the project.

It is recognized that this approach offers only a temporary solution, and does not adequately address the longer-term needs of maintaining the clear ROW or of providing squatters and encroachers with tenure security needed to improve their lives. The project will therefore investigate and attempt to achieve more permanent solutions, including implementation of the

Rajasthan Highway Act of 1995 and measures such as facilitating access to credit or other ways for squatters and encroachers to obtain security of tenure.

Estimates of RSHP-induced resettlement are provided in Table 1-11. These estimates are derived from detailed field studies carried out for Phase-1 and portions of Phase-1A. They are based on a 100% census of potential project-affected persons within 20-m corridor along the 404-km of Phase-1 roads; a 100% census of potential project-affected persons within 20-m corridor on 189-km of Phase 1-A roads (Link 9, Ratangarh-Hanumangarh); and delineation of actual impact corridors based on detailed engineering designs for Phase-1.

To generate estimates for Phase 1-A, Phase-2, and the overall project, eighty percent (80%) of PAP levels for the Phase-1 roads are extrapolated to the other roads on a per kilometer basis. This reduction is applied based on the partial census of Phase-1A roads that included the somewhat anomalous Link 9 Ratangarh to Hanumangarh, traversing a sparsely populated desert area. Pending final census, socio-economic surveys, and final designs for Phase 1-A, these estimates should be considered high-end. In calculating total numbers of affected persons for Phases 1-A and 2, an average household size of 6.5 persons was assumed.

TABLE 1-11
PROJECT RESETTLEMENT AND REHABILITATION ESTIMATES

	Severely-Affected: Loss of Livelihood or Residence		Minor or Temporary Losses		Total Project-Affected	
	Households	Persons	Households	Persons	Households	Persons
Phase-1	1126	7440	1434	9469	2560	16909
Phase-1-A	359	5584	1094	7111	1953	12695
Phase 2	2026	13169	2616	17004	4642	30173
TOTAL	4011	26193	5144	33584	9155	59777

As further described in Chapter 4, the project roads traverse primarily rural areas of Rajasthan. The 1500-km of existing alignments to be improved pass through more than twenty Districts and several hundred settlements. Settled areas are primarily small villages, but a number of large villages and small urban centers are included.

In the Phase-1 case, detailed field studies indicate that more than 4,300 households and close to 28,000 people live, farm, or carry-on business within 10-m of the center line of the 404-km of roads examined. Impacts on these potential PAPs and others have been minimized by careful design. Bypasses and realignments have shortened routes and avoided congested areas reducing PAP numbers. Further, many improved urban sections proposed in the project are considerably less than 20-m wide. Here, the COI has been intentionally narrowed to minimize impacts and displacement. As a result of these efforts and measures, actual project-affected households and persons have been substantially reduced.

Current figures suggest that less than 2560 households and 16,909 people will be actually affected by Phase-1 improvements. Never the less, more than 89.2-ha of private roadside lands and significant assets within the ROW will have to give way to the highway improvements planned. Overall, most of those affected are squatters, encroachers, or households without formal legal title within the ROW. Only about 25% of project-affected households are legal occupants of affected properties possessing title or other tenured status.

Project impacts can be broadly classified as severe where there is a loss of livelihood and loss of commercial or residential structure resulting in displacement and minor or temporary where losses are small or short-term.

More than half (56%) of impacted households will only be slightly or partially affected by project improvements proposed. Their minor and/or temporary losses include loss of spilled-over structures; loss of small roadside strips of land; and loss of wells or trees. These households will lose only small portions of homes or businesses (i.e. less than one third) and/or land; and in some cases, income sources. Most of these losses will be very minor, such as livestock pens, fences and boundary walls, platforms, or stairs.

Forty-four percent (44%) of Phase-1 PAP households will be more adversely affected. They will lose their houses, land, or commercial structures; and, in some cases, a portion of their dwelling and their livelihood. Of all households affected, about 890 will be affected only by lost income or livelihood.

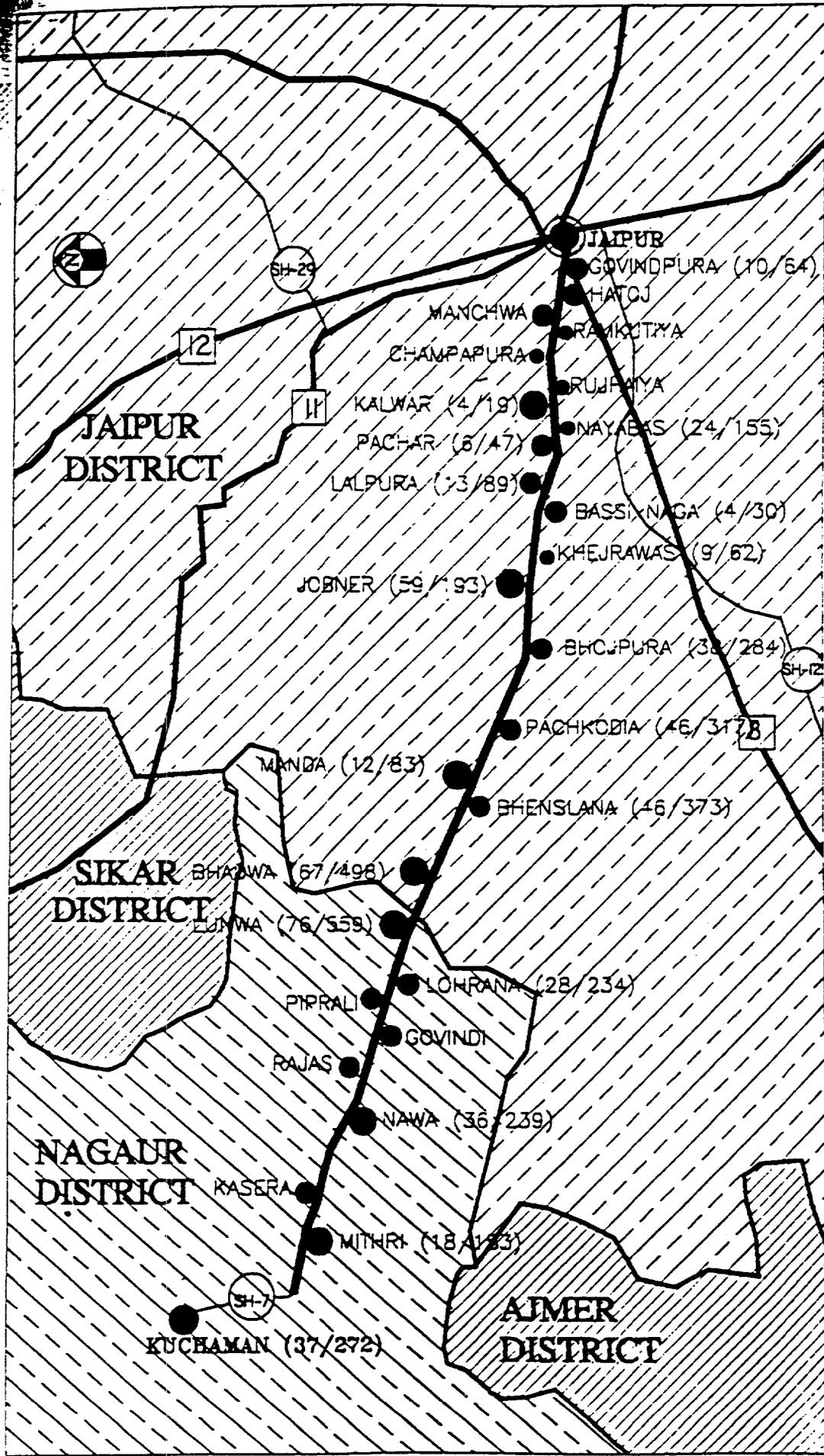
Only about 144 households will actually be displaced. They will lose their entire house (or more than one-third) and all or part of their land, or their house and all or part of an attached commercial structure. Only a third of these displaced households are legal residents, property-holders, or tenants; the majority are squatters, encroachers, or without legal title to properties occupied within the ROW.

Overall, close to 64 % (1515) of the households affected, including those that will be displaced, are from vulnerable groups such as Scheduled Tribes, Scheduled Castes, Other Backward Castes, widows and women-headed households, the disabled, and those below the poverty-line.

The distribution of PAP households by village is shown for each of the Phase-1 contracts in Figures 1-3 to 1-6. A detailed breakdown of Phase-1 project-affected households by impact category and severity is provided in Table 1-11.

1.8 RHSP-RAP budget

This Resettlement Action Plan contains a consolidated overview of estimated costs. This consists of a cost-wise, item-wise budget estimate for the entire duration of resettlement implementation, including administrative expense, monitoring and evaluation, and contingencies. The cost of resettlement has been included in the overall costs of the project. Values for compensation amounts and other support mechanisms will be adjusted, if required, annually based on inflation



LEGEND

- PROJECT ROAD
- DISTRICT BOUNDARY
- HATCJ
- VILLAGE NAME
- ⊙ DISTRICT H.Q.
- NATIONAL HIGHWAY
- NATIONAL HIGHWAY NO.
- STATE HIGHWAYS
- ⊖ STATE HIGHWAY NO.
- LUNWA (76/559)
- VILLAGE - (HOUSEHOLD / PERSON)

POPULATION SIZE

- 0-1000
- 1001 - 5000
- 5001 & ABOVE

SCALE :

1 cm = 5.4 Km



Figure 1-3

PROJECT AFFECTED HOUSEHOLDS / PERSONS

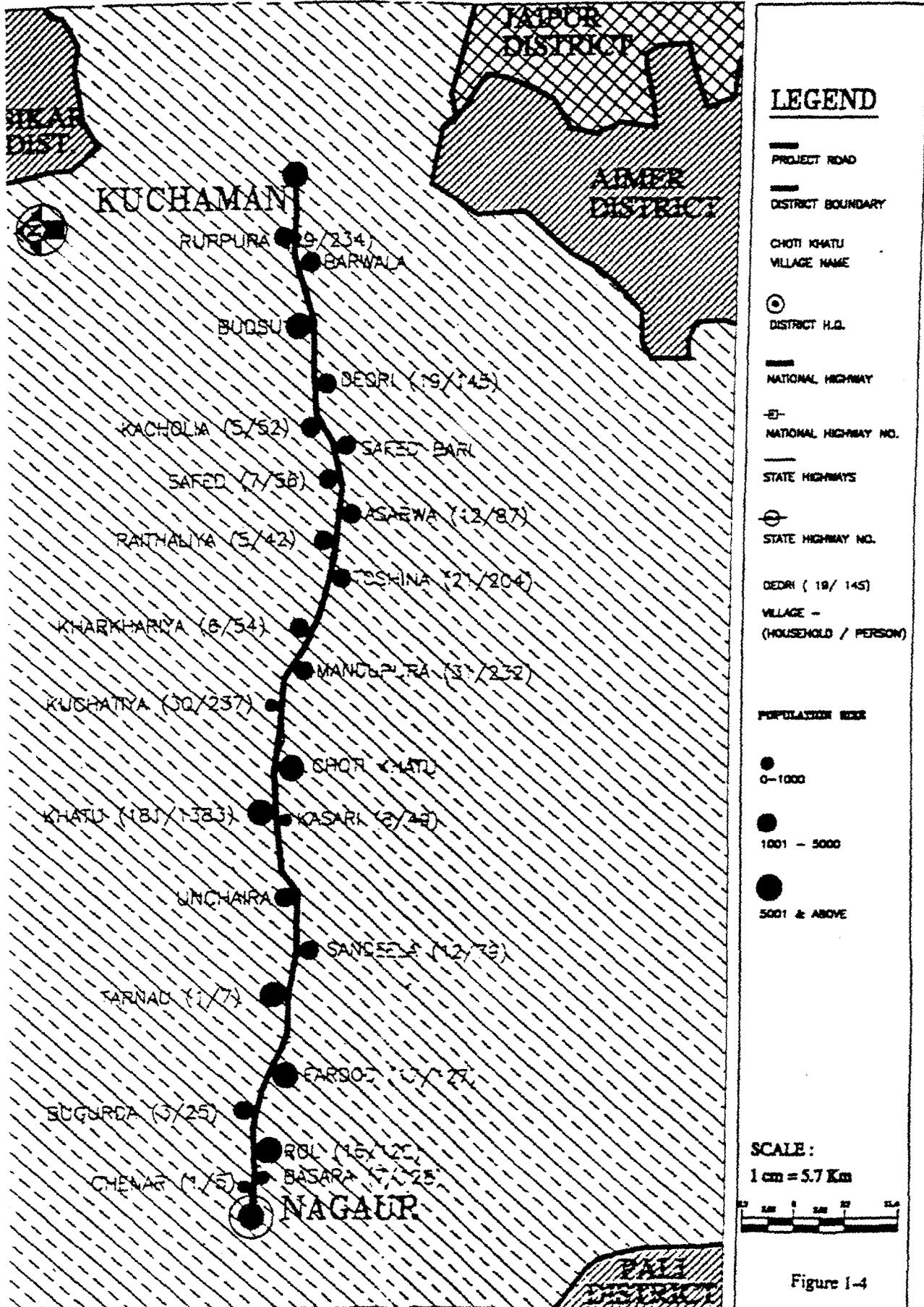
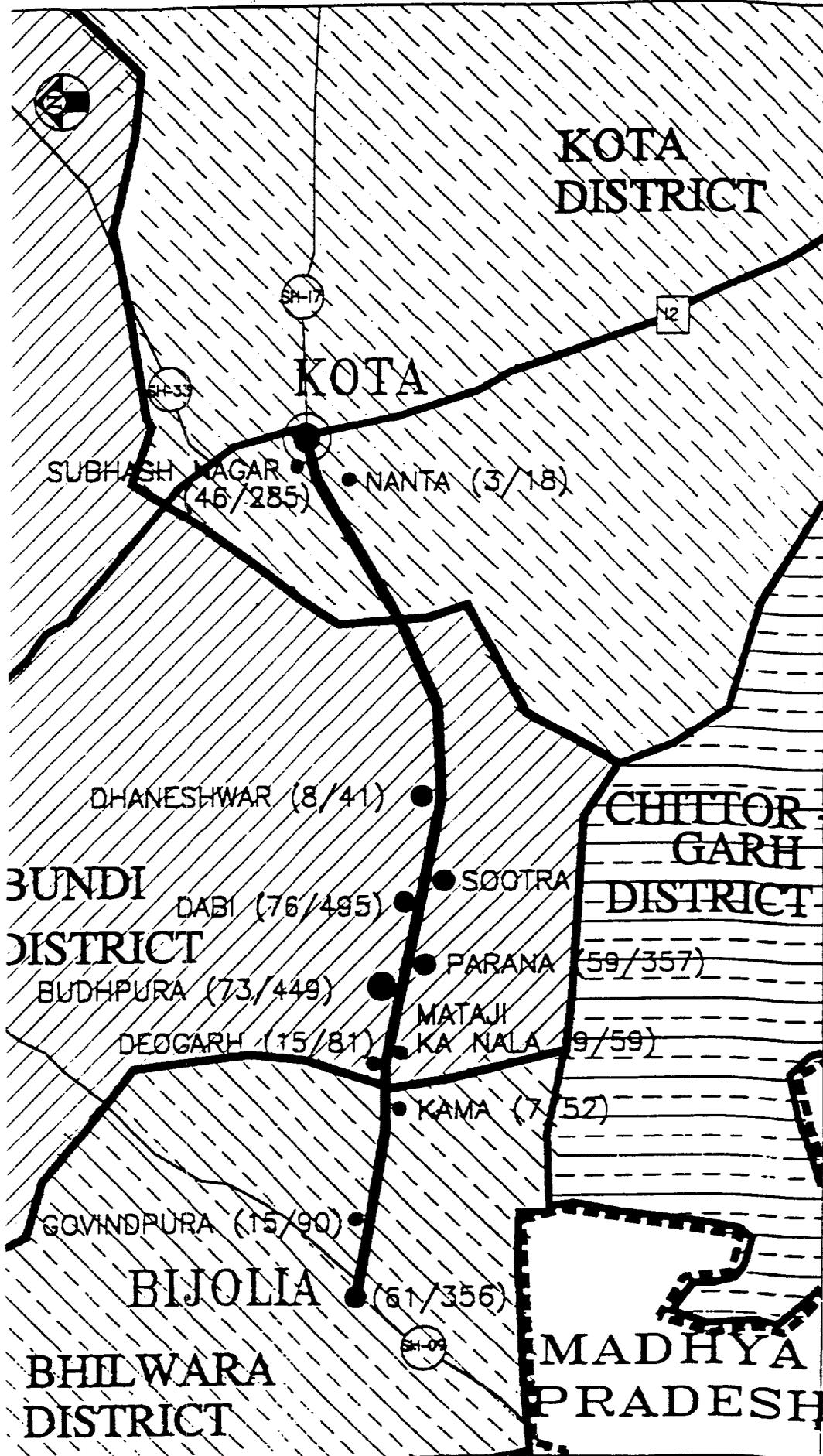


Figure 1-4



LEGEND

- PROJECT ROAD
- DISTRICT BOUNDARY
- STATE BOUNDARY
- DABI VILLAGE NAME
- DISTRICT H.Q.
- NATIONAL HIGHWAY
- NATIONAL HIGHWAY NO.
- STATE HIGHWAYS
- STATE HIGHWAY NO.
- KAMA (7/52) VILLAGE - (HOUSEHOLD / PERSON)

POPULATION SIZE

- 0-1000
- 1001 - 5000
- 5001 & ABOVE

SCALE :

1 cm = 4.4 Km

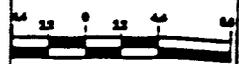
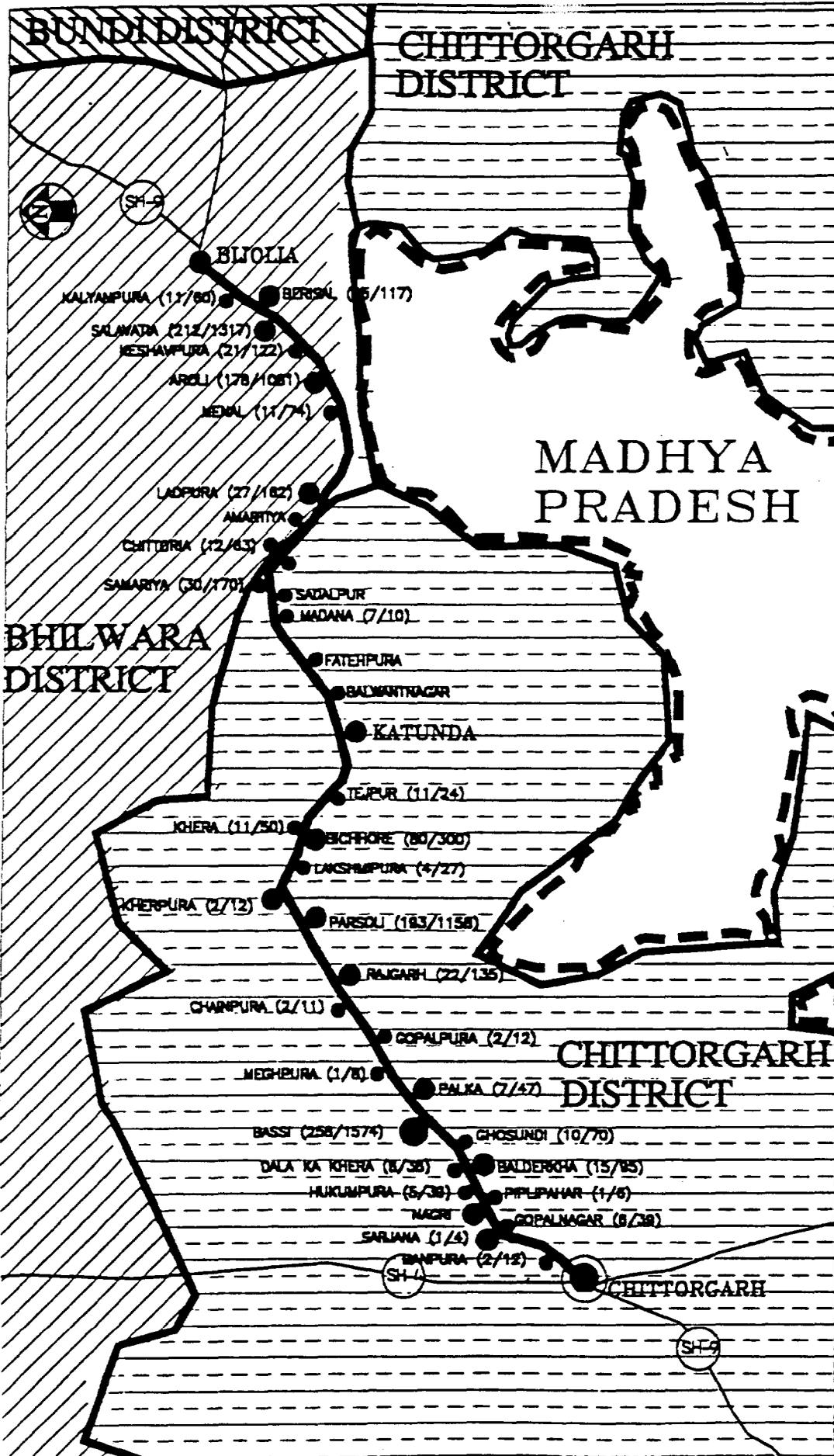


Figure 1-5



LEGEND

- PROJECT ROAD
- - - DISTRICT BOUNDARY
- - - DISTRICT BOUNDARY
- TEJPUR VILLAGE NAME
- ⊙ DISTRICT H.Q.
- NATIONAL HIGHWAY
- NATIONAL HIGHWAY NO.
- STATE HIGHWAYS
- ⊙ STATE HIGHWAY NO.

LADPURA (27/182)
VILLAGE -
(HOUSEHOLD / PERSON)

POPULATION SIZE

- 0-1000
- 1001 - 5000
- 5001 & ABOVE

SCALE :
1 cm = 4.6 Km



PROJECT AFFECTED HOUSEHOLDS / PERSONS

Figure 1-6

factors. The budget incorporates provision for this, and the Resettlement Action Plan describes how such adjustments and updates to the budget are to be made.

Experience from similar projects show that resettlement costs in road projects are low compared with overall project costs. Delays or inadequacies in implementing the resettlement program may however lead to costly delays in overall project implementation, since progress in civil works depends on satisfactory completion of the resettlement program.

The State of Rajasthan will pay for costs related to Land Acquisition and compensation for transfer of title to property from private individuals to the State. Some of the proposed extension of existing GOR programs may also be paid by the GOR. Other support mechanisms, such as cash assistance or equivalent, training, capacity building, income-generating schemes etc. can be covered through the funds provided from the project budget. Below is the summary budget for land acquisition and resettlement. The detailed budget is discussed in Chapter 10 on Costs and Budget.

Table 1-12
RHSP - BUDGET

(Rupees in Lakhs)

ITEM	Phase I			Phase IA			Phase II		
	GOR	WB	TOTAL	GOR	WB	TOTAL	GOR	WB	TOTAL
Private Land Acquisition	969.79		969.79	176.87		176.87	1083.20		1083.20
Acquisition of other immobile assets	359.70		359.70	330.31		330.31	667.76		667.76
Product asset assistance	6.00	538.38	542.38	5.51	475.84	481.35	11.14	961.97	973.11
Technical assistance		65	65		57.66	57.66		115.32	115.32
TOTAL	1335.49	601.38	1936.87	512.69	533.50	1046.19	1762.10	1077.29	2839.39

*Extension of Government
program*

ⁱ Land acquisition in India is undertaken in accordance with the Land Acquisition Act of 1894, most recently amended in 1984. Other acts relevant to this project include the Slum Areas Improvement Act of 1956, the Eviction Act of 1977, the National Housing Policy of 1988, and the Public Premises Act related to eviction of unauthorized occupants, of 1991. The Indian Government is currently considering a national policy on resettlement and rehabilitation, which is awaiting Cabinet approval. Resettlement and rehabilitation in the project also falls under the purview of the EIA Notification, 1994 and subsequent amendments.

ⁱⁱ An exception to limiting project displacement and resettlement benefits to a Corridor of Impact is in the cases where a major shift of alignment/bypass will require land acquisition. In such cases, a full Right of Way will be established, and compensation at replacement cost paid to the land owners.

2. MINIMIZING RESETTLEMENT

2.1 Social Assessment and Project Design

Major efforts have been made to reduce the potential direct negative impacts of the project on both the social and the bio-physical environment. Social and environmental concerns were considered carefully in project preparation and, along with more conventional technical and economic considerations, were influential factors in the design process. These efforts have ranged from slight shifts of an alignment to avoid moving a temple or shrine or to preserve a shady roadside meeting platform, to the design of major bypasses to route through traffic around congested village centers. They include attention to safety features, such as providing a footpath or fence to protect pedestrians, and to measures to soften social impacts, such as narrowing the corridor to avoid pulling down buildings in a built-up area. Environmental concerns such as avoiding cutting down trees were also coordinated with this process.

Final designs reflect collaboration to find the best practical solutions to complex roadside conditions. Not only have negative impacts, especially displacement, been minimized, but the project's positive impacts on communities have been extended and increased.

The sections that follow briefly review:

- key features of the design context and the social factors that were considered;
- the social development approach and objectives;
- the process by which social features have been incorporated into design
- results of collaboration between social assessment and highway design and outcome of efforts to reduce impacts and minimize displacement

2.2 Project Design Context

Project design occurs in multi-leveled context in which focus and emphasis shift over the project preparation period. Design inputs include economic, technical/engineering, environmental and social-- particularly R & R, displacement, right of way and land acquisition considerations.

At the macro level the project is based on the feasibility studies prepared on the basis of economic, social and environmental factors and conditions. This includes preliminary design inputs. At this level alignments were identified based on their EIRR.

At the ~~me~~so-level, that of preliminary engineering designs, alignment questions relating to bypasses, design criteria including cross sections, corridor of impact, and design speeds are issues addressed.

At the micro level, road-specific issues are taken into consideration; for example, a shift in alignment to avoid demolishing a school.

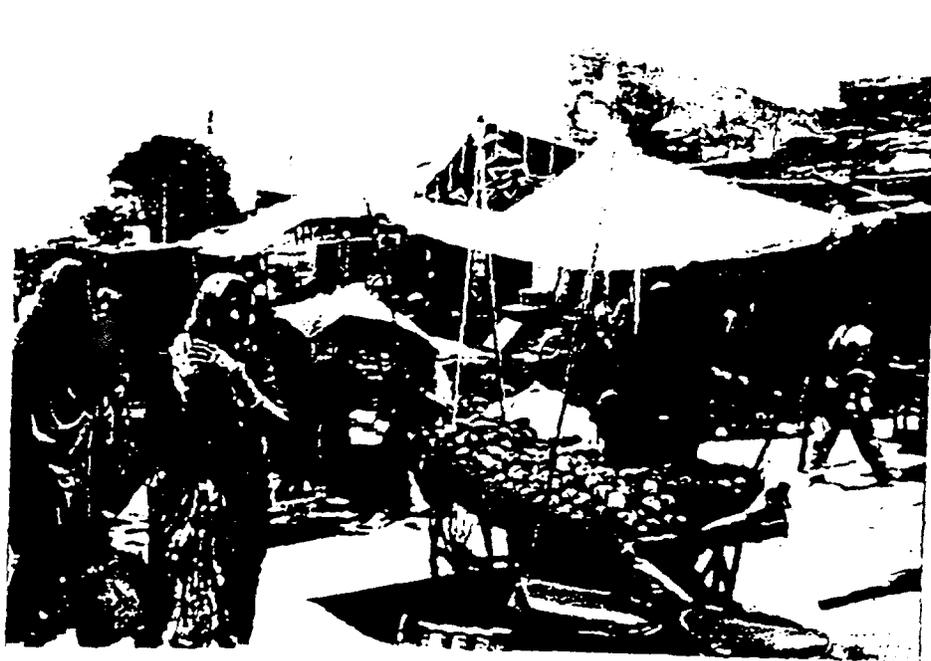


PLATE 1 : LINK - 4



PLATE 2 : LINK - 3

ROADSIDE MARKETS AND MOBILE VENDORS IN THE RIGHT OF WAY ARE COMMON

Social factors and assessment findings, including insights gained from consultations, played an important role within the design context at each of these levels. Efforts to minimize displacement and to avoid, reduce, or mitigate rehabilitation-requiring and other social impacts were concentrated at the meso- and micro-level of project design and detailed engineering. Aspects of this design context, including Right of Way (ROW) and Corridor of Impact (COI), cross-sections, and other features and the associated opportunities for minimizing adverse project impacts they presented are outlined below.

2.2.1 Right of Way and Corridor of Impact

One of the biggest factors is Right of Way, the lawfully acquired corridor of public land owned by the State Government and administered by the PWD for the transit of the existing road. Using available records with the PWD and the Revenue Department, the PCC R&R team verified the boundaries of legal right of way as well as boundaries of private properties within and in the vicinity of likely corridor of impact (COI). This information, entered in strip maps, was jointly verified and certified by the project investigators, PWD, and the Revenue Department.

For this project the World Bank agreed to limit displacement not to the legal Right of Way but only to the corridor of impact. The corridor of impact is the width required for the actual construction of the road, including carriageway, shoulder, embankments and longitudinal drainage. Within this corridor there should be no structures or hindrances. The objective of R&R contributions to project design was to ensure that the corridor of impact was modulated, within acceptable design principles and standards, to minimize displacement and other project impacts.

Plate 2.1 highlights roadside markets and mobile vendors in the right of way which pose significant safety challenges.

2.2.2 Design Cross- Sections

Basically, two types of improved road cross sections are proposed in the project. One is an urban cross section usually comprised of a 7 mts. carriageway, 2.5 mts. shoulder with side walks, parking and drainage and street lighting, which is used for built-up areas. This cross section is for reduced design speeds of around 40-50 kms. per hour. The width of this cross section is elastic, varying from a minimum of 10 mts. to a maximum of 20 mts. where sufficient space is available.

In the rural sections of project alignments, the design cross section is for a two lane rural highway with a design speed of 80-100 km. per hour. Rural sections are comprised of the areas between towns and villages.

Typical rural/highway and urban cross sections of the improvements proposed by the project are shown below in Figures 2-1 and 2-2..

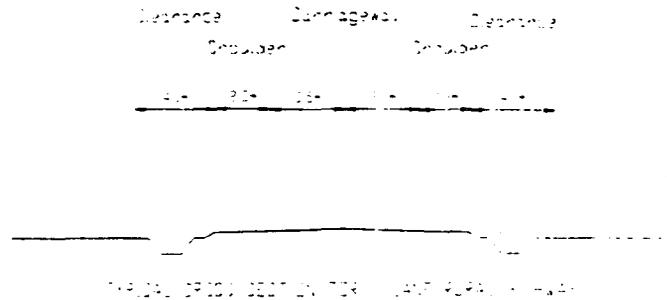


Figure 2-1 Typical Improved Rural Cross-Section

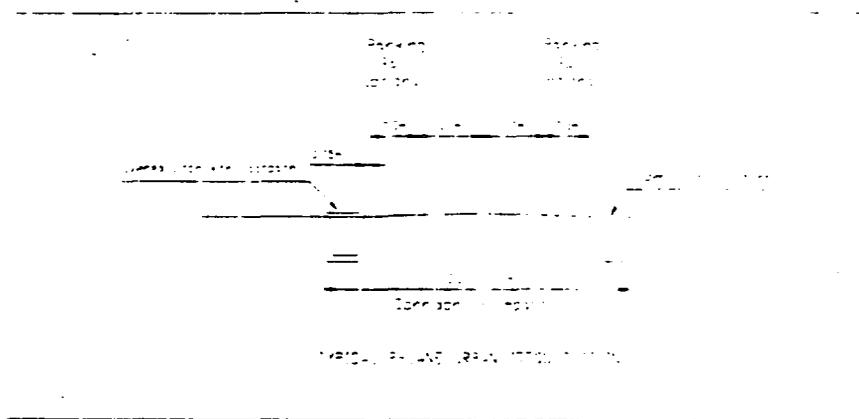


Figure 2-2 Typical Improved Urban Cross-Section

Road improvement impacts in built-up areas lead to mostly commercial and residential structures being affected either completely or partially. In rural sections project impacts are mainly restricted to acquisition of agricultural land, revenue land, forest land and other government lands.

2.2.3 Environment and Social Highway Design

Although the project is largely confined to existing horizontal alignments, selection of road sections for upgrading was based on economic, environmental and resettlement conditions. Alignments included in the project were selected on the basis of their economic rates of return as determined by project feasibility studies.

A maximum design speed of 80 km per hour was adopted for detailed design based on modified Indian Road Congress (IRC) standards, with lower speeds for urban and other constricted areas and curves. Again referenced to IRC standards, the design considered pavement width in relation to safety and examined the significance of accommodating encroaching structures on road shoulders.

The PCC environmental team provided advice on the location of National Parks, Conservation Areas, Sanctuaries, Reserve Forests and tree lines fronting the existing road. With this information, highway designs were developed to align away from these areas where possible. In areas where there has been conflict; for example, where there are trees on both sides of the road, advice was sought from the environmental team as to which line of trees could be sacrificed.

In general, designs for project-proposed highway improvements are aligned centrally over the existing road. Project-proposed improvements deviate from this course to improve the flow of the highway and to ensure the alignment meets minimum design standards, for example: by adding larger curves on sharp corners.

With regard to roadside religious structures in rural areas, designers sought the advice of the PCC R&R unit when they conflicted with the alignment. Only after R&R's discussions with the local people regarding relocation of the structure was a decision made and the alignment fixed.

To improve safety, bus lay-byes with shelters were incorporated in designs, as a rule, every 10 kms. Their specific positioning took into consideration town and village locations and important road junctions where bus routes meet.

2.2.4 Urban/Village Areas

In urban areas, the R&R team provided assistance in the design of the highway through built-up areas by identifying potentially affected building and collaborating with designers to avoid them without sacrificing design and engineering integrity. The road survey showed all buildings and boundary walls and, with R&R's assistance, the engineering team was able to identify which were residential, commercial, unoccupied, derelict, and being constructed. The alignment was then fixed so that its impact on actual individuals, families and the community as a whole was minimized.

The improved highway width was also adjusted to minimize the number of buildings that would have to be acquired to accommodate the alignment. In urban areas where there is sufficient room, parking areas were provided in an effort to reduce congestion.

The improved highway design has also incorporated safety features that will attempt to reduce the speed of vehicles through the urban areas. Extensive signage complemented by speed bumps to reduce speed at the approaches to built-up were incorporated in designs to provide information to drivers to reduce speeds. A similar design approach was also adopted in the vicinity of school and hospitals.

2.3 Mitigation Objectives

When choosing among design options, such as whether to construct a bypass or improve the road through a built-up area, minimization of adverse environmental and social impacts including displacement were major criteria. This practice will continue throughout the project preparation

period. The principal mitigation efforts, principles, and road safety features applied in project designs are described in the subsections that follow.

2.3.1 Mitigation Efforts

Mitigation efforts included the following:

- ◆ Avoiding unnecessary displacement by modifying project alignments, reducing the width of the corridor of impact, or modifying design;
- ◆ Reducing design speed in built up areas;
- ◆ Reducing the width of corridor of impact based on rural and urban cross sections;
- ◆ Building realignments or by-passes around narrow and congested areas;
- ◆ Reducing impacts on existing shrines and religious structures;
- ◆ Providing suitable safety measures, such as speed reductions near schools and hospitals;
- ◆ Providing access to businesses and residential units that would be otherwise impacted by construction; and
- ◆ Minimizing losses of public property, such as tube wells, tree plantations and other common property resources within the ROW, by minimizing the width to be cleared.

2.3.2 Principles of Mitigation

Mitigation measures largely focused on settlement areas along the project roads. Villages/towns along the road are zones of maximum potential impacts. The basic social impact mitigation principles that guided designs were:

- At built up/ village sections where the road width is insufficient for expansion, design alternatives include options for realignments or bypasses.
- In a number of cases straightening of curves and bends for better geometric design resulted in either bypassing or cutting through a settlement— in cases where it affects settlements, alignment changes were indicated.
- Minimal impact on residential and commercial structures thus minimizing resettlement and loss of livelihood.
- Paved shoulders to be maintained as far as possible to facilitate movement of non-motorized traffic.
- Where demolition of structures is absolutely necessary, design alignment will be such as to effect structures only on one side of the road, thus restricting impact to only one side of the road.
- Shrines and religious structures to be maintained as far as possible.

- Design to ensure speed reductions in urban/built up areas, and especially near schools and hospitals.

Plate 2-2 shows congested areas which contribute to potential hazards to pedestrians and motorists.

2.3.3 Road safety concerns

The main concerns of road safety addressed in designs were:

- The presence of road side trees, poles, ditches, steep slopes and barriers. While the project is largely confined to existing alignments, the rehabilitation and widening activity will raise, extend and enlarge existing road embankments at some locations or require new embankment construction, e.g. where drainage structures are added at points. This called for sensitive drainage designs draining away water from the embankment vicinity especially if the village was located at a lower elevation.
- The use of signs, road markings and intersection layout. Signage was located within designs to indicate villages with speed reductions signs and to show the presence of schools and hospitals.
- Roadside access, parking and bus stop arrangements. Speeding vehicles commonly fail to reduce speed or stop when approaching road side access roads, parking and bus stops. In these locations, sufficient space to pull off the roadway was provided.
- Provision for pedestrians, livestock and non motorized traffic. In urban areas provisions for pedestrian walkways were provided in the urban cross section. In contract 3 and a part of contract 4 shoulders have been provided to facilitate the movement of non-motorized traffic..
- Provision of measures to control vehicle speeds in urban areas.

Plate 2-3 shows safety of highway users in non-motorised and slow moving vehicles.

2.4 Resettlement and Rehabilitation Inputs to Project Design

The comprehensive and interactive R&R and design process carried out in project preparation included integration of engineering, social and environmental inputs. The R&R team included field investigators carrying out the census verification and socio-economic surveys and field supervisors. The field team was backed by the PCC R&R unit that included social impact, public participation, and Right of Way specialists. PWD also became closely integrated into the design loop with the formation of the Project Implementation Unit, whose representatives worked closely with the PCC R&R and engineering design groups. The main steps in the R&R and design process were as follows:

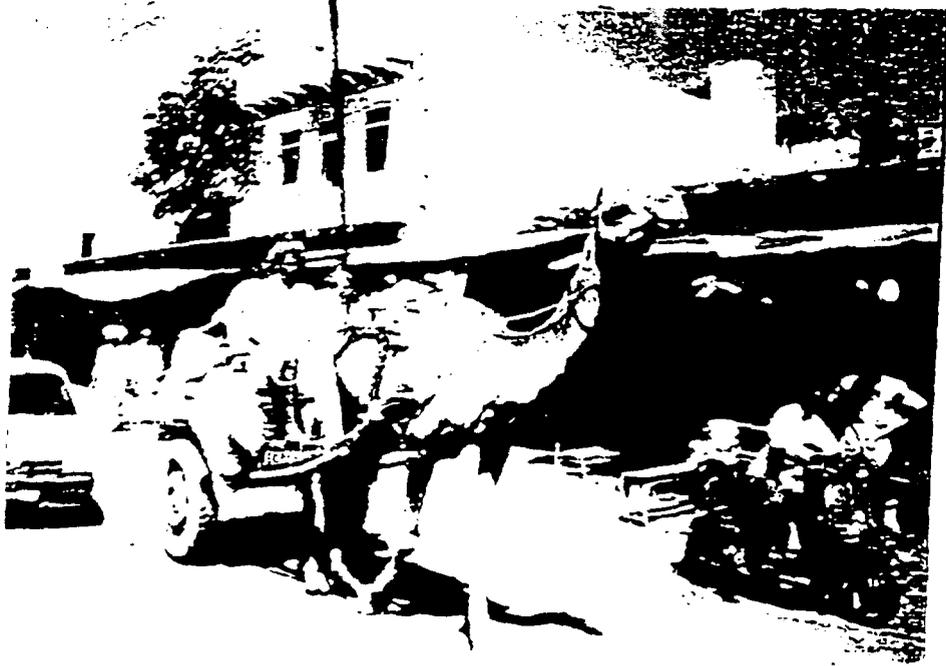


PLATE 3 : LINK - 2



PLATE 4 : LINK - 3



PLATE 5 : LINK - 1



PLATE 6 : LINK - 3

Step 1

This step involved preliminary reconnaissance of the project roads to identify sections with potential environment and R&R issues. This was done with the PCC field surveyor-in-charge. At this stage, constricted sections of road passing through villages with potentially inadequate width for proposed project improvements were cataloged.

Step 2

Following the above, the Right of Way status of the road was ascertained. This was done through collection of land records from the PWD and Revenue Department with the assistance of the PIU. This was a lengthy and protracted process that was most effective when initiated at the onset of R&R field surveys. Right of Way information is necessary to identify land available for road widening and determine land acquisition requirements.

Simultaneous with the compilation of Right of Way information, the census and socio-economic surveys of potential project-affected persons (PAPs) were begun. As elaborated in Chapter 3, the census survey covered 100 % of the potentially affected population within the likely corridor of impact of 20 mts. Following the preparation of final designs, those within the corridor of impact were considered eligible for support under the project. The PAP census survey was based on preliminary engineering drawings. The design center line provided the benchmark line to survey 10 meters on either side (i.e. within the 20 mts. impact corridor).

The census registered all household members and individuals within the potential COI; enumerated their assets and incomes, and gathered sufficient demographic and social information to determine whether they were to be categorized as vulnerable groups with special entitlements under the project. Private land owners, tenants, squatters and encroachers within the ROW, and all those within the 20 mt. corridor were covered in the census.

The socio-economic survey, which was sample-based, provided the baseline against which mitigation measures and support will be measured. Survey analysis covered the needs and resources of different groups and individuals, including intra-household and gender analysis.

Step 3

This step involved determining sections that required realignments and bypasses. This was done by measuring the distance of structures from the existing center line. Where road width available fell below minimum cross-section requirements, the option of a bypass/realignment versus demolition of structures was considered.

The proximity and density of roadside settlement were deciding factors in assessing the scale of impact. As the minimum urban cross section was 10 mts, where the width of the road passing through villages or towns was less, then alternatives to the existing alignment were examined. Next, the number of structures that would be affected was considered. Depending on the cost of

compensation for affected structures and the number of associated potential PAP's, versus the economic and social costs of building a bypass/realignment. viable alternatives were further examined.

This process was complemented by local-level consultations where the needs and opinions of local residents regarding the impacts of widening the road through the village and its alternatives were taken into consideration.

Step 4

Next, the inputs of field information were integrated with engineering designs. Once it was concluded that there was no space for expansion of the road or that widening would affect large numbers of households, then an alternative alignment or bypass was identified around the village by the topographic surveyor-in-charge.

In a number of cases, even where villages had clear and sufficient Right-of-Way for widening; for geometric reasons, for example, where the road had a number of sharp bends, the engineering team decided to bypass a village. In these cases, the R&R team field-checked the alignment or bypass proposed by the survey and engineering team.

Step 5

After integrating social and environmental inputs, the final engineering drawings were completed. Once this was accomplished, the actual number of PAP's expected was determined, especially in the built up area, where there were reduced COIs.

Step 6

The last step in the R&R process involves the disbursement of entitlements, relocation and resettlement, and the implementation of the RAP.

2.5 Co-ordination between design & R & R

Road design was based on co-ordination between the design, environment and the R&R team. In the final designs, the mitigation measures incorporated had the following results::

Avoiding unnecessary displacement by modifying project alignments, reducing the width of the corridor of impact or modifying design - 24 geometric realignments (which require additional land acquisition) have been designed mainly to straighten out curves and increase safety. The corridor of impact has been reduced through all built up areas except at Parana (Contract 3), which has only temporary stone structures housing contract labor. In cases such as in Berisal, (Contract 4), design was modified to accommodate shrines in the shoulder. The same has been done at a number of other sections, such as at Devri in Contract 4.

Reducing design speed in built up areas - The project roads have been designed for highway speeds of 80-100 kms. per hour. However in all urban/ settlement areas the design speed was reduced to between 40-50 kms. per hour.

Reducing the width of corridor of impact based on rural and urban cross sections - The Corridor of impact, i.e., the zone including the carriageway, shoulders, embankments and drainage in rural areas is 20 mts., in some cases the COI extends marginally beyond these structures. The urban cross section has a minimum of 10 mts. Reduced cross sections can be seen at Budhpura, Parsoli, Bichore, Bassi, Jobner and Khatu, to mention a few.

Building realignments or by-passes around narrow and congested areas - There are approximately 12 bypasses, varying in length from less than one km as in the Baiderka to Nawa bypass which is 5.5 kms.

Reducing impacts on existing shrines and religious structures - In many cases the design cross section has been reduced or redesigned to protect shrines. Examples are Menal, Berisal, Hatoj and Bheslana.

Providing suitable safety measures, such as speed reductions near schools and hospitals - Engineering has designed special road crossing designs near schools, with guard rails on the pavements outside the school, signage and speed reductions near hospitals.

Minimizing losses of public property, such as tube wells, tree plantations and other common property resources within the ROW, by minimizing the width to be cleared - Wells, pumps within the proposed construction zone were avoided whenever possible by shifting the alignment; or, if this was not possible, by relocating the structure. In cases where these facilities or features are to be relocated, temporary alternative water sources (new wells, trucked potable water) will be provided to ensure daily access to potable water.

2.4.1 Results of Mitigation Efforts

The mitigation efforts incorporated into designs were focused on minimizing resettlement and safety measures. Safety issues and concerns were addressed at all settlements. Accident-prone areas were identified as part of engineering design and corrective measures like realignments, culverts, bridges, signage etc. were selected as appropriate. As part of detailed engineering studies, all accident-prone areas like urban areas and the vicinity of schools and hospitals were delineated. Strict speed restrictions were imposed in such areas. Given below are some examples of mitigation efforts. Community impacted facilities such as schools and shrine along the project roads are shown in Figs. 2-3 to 2-6.

Schools

Overall, on Road 1 there are 14 schools within the 20 mts. census corridor; though, in all cases, it is only the boundary wall that is within the corridor of impact. Safety measures for school

children were considered extremely important. On Road 3 there are 8 schools. In no case has the actual structure of the school building been affected; only parts of the compound or boundary wall be impacted by project construction..

Hospitals

There are no hospitals within the 20 mts. COI on Road 1. There are 3 hospitals on Road 3, all within Contract 3. At Bichore and Parsoli, only the boundary walls are affected. At Bassi, the design alignment had to be readjusted as the total structure was affected. The new design alignment keeps to the existing road with no part of the hospital within the urban cross section.

Shrines

There were 38 shrines surveyed within the 20 mts. COI for Link 1. Reductions in cross sections have been made to accommodate the shrines. In cases such as Lunwa on Contract 1, realignment was designed to bypass a Jain temple and dharmshala. On Road 3, 47 shrines were identified. In places such as Nanta, realignment has been made to protect an old shrine. While in places such as Berisal, Menal etc., cross- sections have been reduced to preserve religious structures.

Plate 2-4 shows religious structures that need to be considered while deciding on the alignment.

Safety concerns

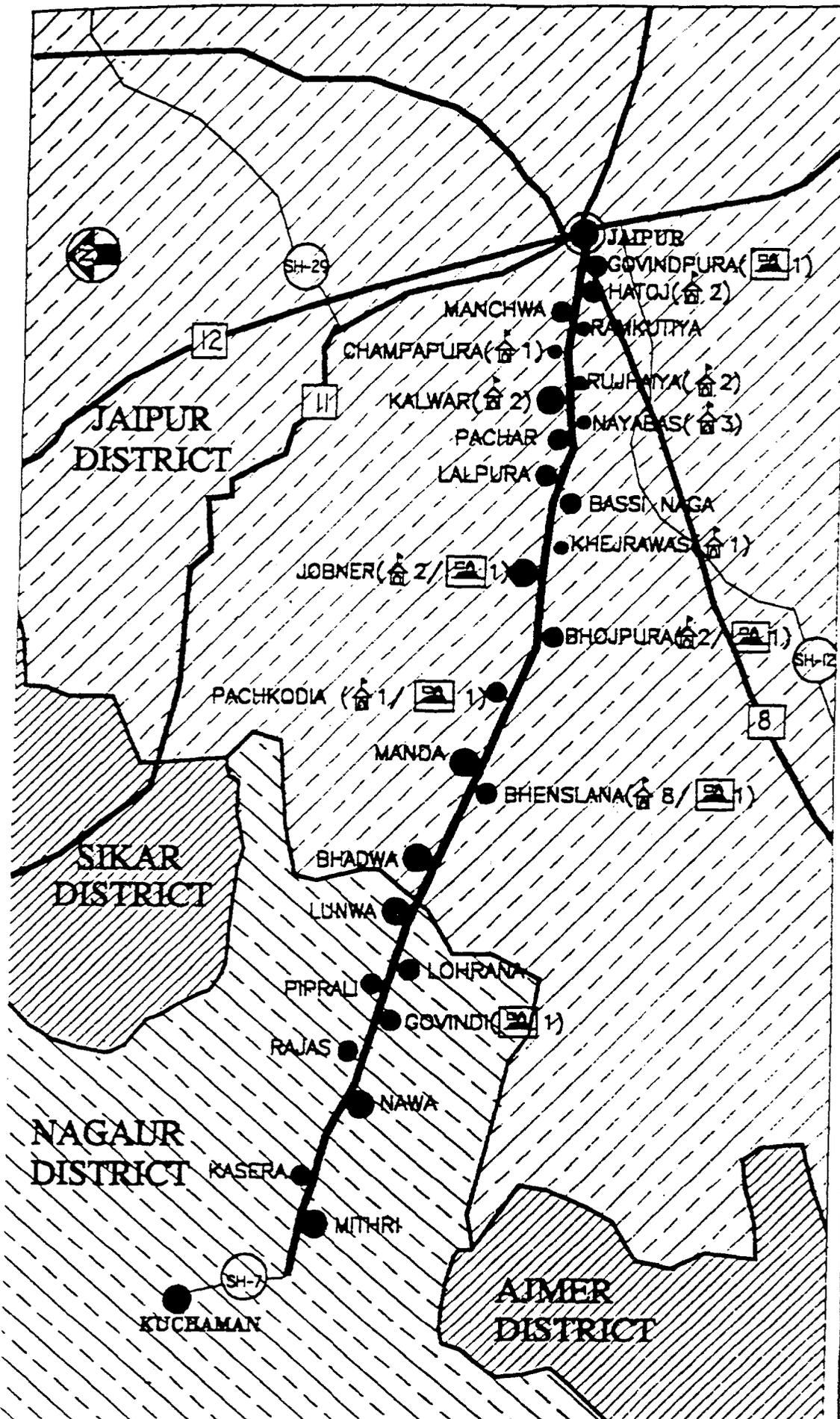
In Contract 1 at Lohrana, a realignment was designed for geometric and safety reasons. The realignment avoids a school and a number of sharp bends. Another example where local level consultations have played an important role in deciding the bypass was at Mithri.

In Contract 2, there are similar examples where safety concerns of the villagers and the lack of space resulted in the design of a bypass. Here, too, local level consultations were held. A separate women's group consultation was held to gain perspective on the impacts of a highway passing through the village.

2.4.1 Contract Specific Mitigation Efforts

Contract 1

In Contract 1 there are a number of bypasses and realignments. The villages/towns that have bypasses/realignments are at Manda, Bhadwa, Lohrana, Nawa and Mithri. The Nawa bypass is the longest with a length of 5.5 km. This bypass, however, reduces the total length of the road. At Manda, Bhadwa, Lohrana and Mithri bypasses have been designed to avoid narrow built-up sections with multiple curves and bends. At Lunwa, to avoid demolition of a Jain temple/dharmshala, a realignment has been proposed on an existing PWD road which is not in use, circumventing a part of the settlement. Urban sections have been suggested at Jobner and



LEGEND

- PROJECT ROAD
- DISTRICT BOUNDARY
- VILLAGE NAME
- DISTRICT H.Q.
- NATIONAL HIGHWAY
- NATIONAL HIGHWAY NO.
- STATE HIGHWAYS
- STATE HIGHWAY NO.
- SHRINE WITHIN COI
- COI ADJACENT SCHOOL
- POPULATION SIZE**
- 0-1000
- 1001 - 5000
- 5001 & ABOVE

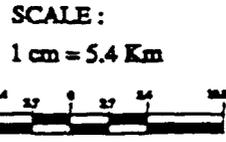
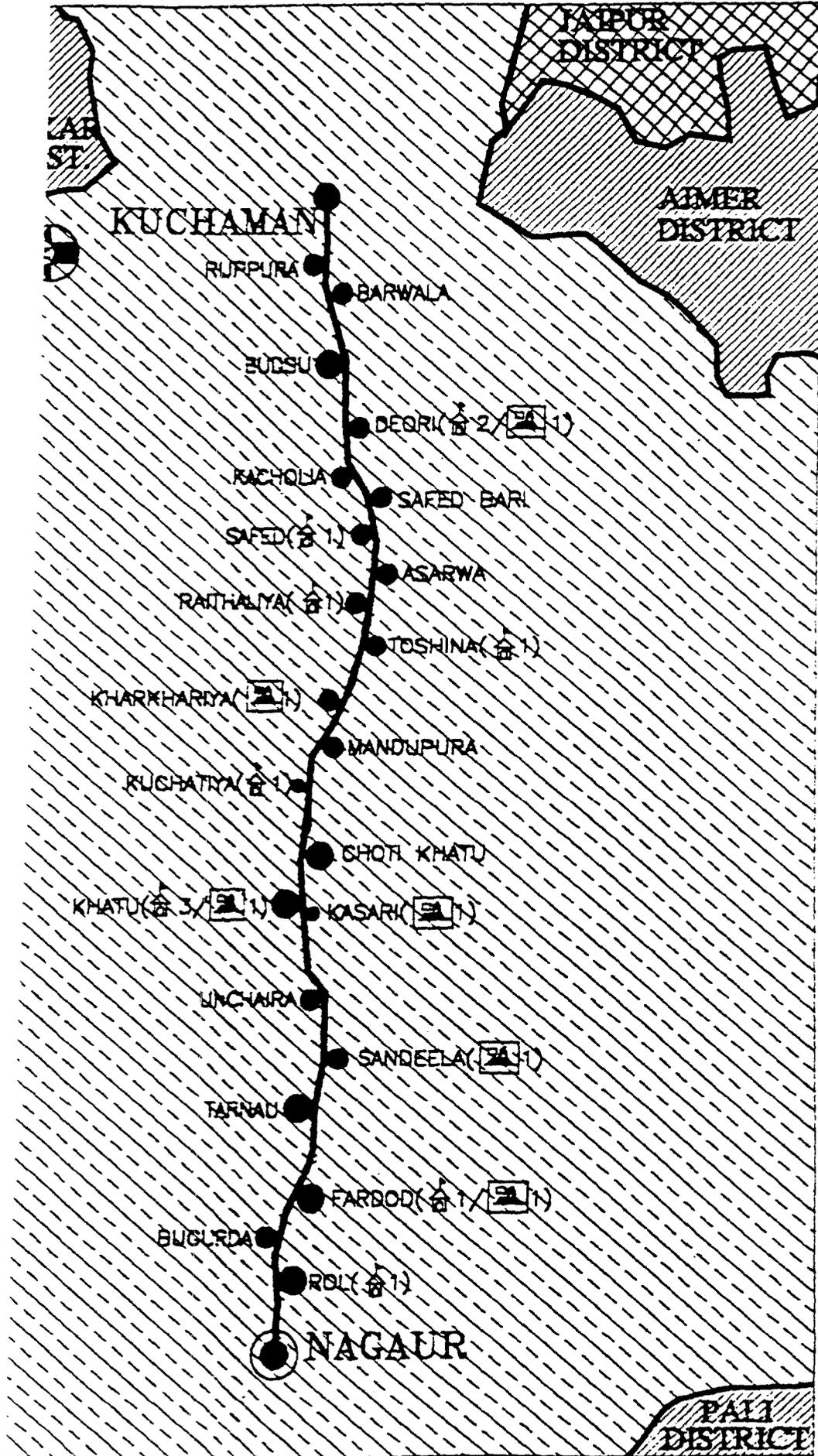


Figure 2-2



LEGEND

- PROJECT ROAD
- DISTRICT BOUNDARY
- CHOTI KHATU VILLAGE NAME
- DISTRICT H.Q.
- NATIONAL HIGHWAY
- NATIONAL HIGHWAY NO.
- STATE HIGHWAYS
- STATE HIGHWAY NO.
- SHRINE WITHIN CCI
- CCI ADJACENT SCHOOL

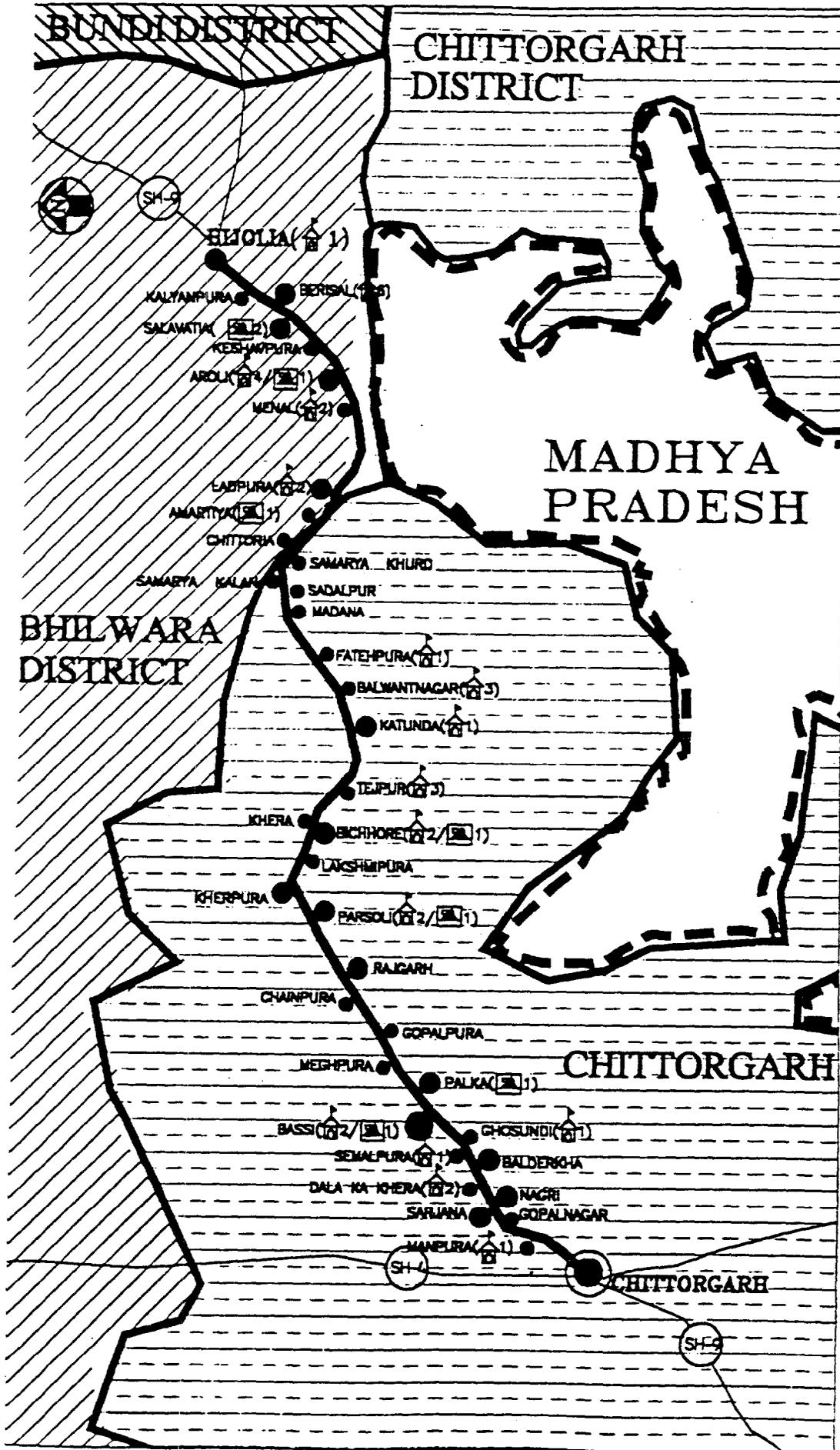
- POPULATION SIZE
- 0-1000
 - 1001 - 5000
 - 5001 & ABOVE

SCALE:
1 cm = 5.7 Km



Figure 2-3

IMPACTED COMMUNITY FACILITIES



LEGEND

- PROJECT ROAD
- DISTRICT BOUNDARY
- DISTRICT BOUNDARY
- TEJPUR VILLAGE NAME
- DISTRICT H.Q.
- NATIONAL HIGHWAY
- NATIONAL HIGHWAY NO.
- STATE HIGHWAYS
- STATE HIGHWAY NO.
- SHRINE WITHIN CCI
- CCI ADJACENT SCHOOL

POPULATION SIZE

- 0-1000
- 1001 - 5000
- 5001 & ABOVE

SCALE :

1 cm = 4.6 Km

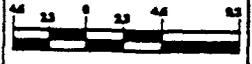


Figure 2-5



PLATE 7 : LINK - 1



PLATE 8 : LINK - 3

**TEMPLES AND RELIGIOUS STRUCTURES ON THE ROAD ARE ASPECTS TO BE
CONSIDERED WITH CARE AND ATTENTION**

Panchkodia. There are a number of other settlements on this section, which have sufficient right of way width for upgradation to highway speed design.

Contract 2

In Contract 2, bypasses were designed for Barwala, Budsu and Choti Khatu. These villages are fairly dense with no space for further road expansion. The other settlements have fairly clear right of way, as most of the settlements on this road section are away from the immediate vicinity of the road. Urban cross sections have been suggested at Khatu and Fardod. The remaining villages have rural highway cross sections.

Contract 3

With regard to minimizing resettlement, contrasting examples can be taken from the different contracts on Roads 1 and 3. In Contract 3, for example, at the start of the project road at the Kota junction at Subhasnagar, the number of PAP's whose commercial or residential structures originally affected within the 20 mts. corridor was seventy. With adjusted final design, this number was reduced one-third. This was possible due to the existence of sufficient ROW available for an urban cross section and careful design planning which avoided the structures on both sides of the road. With careful design inputs, the overall number of PAP's was reduced by approximately 50%.

In this contract, design was modified in the built-up areas/villages of Subhasnagar, Dhaneswar, Dabi, Parana, Budhpura and Bijolia junction to reduce impacts and the number of potential project affected persons. At Subhasnagar, Dhaneswar, Dabi, Budhpura, and Bijolia junction, road width was reduced to 10-15 mts., keeping impacts to a minimum. In these areas, urban cross sections have been incorporated with sidewalks, drains, pavements and street lighting. In Parana, because of the stone quarries, the structures being affected are temporary shelters built by quarry contractors for laborers. Here, the alignment has been shifted by 5 mts. to avoid the stone heaps/hills. This shift resulted in the road affecting only temporary structures. However, in the RAP, the entitlements provided to these stone quarry workers, who live in sub-human condition, will provide them with better living standards. Realignments at Deogarh and Govindpura were done as a result of better geometric design.

Contract 4

In Contract 4, between Bijolia and Chittorgarh, the habitat areas which have urban cross sections include, Berisal, Salawatia, Aaroli, Menal, Ladpura, Samaria, Bichore, Parsoli, Rajgarh and Bassi. At Berisal, the cross section has been reduced to accommodate two shrines on either shoulder. At Salawatia and Aaroli, the design cross section mainly leads to the displacement of vendors. At Menal, the cross section was reduced to 10 mts. to accommodate a shrine near the archeological site of the Menal temple complex. At Samaria Kalan and Parsoli, sections at the beginning of the settlement have a number of affected structures. However,

displacement here is minimal. At Bassi, the design alignment affects commercial structures on the left. The remaining villages/settlements have reduced corridor of impact widths.

In village Balderka, the width of the road is only 7 mts. The number of households identified within 10 mts. of the center line was 48. Due to the lack of space and unviability of demolition of structures, a realignment was designed. On the realignment, the number of affected households was reduced to only seven households.

A Sectoral Environmental Impact Assessment, GOI Environmental Assessments, and Environmental Management Plans have been prepared separately for this project. The project has coordinated the studies and implementation of environmental and socio-economic mitigation measures, particularly in areas where impacts on the environment may have social or economic consequences for the local population.

3. CONSULTATION AND PARTICIPATION

3.1 Introduction

A social assessment has been undertaken for the project to support PAP and other public participation and make explicit the social factors that will affect the development impacts of planned highway improvements and mediate project results. The social assessment identified stakeholders and key social issues, and formulated a participation and consultation strategy. It included socio-cultural analysis and design of a social strategy, institutional analysis, and specifically addressed the issue of how poor and vulnerable groups may benefit from the project.

Results of the social assessment guided RAP preparation, as detailed in Chapter 2 and other sections of this document. Components of the social assessment, including consultation and other public participation will continue over RAP implementation and the remainder of project preparation for Phase-1A and Phase 2.

Participation is a process through which stakeholders influence and share control over development initiatives and the decisions and resources which effect them. The effectiveness of R&R programs is directly related to the degree of continuing involvement of those affected by the project. Comprehensive planning is required to assure that local government, NGOs, host population and project staff interact regularly, frequently and purposefully throughout all stages of the project. Participation of persons directly affected by projects is a primary requirement in development of R&R, if its programs are to be suited to the needs of the resettled population. Their involvement vastly increases the probability of their successful resettlement and rehabilitation.

Constructive participation by the affected population can influence not only social impact of relocation, but also the costs, success and duration of the main investment project itself. The possibility of active participation by PAPs, host communities, NGOs and local government staff varies by project and stage of the project. Table 3-1 highlights the roles of key participants throughout the project cycle.

The sections that follow describe the project's consultation and public participation process and detail the consultation component of RAP implementation.

Table 3-1
PARTICIPATION MECHANISMS

Project Stage	PAPs and Representatives	NGOs	Local officials (in PAP and host areas)	Hosts
Identification	<ul style="list-style-type: none"> - Receive information on project impacts - Representative on coordination committee - Participate in census surveys - Participation in structured consultations to develop IG programs - Keep records of consultations - Choose resettlement locations or housing schemes - Inputs to design of resettlement locations - Representation on grievance tribunal 	<ul style="list-style-type: none"> - Design and carry out information campaign - Assist in census and Socio-economic survey - Participate on Coordination Committee - Participate in consultations - Representation on grievance tribunal - Train VRWs where required - Facilitate PAP intergroup meetings 	<ul style="list-style-type: none"> - Assist in census and socio-economic surveys - Assist NGO in information dissemination - Participate in and arrange consultations - Arrange PAP transport to sites - Help to document consultations - Support VRWs work - Examine feasibility of IG programmes and discuss with PAPs 	<ul style="list-style-type: none"> - Provide information and inputs to design of IG programs - Identify existing credit and IG schemes - Discuss areas of possible conflict with PAPs
Implementation	<ul style="list-style-type: none"> - Monitor provision of entitlements - Labor and other input at site - Credit and other group scheme management - OandM of sites and project input - Management of common property resources - Manage common property resources and community development funds - Member of implementation committee 	<ul style="list-style-type: none"> - Provide on-going information for PAPs and hosts - Provide support in group management - Monitor entitlement provision and implementation of IG programmes - Members of implementation committee 	<ul style="list-style-type: none"> - Process IG proposals - Participate in grievance redressal - Provide assistance under local schemes - Membership of implementation committee - Process documents for welfare and socio-economic services (ration card, BPL card) 	<ul style="list-style-type: none"> - Assist PAPs in use of new production systems - Form joint management groups for common resources
Monitoring and Evaluation	<ul style="list-style-type: none"> - Participate in grievance tribunals - Report to project on IG schemes - Report on service quality at sites 	<ul style="list-style-type: none"> - Provide information to project staff on vulnerable groups - Act as external monitors for project (where not previously involved) 	<ul style="list-style-type: none"> - Ongoing interaction with PAPs to identify problems in IG programs - Participants in correctional strategies 	<ul style="list-style-type: none"> - Provide inputs to M & E of R&R

3.2 Consultation and Public Participation

Experience indicates that involuntary resettlement generally gives rise to severe problems for the affected population. These problems may be reduced if, as part of a resettlement program, people are properly informed and consulted about the project, their situation, and preferences; and are allowed to make meaningful choices. This serves to reduce the insecurity and opposition to the project which otherwise are likely to occur.

The project has ensured and will continue to ensure that the affected population and other stakeholders are informed, consulted, and allowed to participate actively in the development process. This has been and will be done throughout the project, both during preparation, implementation, and monitoring of project results and impacts.

Information has been and will be disseminated to project affected persons and other key stakeholders in appropriate ways. This information has been and will be prepared in Hindi and

local languages as required, describing the main project features including the entitlement framework. Public comments on the proposed project and potential social and environmental impacts that should be addressed by Environmental Management and Resettlement Action Plans were invited. Written comments were welcomed and made part of the project record. The public and participants in the consultative process were advised of access to project documents and information at the project office and provided the addresses of the World Bank India offices and the World Bank Public Information Center in Washington, D. C.

Consultation has been and will be carried out in ways appropriate for cultural, gender-based, and other differences among the stakeholders. Where different groups or individuals have different views or opinions, particular emphasis has been and will be put on the views and needs of the more vulnerable groups.

This RAP provides detailed information regarding the consultation process and documenting the substantial consultation program effected by the project to date. It also describes information disclosure at different stages. The consultation process established for the project has employed a range of formal and informal consultative methods including in-depth interviews with key informants, focus group discussions, seminars, meetings, and workshops.

The overall goals of the consultation program were to disseminate project information and to incorporate public and PAPs views in the Resettlement and Environmental Action Plans. The specific aims of the R&R component consultations were to:

- * Improve project design and lead to fewer conflicts and delays in implementation.
- * Facilitate development of appropriate and acceptable entitlement options.
- * Increase long term project sustainability and ownership.
- * Reduce problems of institutional coordination.
- * Make the R&R process transparent and reduce leakages.
- * Increase resettler commitment to and effectiveness of sustainability of income restoration strategies, and improve coping mechanisms.

The consultation program was tiered and conducted at several levels that included, among others, the following:

- Heads of households likely to be impacted;
- Household members;
- Clusters of PAPs;
- Villagers;
- Village Panchayats
- Local voluntary organizations; and CBOs/NGOs;
- Government agencies and Departments; and
- Major project stakeholders, such as women, tribal and ethnic communities, road-user groups, health professionals, and others.

As part of project preparation, several major workshops have been or will be conducted with participation from key stakeholders including local NGOs, academic institutions, government officials, and others. The purpose of these stakeholder workshops is to present and discuss the project, review the policy framework and approach to social impacts and resettlement, and to achieve agreement about implementation mechanisms and coordination among different groups and agencies. As part of the consultation process, women are given the opportunity to voice their views without men present.

The project has documented and will continue to document how people's views have been taken into consideration in a meaningful way. It has ensured and will ensure that groups and individuals that are consulted are informed later about the outcome of the decision-making process, and how their views have been incorporated.

3.3 Stakeholder Analysis

Stakeholder analysis was carried out early in the project preparation period in conjunction with 'scoping' exercises to design the project's social and environmental assessments. Results of this analysis guided development of a public participation strategy, the design of the multi-leveled consultation program, and other consultative activities with stakeholders and special populations such as tribal groups.

In RSHP stakeholders were identified considering following issues:

- * Who might be affected (positively or negatively) by the development concern to be addressed?
- * Who are "voiceless" for whom special efforts may have to be made?
- * Who are representatives of those likely to be affected?
- * Who is responsible for what is intended?
- * Who is likely to mobilize for or against what is intended?
- * Who can make what is intended more effective through their participation or less effective by their non-participation or outright opposition?
- * Who can contribute financial and technical resources?
- * Whose behavior has to change for the effort to succeed?

Both primary and secondary stakeholders were identified, invited to take part in the consultation series, and solicited to participate in planning and implementation of the R&R program. Primary stakeholders are those affected negatively or positively by the project. Primary stakeholders in RSHP include PAPs, project beneficiaries, and project implementing agencies. Secondary stakeholders are other individuals and groups with an interest in the project viz., the World Bank, highway users, Government of Rajasthan, etc.

3.4 State-level Consultative Workshop

An essential feature of the assessment process is consultation with local experts and stakeholders, particularly those who will be most directly affected. Considering this aspect, a State Level Consultative Workshop was held in September 1997. The participants included social and environmental scientists from academic and research sector, non-government organizations, PWD representatives and R&R consultants. The purpose of the workshop was to promote public awareness and understanding of proposed project actions and to notify stakeholders and others of opportunities to participate in consultations and the assessment process.

Planning for the stakeholder consultative workshop included contacts with numerous social and environmental NGO's and other project stakeholders to encourage participation.

For the Stakeholder Consultative Workshop-1, the methodology used was a participatory one. The Workshop was broadly divided into three sessions. The opening sessions focused on project description, the Government of India and World Bank requirements, the social impact assessment, rehabilitation and resettlement and the sectoral environmental assessment. Sessions I and II were small group discussions followed by a plenary session where findings of the group discussions were summarized and presented.

At the State-level, the consultation process also included consultation with representatives of key project stakeholders and in-depth discussions with organizations such as the Tribal Development Board, the Truckers Association, PWD, the State Planning Board and others. Numerous meetings and exchanges were also arranged with organizations and agencies concerned with highway safety and health conditions, tribal rights and welfare, and other social impact concerns including various organizations and agencies concerned with highway safety and trauma treatment and health organizations working on highway-associated spread of AIDS and STDs.

3.4.1 Key Findings of the Stakeholders Workshop

The key findings from the workshop can be broadly divided into the social impacts and the environmental impacts of the project. These are summarized below:

- The main emphasis was that compensation should be on the basis of 'land for land' and 'house for house'. There is a need for clarification on the standards of compensation. Secondly, there is a need to speed up the Land Acquisition and compensation payment process. The location and type of land is important and should not be allotted in fragments. There is a need to work out the modalities for squatters and encroachers.
- Physical relocation and resettlement should be minimized. The social fabric of the persons relocated should be maintained or in other words the PAPs should be moved along with their peer groups. Efforts should be made to prevent loss of access to livelihood, and PAPs need to be fully involved in relocation planning and process

- right from the project inception stage. Safety is an important issue especially for children, women, and cattle. The time factor in any resettlement program is crucial.
- Acquisition of land and other immovable properties and resettlement should be on the basis of "do first, then remove" with a simplified procedure and timely implementation of the same.
 - Special care should be taken in removing or shifting the sacred trees, shrines, temples, mosques, tombs and other places of cultural and historical significance by following the rituals and customs of community concerned.
 - Best resettlement measures are land for land and assets for assets and compensation measures on market rates.
 - Proper co-ordination among PWD, PHED, Revenue, and other line departments is mandatory for the provision and maintenance of infrastructure created along the road and to provide respective services in rural areas.
 - Notification about the deadline date by government through the media and press will prevent new encroachment.
 - GOR should adopt the R&R policy only after acceptance by the people
 - Loss of access to livelihood should be minimum and losses and needs to be compensated in terms of development based employment generation and occupation sustainable in local social-environmental context.
 - Social environment and communities will experience the impacts, positive and negative. Better transport, communication, other facilities, economic activities, marketing of agricultural products etc. are seen as positive impacts. While physical relocation, accidents, social problems, etc. may turn to be negative impacts
 - Rich people, traders, and non-migrants may turn to be major beneficiaries while indigenous people may not gain immediately and directly from the project.
 - Scheduled Castes (SC) and Scheduled Tribes (ST), women headed households, and other vulnerable social groups affected by the project roads should be identified. They require special consideration for resettlement/rehabilitation on priority basis.
 - Community participation is essential to sustain the project. Timely dissemination of project related information to the PAP's through public consultations (Chaupal meetings) is mandatory.
 - Stray cattle, domestic and wild animals will meet road accidents. Road works, vehicle emitting pollution, higher traffic volume, etc., will cause damage to the vegetation. Local flora and fauna need protection on priority basis
 - Natural landscape land use pattern need to be maintained and improved upon by controlling soil erosion, etc.
 - Ponds, tanks, wells and other traditional sources of surface water may get affected due to the project; therefore project should also design mitigation plan for the same.
 - Accidents need to be controlled through various safety measures. Trauma hospitals and emergency facilities on the road should be provided
 - Provision for the bypasses and alignments in the interest of social safety, and environmental protection were emphasized repeatedly by the participants.

These results were carefully considered in the design of District-level and local/village-level consultations. They also guided social assessment inputs to detailed engineering designs, as discussed in Chapter 2.

3.5 District-level Consultations

In conjunction with on-going detailed engineering design and social and environmental assessment of Phase-1A of the Rajasthan State Highways Project, District-level consultations were arranged to solicit public and PAP inputs. These consultations were also intended to prepare for District Committees that will be established to support R-AP implementation. District-level consultations were scheduled to coincide with the onset of PAP census and socio-economic surveys and to introduce a complementary round of local- and village-level consultations along the Phase-1A alignments. It is anticipated that similar consultations will be carried out for Phase 2 of the project.

The objectives of the District-level consultations were to:

- Expand awareness of the project among the public, local government leaders, and District officials in areas impacted by Phase-1A;
- Identify social and environmental sensitivities and other concerns in affected Districts that should be considered in project design and planning;
- Review potential impacts of the project identified in social and environmental assessments to date; measures taken to avoid, reduce, or mitigate adverse impacts and minimize displacement; and provisions of the project's Environmental Management Action Plan and Resettlement Action Plan;
- Explain principles and procedures proposed for land acquisition, resettlement and relocation; and the compensation and assistance that will be provided to project-affected persons, households and groups who may lose land or assets or suffer other losses;
- Increase cooperation among local governments and District officials in project planning and implementation, including follow-on village- and local-level consultations along project roads;
- Introduce house-to-house surveys, asset verification, videography, village-level consultations, and other activities about to begin along project roads; and
- Assure that local-level inputs are considered in project preparation.

3.6 Local and Village-level Consultations

PCC carried out local level consultations for Phase I roads. Efforts were made to contact each and every PAP. Therefore, more than one group discussion was held in every village. The size of group was restricted to 10 to 12 so that every participant got a chance to express their views on the project. Separate group meetings were held for women.

At the village-level, PAPs and local government leaders were consulted and Participatory Rural Appraisal, focus group discussion, social and resource mapping, livelihood analysis, and other consultative and assessment techniques were employed. Special attention was directed to women's needs and time disposition. Other local consultations included tribal and ethnic groups. Village meetings were conducted in all project corridors. The consultations were mainly focus groups discussions, based on an open ended schedule. A moderator was appointed by PCC. The consultation process was videoed. The methodology also included individual interviews.

The main objectives of the community consultation program were to minimize negative impact in the project corridors and to make people aware of the road rehabilitation project. During the process efforts were made to:

- understand views of the people affected with reference to the impacts of the road;
- identify and assess all major economic and sociological characteristics of the village to enable effective planning and implementation; and
- resolve issues relating to affects on community property.

This community consultation process was carried out in 12 villages on Road 1: Jaipur-Nagaur, 2 on Road 3: Kota- Chittorgarh and 1 on the Ratangarh- Hanumangarh Road, Phase IA. Beside local-level consultations a number of consultations with specific impact groups such as commercial sex workers along highways, truck drivers, nomadic groups were also held. The details of the outcome of the consultations are documented in the Annex 3-1. Video recordings of the same have also been done.

3.6.1 Key Findings of Local-level Consultations

- Participants were aware of the project.
- In most of the villages participants were in favor of a bypass. They were ready to give up their agriculture land but not their house.
- People were also concerned about the shrines, burial/cremation ground and trees getting affected.
- People agreed to participate in the process of identifying alternate site for the road (bypass)
- PAPs were of the view that the community should be consulted before the drawings of the road are finalized.
- Some of the potentially displaced PAPs were of the view that there is no need for the road. They feared that broad roads would result in more accidents and loss of life.
- PAPs were also concerned about the compensation payment, which they think will be lower than the market prices.

While finalizing the designs, the views of the PAPs and outcome of first state level workshop were considered and contributed to reducing the number of PAPs. Detailed findings of the village- and local-level consultations are also provided in Annexes to this document.

3.7 District-level Public Hearings

GOI Ministry of Environment and Forests (MOEF) environmental clearance procedures require GOR State Pollution Control Board Public Hearings in affected Phase-1-affected Districts. These hearings were conducted in July and August 1998 in Nagaur, Jaipur, Kota, Bundi, Bhilwara, and Chittorgarh Districts.

At the hearings, PCC R&R and Environmental staff presented the RAP and EMAP and entertained questions and comments from participants. Findings of the hearing will be forwarded to MOEF for consideration during the clearance process, which includes MOEF review of provisions of the project RAP and proposed mitigation of social impacts.

3.8 Special Group Consultations

The social assessment of potential impacts of proposed project actions on the social environment identified road safety issues, disabled, tribal groups, spread of sexually-transmitted diseases, commercial sex workers and nomads as concerns. To reduce or mitigate the negative impacts of the road upgrading and realignments, the R&R team members consulted various local experts, Government officials, NGOs and stakeholders. Focus Group Discussions (FGDs), In-depth interviews (IDIs) with both open ended and close-ended questions, and observation were the main qualitative tools used to generate the required information.

Special attention was directed to vulnerable groups including tribal and ethnic communities and other marginalized sectors.

3.9 Indigenous People

Potential project impacts on tribal populations were carefully considered and consultations and other participatory approaches were employed during the social assessment.

The indigenous population of tribals in Rajasthan numbers around 57 lakhs and is spread over sparsely inhabited, scattered settlements. Six tribal groups who are scheduled constitutionally by GOI namely, the Meena, Bhil, Garasia, Sahariya, Damor and Bhil Mina are to be found along some of the project roads, but the largest concentrations of tribal populations in Rajasthan are generally outside the project area. Some of these groups and several other ethnic communities of concern are semi-nomadic.

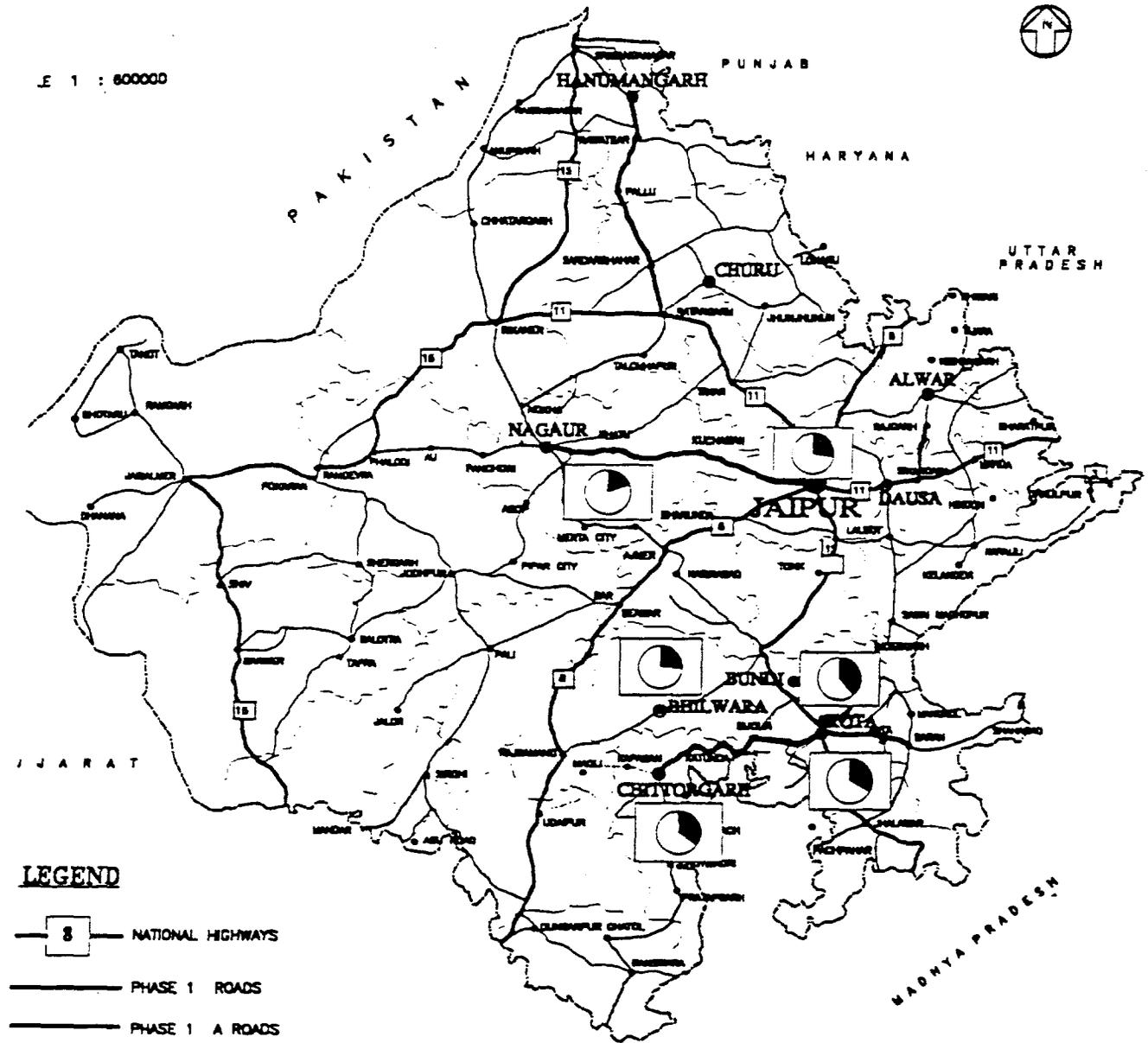
Roads proposed under Phase 1 and Phase 1A of the project traverse the tribal districts of Chittorgarh, Banswara, Kota and Baran, although roadside populations of tribal groups are small. Chapter 3 reports on results of PAP census and socio-economic survey and indicates the limited extent of tribal and ethnic group populations among PAPs.

There are a number of non-governmental organizations working with the tribals in these districts. The social assessment/R&R team held several meetings and consultations with these NGOs,

RAJASTHAN
ROAD MAP



1 : 600000



LEGEND

- NATIONAL HIGHWAYS
 - PHASE 1 ROADS
 - PHASE 1 A ROADS
 - STATE BOUNDARY
 - DISTRICT BOUNDARY
 - DISTRICT HEADQUARTER
 - STATE CAPITAL
- | | |
|--|-----------------|
| | SCHEDULE TRIBES |
| | SCHEDULE CASTES |
| | OTHERS |

**DISTRIBUTION OF SCHEDULE TRIBE & SCHEDULE CASTE
POPULATION IN PHASE 1 PROJECT ROADS DISTRICTS**

representatives of tribal organizations, academics, and government officials involved with tribal development and welfare. These meetings took place in Udaipur in September 1997 and August 1998. Other informal consultations with roadside communities, experts, and others were also carried out.

It was the finding of the social assessment that tribal communities and ethnic groups were not disproportionately or differentially affected by the project. That is, in terms of World Bank OD 4.20, indigenous peoples were not affected as 'peoples', although tribals do constitute a small fraction of Phase-1 PAPs and will likely be represented among Phase-1A and Phase-2 PAPs. For this reason, an Indigenous People's Development Plan was not separately prepared under the project.

Instead, tribal and ethnic communities were considered as a vulnerable group under the project's entitlement framework in which they are accorded special attention and assistance in RAP implementation. Further, tribal and ethnic groups were considered as a project-affected group under the entitlement framework. In this capacity, they will receive additional culturally sensitive consideration including assistance in establishing tenure security, advocacy and legal assistance in obtaining compensation and assistance entitlements, as necessary. The project SDRC also will engage the services of a Social Scientist charged with responsibilities for adapting RAP implementation to needs and circumstances of tribal and ethnic groups.

3.10 Public Participation and Consultation in RAP Implementation

The effectiveness of the R&R program is directly related to the degree of continuing involvement of those affected by the project. Participation of PAPs has been emphasized in the development of RAP to assure that its components are suited to the needs of the impacted and resettled population. Their continued involvement and participation during RAP involvement will both increase the probability of their successful resettlement and rehabilitation and contribute to overall project success.

After the completion of the RAP and its approval by the GOR and World Bank another state level consultation is to be conducted making the RAP public knowledge.

Several additional rounds of PAP consultations are also planned during RAP implementation, and a number of related measures build-in PAP representation and participation in RAP implementation mechanisms including District R&R Committees, grievance procedures and RAP monitoring.

As a follow-on to the round of local-level PAP consultations held during project preparation, a first, second, and third round of consultations will occur in conjunction with RAP implementation.

The purpose of the first round of consultations is to disseminate information on RAP entitlement package and options for each impact category to PAPs. This will involve explaining the Entitlement Framework and resettlement options to the PAPs and soliciting their support and cooperation.

Similarly, first round consultation will be held to finalize agreement on the various community and group entitlements provided in the entitlement framework.

The second round of formal PAP consultation involves agreements on compensation and assistance options and entitlements with PAPs and completion of a PAP identity card indicating the accepted entitlement package.

The third and final round of formal PAP consultations will occur when compensation and assistance are provided and actual resettlement begins.

These consultations will be managed and carried out by the SDRC, District R&R Committees, and assisting NGOs. The sections that follow outline PIU responsibilities in RAP implementation consultations and detail the procedures for carrying them out.

3.10.1 PIU role in RAP implementation PAP consultations

At the implementation stage three rounds of consultations are required. The stages are as follows:

- First round is to meet the Entitled persons, inform them about the entitlements, and hand over the ID cards.
- Second round involves getting back to the PAPs and noting their options for resettlement.
- The last stage is when the compensation is given and the process of shifting begins.

In order to meet the above requirements, the PIU/SDRC will undertake the following actions:

- Prepare an information brochure in the local language, explaining the RAP and what is required of EPs in order to claim their entitlement. It should be distributed throughout the project corridors in communities where there will be entitled persons;
- Request help of village leaders and other influential community leaders to encourage the EPs in the implementation of the RAP;
- Complete a verification process to ensure the correct information has been collected and each household has received an ID card with survey number on it. Each EP in the household unit will be given a separate identification Card. This card will contain specific details of the entitlements.
- Conduct meetings to explain the RAP and answer questions concerning the entitlement.
- Attempt to ensure that the vulnerable groups understand the process and that their needs are being taken into consideration explicitly.

At this stage PAP representation in District R&R committees will also be established with the assistance of partnering NGOs.

3.10.2 Information Dissemination Campaign

An intensive information dissemination campaign for PAPs will be conducted at the outset of RAP implementation. This campaign will be designed by the SDRC Social Scientist and executed by District R&R Committees and partnering NGOs.

The objectives of this campaign are:

- * to help counter rumours and prevent distress
- * to assist in preparation for relocation to new sites
- * early understood and all questions of the PAPs are answered to the best ability. Print and audio-visual materials will be of secondary use in such areas. All the comments made by the PAPs will be documented in the project record and summarized in project monitoring reports.

4. CENSUS AND SOCIO-ECONOMIC SURVEYS

4.1 Objectives

Successful implementation of the Resettlement Action Plan (RAP) depends on appropriate and accurate census and socio-economic surveys of Project Affected Persons (PAPs). Without them, there can be no measurement of potential impacts on affected persons; and, therefore, it is difficult to frame appropriate entitlement policies. Also, in the absence of surveys it is difficult to measure the achievement or non-achievement of the objectives of the RAP. Two kinds of surveys were undertaken during project preparation:

- Census verification survey
- Sample socio-economic survey

The objectives of the census verification survey were:

- * Provide information regarding project impacts in order to facilitate designing of various components of the RAP, especially R&R entitlement.
- * Minimise the influx of outsiders to the affected area
- * Dis-aggregate PAPs by effect categories
- * Set standards for income restoration and monitor the same
- * Comprehensive identification of the physical relocation of PAPs.
- * Enumeration of PAPs assets and landholdings

~~People who are not surveyed during the census will not be considered as PAPs.~~ The cut off date for legal title holders is the notification date of section 4 of Land Acquisition Act and the date on which the census survey was carried out for those who do not have legal standing. The cut off date will be used to establish whether a person located in the corridor qualifies as a PAP during the implementation of the various phases of the project. However, persons not enumerated during the census, but able to prove their stay in the project corridor, ~~at least one year prior to the cut off date~~ will be considered for entitlement.

The objectives of the sample socio-economic survey were:

- * To attach actual values to key indicators of the PAPs social and economic status and their vulnerability to socio-economic change due to the project.
- * To assess use / dependence on common property resource
- * To provide a baseline needed to monitor and evaluate EPs in the future; and
- * To provide further inputs in preparation of RAP.

This chapter reviews census and socio-economic surveys undertaken for Phase-I of the project, supplies guidelines for census and socio-economic survey to be carried out for subsequent project Phases, provides a social profile of the project area, and summarizes Phase-I survey results.

4.2 Census of Project-Affected Persons

A full census of households and individuals potentially within the project's Corridor of Impact (COI) was undertaken to register and document the status of the potentially affected population within the project impact area of Phase-1 and 50% of Phase-1A. It provides a demographic overview of the client population served by the RAP and profiles household assets and main sources of livelihood. It covers 100% of the potentially affected population within the likely COI.

In the census process, legal boundaries of affected properties and the ROW were verified. The census registered all household members and individuals within the potential Corridor of Impact; their assets and income, and demographic and social information to determine whether project affected persons were to be categorized as vulnerable groups with special entitlements under the project. Private land owners, tenants, and squatters and encroachers within the ROW were covered.

Using available records, the project verified the boundaries of the legal Right of Way as well as the boundaries of private properties within and in the vicinity of the likely Corridor of Impact. Structures, trees and other assets were also recorded. This information has been entered on strip maps, and the information entered will be jointly verified and certified by the project investigators, local revenue officials, and owners of the land and other assets likely to be affected.

With the completion of final designs, only those within the actual Corridor of Impact are considered eligible for support under the project. This is a substantially lower number than those initially covered in the census.

This RAP includes provisions and specifications for census of the potentially affected population of subsequent project phases. PAP census is underway for the remainder of Phase-1A roads and this RAP will be updated to include its results once they are available.

4.3 Baseline Socio-Economic Survey

A detailed socio-economic survey was conducted in conjunction with the census of the project-affected population to profile the impacted project area and provide a baseline against which mitigation measures and support will be measured. For this purpose, comprehensive information related to people's assets, incomes, important cultural or religious networks or sites, ethnic and cultural identity, and other sources of support such as common property resources was collected. The analysis has covered the needs and resources of different groups and individuals, including intra-household analysis and gender analysis.

Survey results are summarized in sections that follow. Survey methodology and instruments are documented in Annex 4-1 to this document. This RAP includes provisions and specifications for survey of the potentially affected population of subsequent project phases. PAP survey is

underway for the remainder of Phase-I A roads and this RAP will be updated to include its results once they are available.

4.4 Cut-Off Date

The cut off date for those who have legal titles is date of notification of section 4 of LA Act 1894 (as amended in 1984). Surveys of project affected persons were used to identify eligibility for project benefits. The census and socio-economic survey establishes a cut-off date for PAP eligibility for assistance under the project. People moving into the COI and ROW after this cut-off date will not be entitled to support.

It is recognized that there will be a margin of error in the census, and any person who was not enumerated but can show documentation or evidence that they are rightfully an Entitled Person will also be included. The Project Implementation Unit is responsible for such verification.

The cut off date for non-legal titleholders is given below.

LINK	CUT OFF DATE
LINK 3	
Kota- Chittorgarh	September 1997
LINK 1	
Jaipur-Nagaur	December 1997

4.5 Guidelines for Census and Socio-economic survey

Displacing people involuntarily gives rise to severe economic, social and environmental problems. Rehabilitation plans and programme are therefore required to be prepared to minimise such problems and to ensure that the people so displaced either improve or at least regain their previous standard of living. For this, information about the magnitude of displacement of the inhabitants of the area getting affected and the impact of project on the socio-economic aspects of the persons affected thereby should be obtained. The full baseline survey is given in Annex 4-2. Annexure IV of the GOR R & R Policy details the guidelines for socio-economic studies and preparation of RAP. According to the policy guidelines the following procedure is to be adopted in obtaining detailed information:

1. Preliminary screening to provide minimum information on social impacts
2. Verification of legal boundaries of project area, to document existing structures, land plots, and others physical assets. This involves :
 - identification of suitable resettlement sites, in close proximity to the affected area
 - All encroachments, private land holdings and others assets in the project are to be documented
 - Assets, structures, land holdings, trees, wells shall be recorded on strip maps

- All information to be computerized. Photography/video recordings to be used to document existing structures.
- 3. Public notification of intent of LA for the project.
- 4. Conduct sample socio-economic baseline survey. The survey shall gather information on the various categories of losses and other adverse impacts likely under the project.
- 5. Sample socio-economic survey shall identify potentially affected populations with special attention to vulnerable groups
- 6. Assessment shall also be made on the value of various assets
- 7. Full baseline survey on the basis of sample socio-economic survey.

Sources of Data

Other relevant information should also be collected through the following secondary sources:

- Revenue officials - with regard to land particulars for both acquisition of properties and resettlement of oustees.
- Census records, voters list etc. for enlistment and demographic information.
- Project authorities (PWD) to find out the ROW/COI, estimates of the cost of infrastructure development etc.
- Development agencies like DRDA, ITDA etc. to get information on various developmental programs for specific sections of population like those living below poverty line (landless, marginal and small farmers etc.) tribal, SCs etc.
- Other development departments like Agriculture, Co-operatives, Animal Husbandry, Health and Family Welfare, District Industries Centre, Khadi and Village Industries Board, Minor Irrigation and other related departments/organizations to find out various development welfare programs being implemented in the area for the welfare of the local population. This will help in exploring the possibilities of dovetailing such programs within the R&R measures proposed for the affected population.
- Local organizations including NGO's in order to involve them and integrate their activities in the economic development programs of the displaced population.

Methods of Data collection

- * Household level contacts and interviews with each affected family for completing the household socio-economic profile.
- * Contact woman headed households, on sample basis to collect information in different aspects through appropriate questionnaire.
- * Similar individual contacts are required for other sections of the population including handicapped, artisan etc.
- * Contact various concerned Government officials to get relevant data for the planning exercise.

Participatory rural appraisal exercise with the involvement of affected person, particularly in mapping of the affected areas of the village, the new resettlement sites, identification of the

infrastructure required, development of common resources etc. is undertaken. In this exercise, women of the affected families, as well as representative of the host-population should also be involved so as to get their views and opinion on the over all planning of the resettlement sites.

Extensive field visits of the affected, as well as the resettlement area with emphasis on field level observations and discussions with the village communities, Government officials, Non-Government Organizations etc. is required. Discussions with different section of affected and host-population, in particular, will help in understanding their problems and preferences.

A capability assessment of NGO's operating in the area in order to identify one or more NGO's depending upon the magnitude of the problem of displacement due to the project is to be done.

8. Reporting to include

- assessment of land acquisition
- estimates of losses
- identification of categories of affected persons
- status of squatter and encroachers
- identification of loss of different assets of PAPs

9. Preparation of draft/norms of compensation and R & R entitlements

4.6 Demographic and socio-economic profile of project road districts

The overall demographic profile of the project road district indicates the context of project specific road issues. Rajasthan is divided into thirty-two districts, six of which contain the Phase I project roads - Jaipur, Nagaur, Kota, Bundi, Bhilwara and Chittorgarh. The total population of the state is 4.38 crore (1991 census) which is 5.19% of the total population of the country and ranks ninth among all the states. During the decade 1981-1991, the state has registered a growth rate of 2.8% as against 2.35% for the whole country. The state is the abode of different castes and communities and about 150 sub-castes of Hindus are settled here. Tribal populations are scattered in different parts of the state but southern Rajasthan is the homeland of several major tribal groups.

Area and Population

The distribution of population in various districts is closely related to various factors pertaining to climatic conditions, fertility of soils, availability and development of means of transport and communication, growth of trade and other secondary and tertiary activities. In Rajasthan, a close relationship between the size of population and the area of various districts is discernible. The most populous districts like Bharatpur, Jaipur, Alwar, Dholpur, and Kota lie on the eastern fringe of the state, while the least populous districts like Jaisalmer, Barmer, and Bikaner lie in the west. The dispersal of population closely follows the pattern of the annual rainfall regime that exhibits a consistent decreasing trend from east, south-east to west and north west.

TABLE 4-1
DEMOGRAPHIC PROFILE OF PROJECT AFFECTED DISTRICTS IN COMPARISON TO
RAJASTHAN FOR ROAD I JAIPUR - NAGOUR

Demographic Details	Rajasthan State	Jaipur District	Nagaur District
Population	44,005,990	4,722,551	2,144,810
<i>Rural</i>	77.12%	60.47%	84.02%
<i>Urban</i>	22.88%	39.53%	15.98%
Population Density persons / sq. km	129	336	121
Population Growth 1981-91	28.44%	39.69%	31.44%
Sex ratio (Number of females for 1000 Males)	910	942	891
Literacy rate	38.55%	47.88%	31.30%
<i>Male</i>	54.99%	64.83%	49.35%
<i>Female</i>	20.44%	28.69%	13.29%
Scheduled Tribe (ST)	12.44%	11.2%	0.22%
Scheduled Caste (SC)	17.29%	16.2%	19.73%

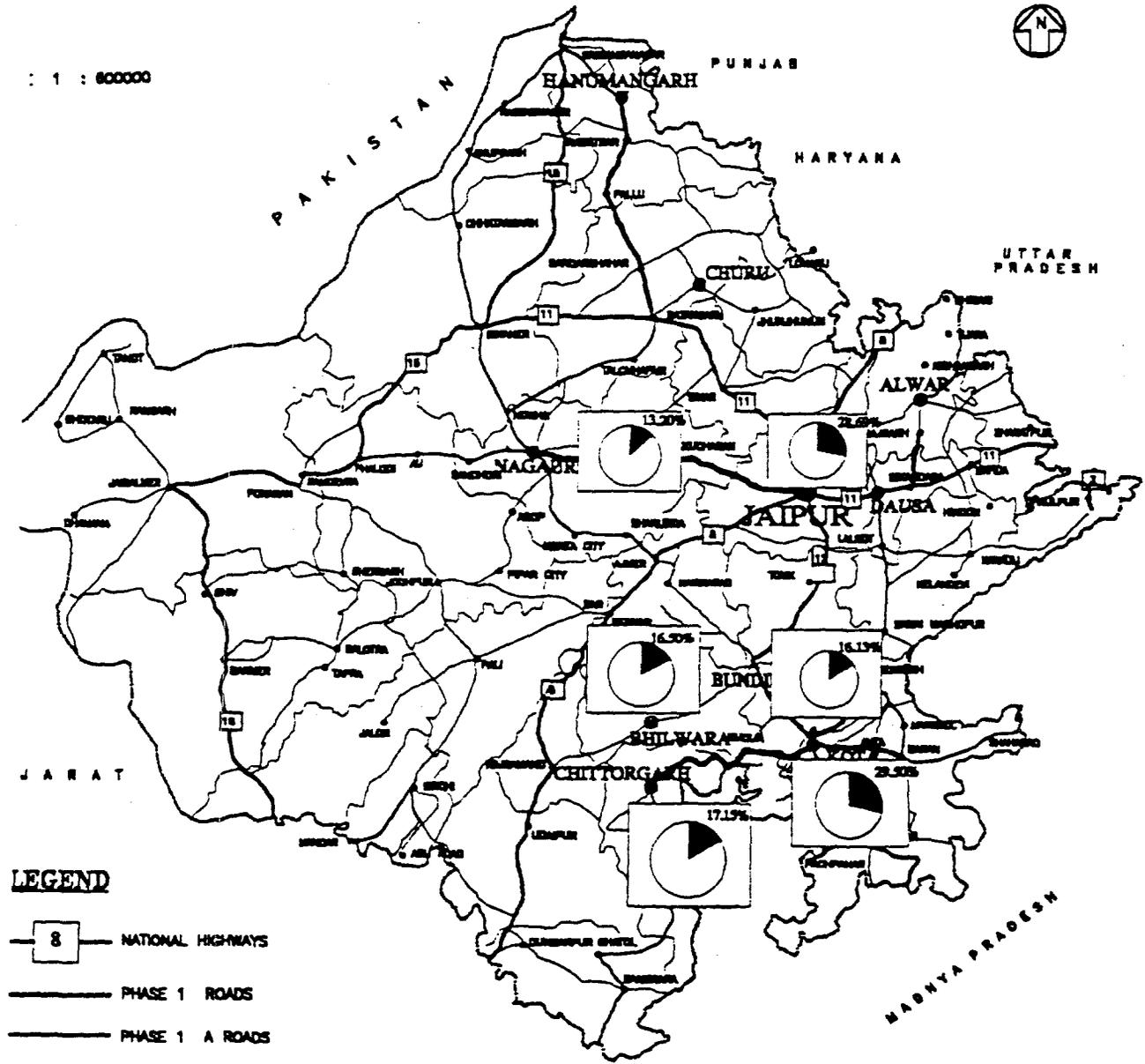
Source: Census of India, 1991

The urban population in Jaipur is high, about 40%, compared to Nagaur which is about 16%. This is because of the presence of state capital in Jaipur District. Population density and population growth/literacy rate is also comparatively high in Jaipur District. Female literacy rate is low for Road I project affected districts although in Jaipur Urban area it is slightly higher.

RAJASTHAN ROAD MAP



1 : 800000



LEGEND

- NATIONAL HIGHWAYS
 - PHASE 1 ROADS
 - PHASE 1 A ROADS
 - STATE BOUNDARY
 - DISTRICT BOUNDARY
 - DISTRICT HEADQUARTER
 - STATE CAPITAL
- | | |
|--|------------|
| | Literate |
| | Illiterate |

CEMAT LITERACY MAP FOR PHASE 1 PROJECT ROAD DISTRICTS

TABLE 4-2
DEMOGRAPHIC PROFILE OF PROJECT AFFECTED DISTRICTS IN COMPARISON TO
RAJASTHAN FOR ROAD 3 KOTA-CHITTORGARH

Demographic details	Rajasthan State	Kota District	Bundi District	Bhilwara District	Chittorgarh District
Population	44,005,990	2,030,851	770,248	1,593,128	1,484,190
Rural	77.12%	63.56%	82.36%	0.46%	84.39%
Urban	22.88%	36.43%	17.64%	19.54%	15.61%
% of population to that of State		4.62	1.75	3.36	3.38
Population Density (persons / sq. km)	129	163	139	152	137
Population Growth	28.44%	32.32%	25.85%	21.58%	20.42%
Sex ratio (Number of females for 1000 Males)	910	887	889	945	950
Literacy rate	38.55%	47.88%	32.75%	31.65%	34.28%
Male	54.99%	64.03%	47.40%	45.95%	50.55%
Female	20.44%	29.50%	16.13%	16.50%	17.15%
Schedule Tribe (ST)	12.44%	14.00%	20.20%	9.02%	20.28%
Schedule Caste (SC)	17.29%	19.00%	18.00%	17.12%	14.63%

Source: Census of India, 1991

The urban population in Kota is high, about 36.43%, compared to other districts because of the Kota urban area which is the industrial capital of Rajasthan. Excepting Kota, in all other district the rural population is more than 80%. In Kota, population density, population growth, literacy rate are high because of the urban influence. Similarly female literacy is comparatively higher.

Link 3 connects the District capitals of Kota and Chittorgarh and carries a substantial portion of the traffic between Chittorgarh and Bundi. Although the ends of the Corridor are urban i.e. Kota and Chittorgarh (Kota's population is over a half million), the settlements between are small, compact units whose economy is based either on agriculture or mining. There are 47 villages located on or immediately adjacent to the ROW between Kota and Chittorgarh. They are generally small, ranging in size from less than 150 persons to slightly over 3,000 residents. Regional population densities range between 100 and 200 persons per square kilometer.

Vulnerable groups

The percentage of Schedule Caste (SC) and Schedule Tribe (ST) population is between 9-20% in the project affected districts. The tribal population in Rajasthan is 12.44% of the total population which puts India in the sixth place in whole of India. The tribes mainly consists of Bhils, Meenas, Garasias and Saharias. They are scattered in different parts of Rajasthan but the southern part of Rajasthan is the homeland of several tribes which have their own ancestral territories and identities.

In the south-eastern zone which comprises of 14 districts including Chittorgarh, Bundi, Bhilwara, Kota and Jaipur, 46.06% of the total tribal population is settled. Bhil, Meena and Saharia are the chief tribes found in this zone.

The western zone is comprised of 12 districts including Nagaur, where 7.14% of the total tribal population resides. This zone mainly comprises of Bhils and Meenas. About 96% tribals belong to rural areas while only 4% of them live in urban areas.

The distribution of Scheduled Caste population is uneven in the various districts and tehsils. The SCs are mainly harijans, chamars, balais, meghwals, regars etc. The highest percentage of SC population is found Karanpur tehsil of Ganganagar district, 41.8% while the lowest percentage is in Kushalgarh tehsil of Banswara district, 2.4%.

SC population data shows that the entire Ganganagar district and some parts of Bikaner, Bharatpur, Jaipur, Sawai Madhopur and Sirohi districts have over 25% of this population. Higher percentages, between 20-25% are noted in Churu, Nagaur, Tonk, Dholpur, and Kota. In the southern districts of Banswara, Dungarpur and Udaipur SC population is less than 5 %.

Economic Activity Profile of the Affected Districts.

Workman participation

In Rajasthan the percentage of working population is very low and does not exceed 35% in most of the districts. Work participation is slightly higher in Bhilwara 38.5%. Jaipur 29.4%. Ajmer 35.8%. Alwar 26.7%. Bharatpur 27.3%, Kota 30.4% and Chittorgarh 37.8%.

Occupational structure

The percentage of main workers to the total population is 31.62% while the marginal workers are 7.25% of the total population.

The non-workers in the state are 61.13% of the total population. Non-workers are those who have never worked in connection with an economic activity any time of the year preceding the enumeration

Main workers

In Rajasthan the percentage of cultivators to the total main workers is 58.8%. The agricultural workers are 10.0% of the total main workers.

Occupation

Agricultural occupation forms the mainstay of employment in the state because of the large proportion of the population live in rural area. Agricultural workers include cultivators and agricultural laborers.

On the national level, cultivators constitute 41.6% of the total workers. In Rajasthan they constitute 58.86% of the total workers. However the state is not counted as an agriculturally developed one, as agricultural workers are more and farm produce is much less. The ratio of cultivators to main workers is less than the national average.

Rajasthan has the highest ratio of cultivators to agricultural workers on a national level, which indicates that the proportion of landless labor is the lowest in the state.

The tables below indicate economic activity in the project district area in comparison to State figures.

TABLE 4-3
ECONOMIC ACTIVITY PROFILE OF PROJECT AFFECTED DISTRICTS ON ROAD
1 JAIPUR-NAGOUR

Economic Activity Profile Details	Rajasthan State (%)	Jaipur District (%)	Nagaur District (%)
Farmers	58.81	45.04	68.46
Male	56.22	40.23	62.49
Female	69.34	69.02	84.60
Agricultural labours	10.00	5.57	8.10
Male	7.99	4.95	7.21
Female	18.23	9.21	10.50
Workers involved in Livestock forestry fishing, hunting and plantations orchards and allied activities	1.80	1.38	1.05
Male	1.92	1.64	1.17
Female	1.34	1.33	0.65
Mining and Quarrying Workers	1.03	0.44	0.92
Male	1.14	0.50	1.20
Female	6.56	0.26	0.18
Workers involved in manufacturing processing servicing and repairs in house hold industry	2.00	3.26	2.36
Male	2.07	3.35	2.78
Female	1.72	2.86	1.22
Workers involved in manufacturing processing servicing and repairs other than house hold industry	5.45	9.79	3.76
Male	6.37	11.47	4.98
Female	1.66	2.36	0.44
Constructions Workers	2.42	4.05	1.80
Male	2.87	4.70	2.38
Female	0.61	1.19	0.21
Trade and Commerce workers	6.42	10.37	5.11
Male	7.78	12.34	6.90
Female	0.82	1.61	0.29
Workers involved in transport storage and Communications	2.39	4.12	1.71
Male	2.94	4.99	2.33
Female	0.13	0.27	0.03
Workers involved in other services	9.69	14.87	6.75
Male	10.70	15.83	8.56
Female	5.59	10.59	1.88

Source: Census of India, 1991

TABLE 4-4
ECONOMIC ACTIVITY PROFILE OF PROJECT AFFECTED DISTRICTS ON ROAD
3 KOTA-CHITTORGARH

Economic Activity Profile Details	Rajasthan State (%)	Kota District (%)	Bundi District (%)	Bhilwara District (%)	Chittorgarh District (%)
Farmers	58.31	40.84	60.10	65.99	70.06
Male	56.22	41.76	59.77	61.20	66.75
Female	69.34	36.49	60.91	77.53	77.26
Agricultural labours	10.00	16.30	12.43	8.06	9.71
Male	7.99	11.80	9.23	5.90	6.64
Female	18.23	38.10	24.47	13.28	16.37
Workers involved in Livestock forestry fishing, hunting and plantations orchards and allied activities	1.30	2.0	3.33	2.90	1.32
Male	1.92	2.3	3.72	2.99	1.49
Female	1.34	0.8	1.87	2.66	0.97
Mining and Quarrying Workers	1.03	3.0	3.74	1.40	1.33
Male	1.14	3.0	3.30	1.32	1.75
Female	6.56	4.50	3.50	0.38	0.42
Workers involved in manufacturing processing servicing and repairs in house hold industry	2.00	1.20	1.09	1.81	1.5
Male	2.07	1.0	1.16	2.02	16.9
Female	1.72	2.1	0.82	1.22	1.08
Workers involved in manufacturing processing servicing and repairs other than house hold industry	5.45	8.3	4.42	6.31	3.2
Male	6.37	9.2	4.96	8.57	4.44
Female	1.66	4.2	2.38	0.85	0.60
Constructions Workers	2.42	3.2	1.62	1.39	1.50
Male	2.37	3.6	1.90	1.30	2.03
Female	0.61	1.4	0.60	0.38	0.33
Trade and Commerce workers	6.42	8.3	4.53	4.60	4.03
Male	7.78	10.0	5.39	6.30	5.68
Female	0.82	1.7	0.93	0.51	0.45
Workers involved in transport storage and Communications	2.39	3.3	1.60	1.68	1.43
Male	2.94	3.9	2.01	2.35	2.00
Female	0.13	0.3	0.06	0.07	0.09
Workers involved in other services	9.69	12.0	6.91	5.86	5.92
Male	10.70	13.0	7.56	7.00	7.53
Female	5.59	10.0	4.46	3.12	2.43

Source: Census of India, 1991

Kota, as mentioned earlier, is the industrial capital of the State; while Chittorgarh also supports a variety of industrial activities, including fertilizer and cement manufacture, copper and zinc smelting and agricultural produce processing enterprises. Most of the settlements along the Corridor, however, are economically depressed. Rock quarrying supports a very large portion of the working population in the northern half of the Corridor. Active mining operations border

approximately 15 kilometers of the Corridor between Kota and Bijolia. More than 4,400 persons are directly employed in mining in the area (GOI 1991).

Tourism Development Potential.

The tourism potential presented by the area's historic sites, temples and sanctuaries along the alignment is substantial.

Tourism within the wildlife sanctuaries has been recognized as a long range goal with "tremendous tourist potentialities" (Bissa 1996) and tourists are being encouraged to access the sanctuaries from Kota, Bundi, Ajmer, Udaipur and Chittorgarh (Ziddi 1998), all of which have tourist attractions (principally historical sites) and accommodations.

Access at present to the wildlife sanctuaries, temples and historical structures along the Corridor is severely restricted by the condition of the existing highway. Local accommodations are lacking or inadequate and are unlikely to improve until highway conditions improve to a point where demand for these services prompts development of support amenities.

4.7 Contract specific Settlements and Population

Road 1 passes through the districts of Jaipur and Nagaur. The settlements and communities affected on Contract 1 and 2 are given in the table below.

TABLE 4-5
COMMUNITIES AFFECTED ON THE JAIPUR NAGOUR CORRIDOR

District	Communities or Village	Project Affected Households (PAH)	Project Affected Persons (PAP)
Jaipur	GovindPura	10	64
	Kalwar	4	19
	Nayabas	24	155
	Pachar	6	47
	Lalpara	13	89
	Bassi Naga	4	30
	Khejrawas	6	62
	Jobner	59	193
	Bhojpura	38	284
	Pachkodia	46	31
	Manda	12	83
	Bhensiana	46	373
	Bhadwa	67	498
	Total	335	1928

District	Communities or Village	Project Affected Households (PAH)	Project Affected Persons (PAP)
Nagaur	Lunwa	76	559
	Lohrana	28	234
	Nawa	36	239
	Mithri	18	153
	Kuchaman	37	272
	Ruppura	29	234
	Deori	19	145
	Kacholia	5	52
	Safed	7	56
	Asarwa	12	87
	Raithaliya	5	42
	Toshina	21	204
	Kharkhariya	6	54
	Mandupura	31	232
	Kuchariya	30	237
	Kharu	181	1383
	Kasari	8	49
	Sandeela	12	79
	Tarnau	1	7
	Fardod	17	127
	Bugurda	3	25
	Rol	16	120
	Basara	7	128
Chenar	1	5	
Total	606	4723	
Grand Total*	1004	7430	

Source: Socio-Economic Survey

* Details of village Budsu and Barwala need to be incorporated.

Demography.

The total number of households that will be affected due to the project are 1,004 in this corridor. The total number of PAPs in Jaipur-Nagaur corridor are 7,430. The number of families affected are 1309 in Jaipur- Nagaur.

The total population to be impacted from the upgradation of this road according to 1991 Census figures are 3,40,942 persons. This figure, when extrapolated for 1998 at the growth rate figures of 24.82% for Jaipur district and 22.34% for Nagaur districts, gives a total of 4,19,250 persons.

Of this total population the approximate number of potentially affected persons who come within the 20 mts. corridor of impact are 7,108 persons. The PAP's comprise approximately 1.7 % of the total population living in the vicinity of Road 1.

Road 3 passes through the districts of Kota, Bundi, Bhilwara and Chittorgarh. This section comprises of contract 3 and 4.

TABLE 4-6
COMMUNITIES AFFECTED BY THE KOTA-BIJOLIA-CHITTORGARH CORRIDOR

District	Communities or Village	Project Affected Households (PAH)	Project Affected Persons (PAP)
Kota	Subhash Nagar	46	255
	Nanta	3	18
	Total	49	302
Bundi	Dhaneshwar	8	41
	Dabi	76	495
	Parana	59	357
	Budhpura	73	449
	Mataji Ka Naia	9	59
	Deogarh	15	81
	Total	240	1482
Bhilwara	Kama	7	52
	Govindpura	15	90
	Bijolia	61	356
	Kalyanpura	11	60
	Bensal	25	117
	Salavatia	212	1317
	Keshavpura	21	122
	Aroli	178	1081
	Menal	11	74
	Ladpura	27	162
	Total	568	3431
Chittorgarh	Chittoria	12	63
	Samariya	30	170
	Madana	7	10
	Teipur	11	34
	Khera	11	50
	Bichhore	30	300
	Lakshmiपुरा	4	27
	Khaerpura	2	12
	Parsoli	193	1155
	Raigarh	22	135
	Chainpura	2	11
	Gopalpura	2	12
	Meghpura	1	8
	Palka	7	47
	Bassi	258	1574
	Ghosundi	10	70
	Dala Ka Khera	8	38
	Balderkha	15	95
	Hukumpura	5	39
	Piplipahar	1	6
	Gopalnagar	6	39
Sarjana	1	4	
Manpura	2	12	
Total	690	3904	

Source: Socio-Economic Survey

Demography.

The total numbers of households that will be affected due to the project are 1556 in this corridor. The total numbers of Project Affected Persons (PAPs) in this corridor are 9,479. The number of families affected is 2,022 in the Kota-Chittorgarh corridor.

The total population which are to benefit from the upgradation of Road 3 according to 1991 Census figures is an approximate total of 55,449 persons. This figure, extrapolated for 1998 at an average estimated growth rate of 20.79 % for Bundi district, 15.79 % for Bhilwara district and 18.02% for Chittorgarh, is estimated to be 65,571 persons.

Of this total population, the approximate number of potentially affected persons who come within the 20 mts. corridor of impact are 9,479 persons. Thus PAP's comprise about 14.46% of the total beneficiaries, assuming that the population along the road will benefit from the better access.

Of the total potentially affected persons within the 20 mts. Corridor in Phase I roads, i.e., 16,909 persons, approximately 979 (144 households - inclusive of title holders, squatters and indeterminate category) persons are to be displaced.

4.8 Census Verification and Socio-Economic Survey : Results and Discussion

This section attempts to give a description of the demographic and socio-economic characteristics of the PAPs of Phase-I roads.

TABLE 4-7
SOCIO-ECONOMIC CHARACTERISTICS OF PAPS ROAD 1
JAIPUR-NAGAUR

Sl. No.	Particulars	Jaipur-Nagaur Corridor	
1.	Households Affected	1,004	
2.	a) Total number of PAPs	7,430	
	b) Total number of families	1309	
3.	Sex ratio -	1000:904	
	(i) Male % age	52.5	
	(ii) Female % age	47.5	
4.	Social Stratification		
	(a) Religious Group	(%)	
	Hindu	93.3	
	Muslim	6.5	
	Sikh	-	
	Christian	-	
	Jain	0.2	
	Others	-	
	(b) Ethnicity	(%)	
	SC	15.7	
	ST	0.9	
	OBC	38.3	
	Other Caste	45.1	
5.	Occupation	Main (%)	Subsidiary (%)
	Agriculture	44.5	69.7
	AL Expand	0.5	1.7
	Allied Agriculture Activity	1.6	10.3
	Forest Labour	0.1	-
	Govt. Service	6.0	-
	Private service	9.9	1.1
	HH industries	0.4	-
	Trade and business	19.9	2.8
	Professional	4.0	0.6
	Squatter	13.1	13.9
6.	Average Annual Household Income (in Rs.)	27,433	
7.	Average Annual Household Expenditure (in Rs.)	29,631.	
8.	Women Headed Households	1.4	
9.	Land holding	(%)	
	Landless	5.4	
	Marginal Farmer	29.3	
	Small Farmer	12.9	
	Medium Farmer	31.7	
	Large Farmer	20.7	
10.	Below Poverty line (BPL) families (in %)	10.6	

Source: Socio Economic Survey

Sex Ratio. The sex ratio in the Jaipur- nagaur corridor is 1000: 904.

Religious Groups. Majority of the PAPs are Hindus accounting for 93.3% in Jaipur-Nagaur corridor. Muslim population Jaipur-Nagaur was found to be (6.5%). The Christians and Jains are almost negligible.

Language and Ethnic Groups: Local Marwari dialect is spoken all over the study area although Hindi is spoken and understood every where. Among the caste categories, Other Backward Castes (OBCs) are in majority followed by higher caste in both the corridors. Scheduled Castes are more than Scheduled Tribes. Tribal population along Jaipur-Nagaur corridor is less than 1%.

Literacy. Approximately 86% of the total PAPs surveyed in Jaipur-Nagaur are literate. However, further analysis shows that of the majority of the literate persons are educated upto school level. Significant proportion of PAPs are just literate due to their ability to read simple sentences and sign. The female literacy rate shows that 43% of females in Jaipur-Nagaur are literate.

The literacy rate among the SCs is high (66%) as compared to STs (17%) in Jaipur - Nagaur.

Age Group Classification. The age classification shows that in both the project corridors more than half the PAPs are in the economically productive age group of 15 to 59 years. Approximately one-fifth of the total PAPs are in the school going age group of 6 to 14 years. Less than one tenth of the total PAPs are old and retired.

Economy. The economic indicators or parameter considered during the survey were occupational structure, usual activity, average annual household income, quality of life, land tenure.

Usual Activity. As per Census of India, a person can be classified into different categories based on kind of activity the person carried out. Usual Activity helps in distinguishing main and marginal workers depending upon the number of days the person is employed. The data eventually helps in identifying alternate economic rehabilitation schemes. Although the age group classification shows that more than half of the population is in the economically productive age group, the usual activity classification shows that only 26% are in this group of the total PAPs surveyed in Jaipur-Nagaur corridor.

Less than one percent of the total PAPs were found to be in non-workers category, but this certainly does not mean that area is economically prosperous. In the rural scenario, some kind of employment is always available, but that may not be sustainable over a long period of time.

More than one-fifth of the PAPs surveyed are engaged in household activities and another one fifth come under the category of students. Rest of the PAPs account for old and retired people, children below the age of six years i.e., non-school going age, handicapped and children in the age group of 6-14 years but not attending schools.

Occupation. In order to facilitate the development of income restoration schemes, occupation has been divided into two categories: main and subsidiary.

For majority of the PAPs surveyed agriculture seems to be the main occupation in Jaipur-Nagaur (45% of the total PAPs) followed by trade and business where, approximately 20% of the PAPs in Jaipur-Nagaur are engaged in this occupation. Squatters and encroacher (commercial establishments) account for thirteen percent on the Jaipur-Nagaur corridor. Other main occupations

are agriculture labor (AL) non-agriculture labor (NAL), Government and Private services, self employment, etc.

Similar to the main occupation, agriculture is followed by the majority of the PAPs as a subsidiary occupation in both Jaipur - Nagaur (70% of total PAPs) corridor, followed by allied agriculture activities such as diary, poultry, sheep rearing, etc. One tenth of the total PAPs in the corridor are following allied agriculture activity as subsidiary occupation. Three percent of the total PAPs follow trade and business as subsidiary occupation in Jaipur- Nagaur corridor. Other subsidiary activities are AL, private service in form of helping hands in commercial establishments, HH industries, etc

Nearly 14% of total PAPs are squatters in Jaipur - Nagaur.

Land Tenure. Three kinds of land were encountered during the survey of phase I project corridors viz.

- Private land (agriculture, homestead)
- Government land (revenue, forest, military)
- Community land

As the land holdings are small and yield per acre is also low, government land has been encroached upon and cultivated in order to supplement the household income.

Land holding Categories. In this corridor approximately 42 percent of the total households holding agriculture land fall under the category of either small or marginal farmers and another 5 percent are landless who work as agriculture labor.

Women Headed Households. Not many households headed by women were found in the project corridors surveyed. Only 1.4% of the total households are headed by women.

Homeless Population. During the socio-economic and census survey it was found that all PAPs surveyed had some kind of housing facility, either as an owner or a tenant.

Average Annual Household Income and Expenditure. The average annual household income in Jaipur-Nagaur was found to be Rs. 27,433. The expenditure figure is higher than income. The reason being that the PAP always tends to downplay the income and enhances the expenditure in order to gain more compensation. Moreover, there are some hidden income in rural areas, which cannot be translated into monetary terms.

The average annual expenditure in Jaipur - Nagaur corridor was found to be Rs. 29,631.

Analysis of Below Poverty Line (BPL) families was also carried out considering annual income to be below Rs.24,000. In this corridor, one-tenth of the total households surveyed were found to be in the category of BPL families.

TABLE 4-8
SOCIO-ECONOMIC CHARACTERISTICS OF PAPS ON ROAD 3
KOTA-CHITTORGARH

Sl. No.	Particulars	Kota-Bijolia -Chittorgarh Corridor	
1.	Households Affected	1556	
2.	a) Total number of PAPS	9479	
	b) Total number of families	2022	
3.	Sex ratio -	1000:923	
	(i) Male % age	52	
	(ii) Female % age	48	
4.	Social Stratification		
	(a) Religious Group	(%)	
	Hindu	87.8	
	Muslim	9.1	
	Sikh	-	
	Christian	0.1	
	Jain	2.1	
	Others	0.9	
	(b) Ethnicity	(%)	
	SC	21.8	
	ST	17.0	
	OBC	36.2	
	Other Caste	25.0	
5.	Occupation	Main (%)	Subsidiary (%)
	Agriculture	37.0	67.7
	AL Expand	1.1	4.8
	Allied Agriculture Activity	1.9	10.3
	Forest Labour	0.2	0.5
	Govt. Service	3.0	0.9
	Private service	9.6	0.4
	HH industries	0.5	1.6
	Trade and business	29.3	0.5
	Professional	3.7	2.3
	Squatter	13.8	11.0
6.	Average Annual Household Income (in Rs.)	39,632	
7.	Average Annual Household Expenditure (in Rs.)	39,833	
8.	Women Headed Households	1.8	
9.	Land holding	(%)	
	Landless	13.3	
	Marginal Farmer	73.4	
	Small Farmer	8.3	
	Medium Farmer	4.3	
	Large Farmer	0.7	
10.	Below Poverty line (BPL) families (in %)	12.8	

(Source: Socio-Economic Survey)

Sex Ratio. The sex ratio in Kota-Chittorgarh corridor is 1000:903.

Religious Groups. Majority of the PAPs are Hindus accounting for 87.8% in Kota-Chittorgarh. However, Muslim population was found to be (9.1%) in Kota-Chittorgarh. The Christians and Jains are almost negligible.

Language and Ethnic Groups: Local Marwari dialect is spoken all over the study area although Hindi is spoken and understood every where. Among the caste categories Other Backward Castes (OBCs) are in majority as in Jaipur-Nagaur corridor. One fourth of the population belongs to general category. Scheduled Castes population (22%) are more than Scheduled Tribes (17%). Comparing the two corridors, tribal population was found to be higher in Kota-Chittorgarh corridor.

Literacy. Approximately 89% of the total PAPs surveyed in Kota-Chittorgarh are literate. However, further analysis shows that of the majority of the literate persons are educated upto school level. Significant proportion of PAPs are just literate due to their ability to read simple sentences and sign. The female literacy shows that 59% of females in Kota-Chittorgarh are literate.

The literacy rate among the SCs is high (65%) as compared to STs (21%) in Kota-Chittorgarh.

Age Group Classification. The age classification shows that in both the project corridors more than half the PAPs are in the economically productive age group of 15 to 59 years. Approximately one-fifth of the total PAPs are in the school going age group of 6 to 14 years. Less than one tenth of the total PAPs are old and retired.

Economy. The economic indicators or parameter considered during the survey were occupational structure, usual activity, average annual household income, quality of life, land tenure.

Usual Activity. Although the age group classification shows that more than half of the population is in the economically productive age, group the usual activity classification shows that only 33% of the total PAPs surveyed in Kota-Chittorgarh corridor come under the workers category.

Less than one percent of the total PAPs were found to be in non-workers category, but this certainly does not mean that area is economically prosperous. In the rural scenario, some kind of employment is always available, but that may not be sustainable over a long period of time.

More than one fifth of the PAPs surveyed are engaged in household activities and another one-fifth come under the category of students. Rest of the PAPs account for old and retired people, children below the age of six years i.e., non-school going age, handicapped and children in the age group of 6-14 years but not attending schools.

Occupation. In order to facilitate the development of income restoration schemes, occupation has been divided into two categories: main and subsidiary.

For majority of the PAPs surveyed agriculture seems to be the main occupation in Kota-Chittorgarh (37% of the total PAPs) followed by trade and business where, approximately 30% of the PAPs in Kota-Chittorgarh are engaged in this occupation. Squatters and encroacher (commercial establishment) accounts for 14% Kota-Chittorgarh corridor. Other main occupations are agriculture labour (AL) non agriculture labour (NAL), Government and Private services, self employment, etc.

Similar to the main occupation, agriculture is followed by the majority of the PAPs as a subsidiary occupation in both Kota-Chittorgarh (68% of total PAPs) corridor, followed by allied agriculture activities such as diary, poultry, sheep rearing, etc. One tenth of the total PAPs in the corridor are following allied agriculture activity as subsidiary occupation.

Nearly 11% of total PAPs are squatters in Kota-Chittorgarh.

Land Tenure. Three kinds of land were encountered during the survey of Phase-I project corridors, viz,

- Private land (agriculture, homestead)
- Government land (revenue, forest, military)
- Community land

As the land holdings are small and yield per acre is also low, government land has been encroached upon and cultivated in order to supplement the household income.

Land holding Categories. In this corridor approximately four-fifth of the total households holding agriculture land fall under the category of either small or marginal farmers and another 13 percent comes under the category of landless laborers.

Women Headed Households. Not many households headed by women were found in the project corridors surveyed. Only 1.7% of the total households are headed by women.

Homeless Population. During the socio-economic and census survey it was found that all PAPs surveyed had some kind of housing facility, either as an owner or a tenant.

Average Annual Household Income and Expenditure. The average annual household income in Kota-Chittorgarh was found to be Rs. 39,632..

The average annual expenditure in Kota-Chittorgarh corridor was found to be Rs. 39, 833.

Analysis of Below Poverty Line (BPL) families was also carried out considering annual income to be below Rs.24,000. In Kota-Chittorgarh almost 13% were found below the poverty line.

5. RESETTLEMENT POLICIES AND ENTITLEMENTS FRAMEWORK

5.1 Background

The resettlement policy for the project is prepared according to the principles the World Bank's Operational Directive (O.D. 4.30) for Involuntary Resettlement, the draft R&R policy of the Government of Rajasthan, other state R&R policies, and the project-level policies of several other World Bank-assisted State Highways projects. In particular,

- * Wherever possible, displacement will be reduced on or avoided altogether by sensitive design of civil works (e.g. alternative designs or modification to the design).
- * Where displacement is unavoidable, those displaced will have their living standard improved.
- * They will be located as a single unit among the peer groups or will be assisted to integrate into their new community. Particular attention will be paid to the needs of the most vulnerable groups to be resettled.
- * PAPs will be compensated, at replacement cost, for assets lost. Adequate social and physical infrastructure will be provided.
- * PAPs and the host community would be encouraged to participate in the design and the implementation of RAP.

5.2 Project Impacts and Entitlements

5.2.1 Impacts Addressed in Project RAP

The social impact mitigation and resettlement policies governing the project address development-induced impacts caused by the project, and are not limited to physical relocation. The RAP addresses the direct and indirect impacts of project construction and operation on affected persons, families, households, communities, and groups. It provides mitigation for social and economic losses expected as a result of project action.

The most direct and immediate impacts are those associated with project construction. These impacts are induced by land acquisition and subsequent land clearance required establishing, extending, or re-establishing public ROW. They include loss of land, shelter, and other assets within the project's corridor of impact; displacement of existing land uses; and resettlement or relocation of roadside residents, businesses, and public facilities. Less direct and immediate are project impacts on roadside communities and impacts of the improved highways once they are completed and in operation.

Mitigation is provided through compensation and assistance to project-affected persons, families, households, and groups. These social units are entitled to compensation and assistance on the basis of Indian law and the policy framework adopted by the project.

The RAP delivers a comprehensive package of compensation and assistance to entitled persons, families, households, and groups suffering losses as a result of the project. It provides mitigation for:

- loss of assets, including land and house or work place;
- loss of livelihood or income opportunities; and
- collective impacts on groups, such as loss of community assets, common property resources, and others.

Loss of assets and livelihood are impact categories that represent direct project impacts on an identified population. The people likely to be affected have been or will be surveyed and registered, and project monitoring and evaluation will compare long-term impact against baseline socio-economic data.

Collective impacts on groups represent indirect impacts, where group members need not be individually registered. Group-oriented gains and losses in this category are less quantifiable in terms of impacts on the individual. Mitigation and support mechanisms are collectively oriented, and the monitoring of these efforts will examine the impact and benefits for the groups involved.

5.2.2 RAP Compensation and Assistance Eligibility

Under the resettlement policy adopted for the project, several categories of project-affected persons are recognized with varying eligibility for the compensation and assistance package provided by the RAP. The three major categories of project-affected persons addressed in the project entitlement framework are:

- Project Affected Households (PAHs)
- Project-Affected Persons (PAPs)
- Project Affected Groups (PAGs)

Each of these categories is briefly defined and discussed below. Several other key terms used in the project entitlement framework are also defined.

Project Affected Households (PAHs) are defined as groups of people living under one roof and maintaining one kitchen within the project's impact corridor. Often, project affected households contain more than one family. Most RAP entitlements are provided at the household level; however, because eligibility for some GOI and GOR programs provided as entitlements is on a family basis, the RAP also recognizes a **Project-Affected Families (PAF)** unit. Project Affected Families, as per GOR draft Resettlement provisions are defined to include *karta*, spouse (husband/wife), minor children, and others dependent on the family head; every major son (above 21 years of age) irrespective of marital status; every major unmarried daughter (above 21 years of age); Divorced, separated, widow and deserted woman, having no source of livelihood; physically disabled and mentally handicapped person, irrespective of age and sex; minor orphans

who have lost their parents and are independent; and share croppers/holders if recorded as such in the record of rights (ROR).

Project-Affected Persons (PAPs) are persons who have economic interests or residence within the project impact corridor and who may be adversely impacted directly or indirectly by the project. Project-affected persons include those displaced, those losing commercial or residential structures in whole or part, those losing agricultural land or homesteads in whole or part, and those losing income sources as a result of project action.

Project Affected Groups (PAGs) are groups or communities outside the immediate impact corridor that may be affected by the project with a focus on the more vulnerable or weaker groups in society.

Other important terms and categories employed in the RAP related to entitlements include the following:

Entitled Persons (EPs) are all those PAPs who qualify for or are eligible and entitled to assistance/compensation since they will be resettled or otherwise negatively impacted by the project. "EPs" also include project-affected families, households, and groups.

Vulnerable groups include PAPs falling into the following categories: Scheduled Tribes, Scheduled Castes, Other Backward Castes, women-headed households, handicapped/disabled, landless and Below Poverty Line families.

Compensation refers to the amounts paid to the private property owner under Land Acquisition Act. Compensation is paid when the government utilizes its power of eminent domain over an expropriated party.

Assistance refers to the support provided to PAPs in the form of grants, assets, services, etc. in order to restore/improve the standard of living and reduce the negative impacts of the project.

Squatters are landless people settled on public ROW for residential or commercial purposes. As a rule, they are not entitled to compensation, but are eligible for assistance to mitigate adverse impacts of the project.

Encroachers are persons holding land adjacent to the ROW using it as spill-over space for commercial, or agricultural purposes. Like squatters, encroachers are not entitled to compensation, but are also eligible for assistance to mitigate adverse project impacts.

5.2.3 Summary Entitlement Matrix

The components of the RAP compensation and assistance package are the set of GOR- or project-provided entitlements that those affected by the project are eligible to receive. A matrix of entitlements is described when compensation and assistance actions for categories of loss are arrayed against eligibility criteria.

These compensation and assistance actions are summarized in Table 5.1 which shows the entitlement matrix that will be implemented in the RAP and indicates PAP eligibility for associated support. Classes of entitlements provided by the RAP are described and discussed in Section 5.3 that follows.

TABLE 5-1
RSHP Summary Entitlement Matrix

RAJASTHAN STATE HIGHWAYS PROJECT									
Social Impacts and Resettlement: Summary Entitlement Matrix									
Impacts and assistance criteria	TYPES OF PROJECT-AFFECTED PERSONS								
	Outside Public Right of Way (Land Acquisition)				Inside Public Right of Way				
	Title Holders		Tenants		Squatters & Encroachers		Tenants		
	V	NV	V	NV	V	NV	V	NV	
LOSS OF LAND AND OTHER ASSETS									
Within Corridor of Impact									
Unit of Entitlement: Project-affected Household (PAH) Project-affected Family (PAF)									
Consultation, counseling regarding alternatives, and assistance in identifying new sites and opportunities	YES	YES	YES	YES	YES	YES	YES	YES	YES
Compensation for land at replacement cost, free of fees or other charges	YES	YES	NO	NO	NO	NO	NO	NO	NO
Advance notice to harvest non-perennial crops, or compensation for lost standing crop	YES	YES	YES	YES	YES	YES	YES	YES	YES
Compensation for perennial crops and trees, calculated as annual net product value multiplied by number of years required for new crop to start producing	YES	YES	YES	YES	YES	YES	YES	YES	YES
Replacement or compensation for structures and other non-land assets	YES	YES	NO	NO	YES	YES	NO	NO	NO
Rights to salvage materials from existing structures, trees, and other assets	YES	YES	NO	NO	YES	YES	NO	NO	NO
Assistance in accessing housing schemes, or other targeted support to assist poor and vulnerable in reestablishing their homes	YES	NO	NO	NO	YES	NO	NO	NO	NO
Option of housing in resettlement sites in cases of cluster relocation	YES	YES	NO	NO	YES	YES	NO	NO	NO
Shifting assistance and transition stipends	YES	YES	YES	YES	YES	YES	YES	YES	YES

LOST OR DIMINISHED LIVELIHOOD Within Corridor of Impact	Unit of Entitlement: Project-affected Person (PAP) Adult Individuals (#Families)								
	YES	YES	YES	YES	YES	YES	YES	YES	YES
Rehabilitation and assistance for lost or diminished livelihood	YES	YES	YES	YES	YES	YES	YES	YES	YES
Additional support mechanisms for vulnerable groups in reestablishing livelihood	YES	YES	YES	YES	YES	YES	YES	YES	YES
Employment opportunities in connection with project	YES	YES	YES	YES	YES	YES	YES	YES	YES
Any other impacts not yet identified, whether loss of assets or livelihood, shall be documented and mitigated based on the principles agreed upon in the RSHP social impacts and resettlement policy framework.	The specific nature of the entitlements shall be agreed upon between the Government of Rajasthan and the World Bank								

INDIRECT, GROUP-ORIENTED IMPACTS Vicinity of the Road Corridor	Unit of Entitlement: Project-Affected Group (PAG)								
	YES	YES	YES	YES	YES	YES	YES	YES	YES
3 Restoration and improvement of community assets such as public water pumps, sanitation and drainage facilities, schools, temples and shrines, and cultural heritage resources.									
Restoration and improvement of common property resources, such as access to water, fodder, and fuelwood and landscaping of community common areas in urban environments.									
Provision for women's needs, particularly related to location of sources of water and fuelwood.									
Provision of safe space and access for business purposes, local transport, and public use.									
Safety measures for pedestrians, particularly children, and other non-motorized transport.									
Provision of roadside areas, midways, and other amenities for highway travelers.									
Improved access and opportunities for disabled people									
Provision for AIDS and Sexually Transmitted Disease (STD) awareness, prevention, and treatment.									
Provision of targeted assistance to tribal and ethnic groups including advocacy and legal assistance supporting tenure security.									
Provision of enhanced emergency response and accident-induced trauma treatment for road-users and roadside residents.									
Provision of limited assistance to migrant labor camps and impacted host communities during road construction									
Any other group-oriented impacts not yet identified, shall be documented and mitigated based on the principles agreed upon in the RSHP social impacts and resettlement policy. The specific nature of the entitlements shall be agreed upon between the Government of Rajasthan and the World Bank.									

Note: V- Vulnerable ; NV - Non Vulnerable

5.3 Support Principles for Categories of Impacts

The RAP provides entitlements and assistance actions responding to the major social and economic impacts and losses expected as a result of project action. As summarized in Table 5.1 above, three major classes of entitlements are defined in the Entitlement Framework. These entitlements and the support principles governing them are introduced below. Specific entitlements are further detailed in Table 5.2.

5.3.1 Entitlements for Project-Affected Households

The project will cause people to lose productive land, house plots and business locations, and other immovable assets such as dwellings, commercial structures, wells, and trees. The RAP addresses this category of loss through several compensation and assistance actions and support mechanisms that those adversely affected by the project are entitled to receive. These entitlements cover loss of land, structures and other assets, such as crops.

The entitlement unit for such assistance is the family unit or project-affected household (PAH), sometimes comprised of more than one project-affected family (PAF). If a household asset is to be taken, the family, as a collective unit, will be "entitled". Compensation will be given to the head of the household and, when new land or structures are given, both the husband and wife's names will be placed on the title.

The project will compensate and replace lost assets at their replacement value, defined as the amount required for the affected household to replace the lost assets through purchase in the open market.

Entitlements provided to project-affected households also include a shifting allowance, rights to salvage building materials and counseling on alternative assistance.

The starting point for these entitlements is the Land Acquisition Act under which title-holders are awarded compensation for property, structures and other assets, such as crops, surrendered to the project. The Act requires compensation to be at market value. Existing records of land transaction and other official documents pertaining to the value of various assets are not reliable as indicators of real value. In recognition of this, the Indian Land Acquisition Act stipulates that additional compensation known as solatium is to be paid on top of the registered value of land and other assets. This may still be insufficient to reach real replacement cost.

Where the legal compensation, paid by the government, may be lower than the market value, the project will objectively establish the real replacement cost of assets to be required. This will be done by conducting Land Market Value Surveys along project alignments and by compiling and comparing other available sources of information.

For Phase-1 of the project, the PCC has conducted a market value assessment to determine whether additional assistance will be necessary in order to reach real market value. In Phase-2,

the PCC, another independent consulting firm or a research institution will assess a true market value. Consultation with the Revenue Department will also take place.

Those not eligible for legal compensation for loss of their structures and assets will be assisted by other support mechanisms, such as existing government housing schemes and other project assistance.

When displacement results in loss of home and shelter, RAP provisions assure that every effort will be made by the project to ensure that new housing is available before people are required to relocate. The RAP approach will minimize relocation distance and the disruption of local support networks by assisting households in moving back and away from the Corridor of Impact to the maximum extent possible.

In the event that large population clusters are affected by the project and must be relocated, the project will provide new housing in a resettlement site approved by the affected people, with adequate infrastructure and utilities. This will be provided as an option and households may still elect self-relocation. In such cases, compensation and other support will be provided to self-relocating households and project will assist and facilitate their resettlement process.

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.

The RAP approach to squatters and encroachers recognizes the need to maintain clear road corridors and discourage speculative encroachments while also assisting poor people whose assets and livelihoods may be lost or disrupted by the project. For purposes of this project, squatters are defined as residential/business units squatting entirely on the public ROW; whereas encroachers are defined as adjacent properties/uses spilling over into the ROW.

Early census survey will identify all potentially affected people, whether inside the ROW or outside it in cases of realignment or ROW extension. A cut-off date will be determined for each of the project roads. Opportunistic encroachments and squatting taking place after this date will not be considered eligible for support under this project. Squatters will be assisted in re-establishing their homes and businesses elsewhere. Encroachers, as distinct from squatters, will generally not be eligible for assistance. Targeted support will be given to extremely vulnerable groups in this category for improving livelihood.

The RAP provides nine general compensation and assistance actions for the PAH category to cover loss of land and other assets:

1. Consultation, counseling regarding alternatives, and assistance in identifying new sites and opportunities.

PAHs are eligible to receive consultation and counseling with regard to their entitlements and compensation. Additionally they will be shown any alternatives available for relocation of their

business or households. They will receive assistance in identifying new sites for relocation and will be guided on what opportunities are available to them for vocational and training opportunities.

2. Compensation for land at replacement cost, plus allowances for fees or other charges.

Only titleholders are eligible for compensation under the Land Acquisition Act. Some titleholders may be members of vulnerable groups and will thus be eligible for other support mechanisms. Squatters, encroachers and tenants are not eligible for compensation for land. All fees, taxes and other charges incurred in the relocation and re-establishment of Entitled Households (EHs) will be met by the project.

3. Advance notice to harvest non-perennial crops, or compensation for lost standing crops.

PAHs will be informed that the land on which their crops are planted will be used by the project in the near future and that they must harvest their crops in time. If standing crops cannot be harvested, EHs will be compensated for the loss.

4. Compensation for perennial crops and trees

Only titleholders and certain tenants are eligible for compensation for perennial crops. The value will be calculated by multiplying the annual production value by the number of productive years remaining. (check GOR)

5. Replacement or compensation for structures or other non-land assets.

EHs are eligible for replacement or compensation for structures and other non-land-related assets that are impacted by the project.

6. Right to salvage materials from existing structures

EHs are eligible to salvage material from their existing structures and sites, with the possible exception of trees.

7. Inclusion in existing government housing schemes.

Those EHs belonging to a vulnerable group, as defined by the project, are eligible for the existing housing schemes for the weaker sections of society. Vulnerable groups are defined as Scheduled Tribes and other disadvantaged ethnic minorities, Scheduled Castes, Other Backward Castes, Women-headed Households, Landless Agricultural Workers, the disabled, and any EH with an average household income of less than Rs. 2000/month.

8. *Option of moving to resettlement sites, or clusters, incorporating needs for shelter and livelihood.*

EHS will be given the option of voluntary relocation to a site they have chosen themselves wherever possible or a site chosen by the RAP implementation team. Whichever option the EH chooses, it will receive support required to resettle and rehabilitate the household.

9. *Shifting assistance.*

EHS are entitled to a shifting allowance to move their belongings. Replacement housing must be available before people are made to move. If relocation sites are not ready for them, at the end of the two month notification period, the project must make temporary arrangements until their permanent structures are ready.

5.3.2 Entitlements for Project-Affected Persons

In some cases, the displacement caused by the project will lead to loss of livelihood or income opportunities. The RAP addresses this category of loss through several actions and support mechanisms that individuals and families affected by the project are entitled to receive.

Assistance will be given to the affected population to reestablish their livelihood and income, and to compensate for temporary losses. The basic unit of entitlement eligible for support in such cases will be the adult individuals, both men and women, as Project-Affected Persons (PAPs). All adult members of households affected in this way will be eligible for this support and, for this reason, there may be more than one person eligible in each household. In some cases, this assistance will be provided through government programs that provide support on a family basis.

A typical common loss will be displacement of a business structure such as a small roadside shop. The project will assist such businesses in relocating, and in continuing their preferred occupation without loss of customer base.

Where project impacts result in people being unable to continue occupations, the project will provide support and assistance through alternative employment strategies. 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.

Additional support mechanisms will be made available to vulnerable groups to re-establish or enhance their livelihood through existing government employment programs.

The RAP provides three general assistance actions for loss of income and livelihood to entitled persons (EPs):

1. Rehabilitation and assistance for lost or diminished livelihood.

EPs are eligible for help to improve or, at least, regain their original levels of economic well being and income levels. Vulnerable groups will receive the most-targeted support. All EPs will be counseled on options to improve their economic circumstances.

2. Additional support mechanisms for vulnerable groups in re-establishing or enhancing livelihood.

Members of vulnerable groups who are EPs will receive targeted support from the RAP implementation unit. Counseling on alternatives, guidance on appropriate training programs and advice on marketing new products will be given.

3. Employment opportunities connected with the project, to the extent possible.

Local people whose livelihood is impacted by the project will be offered jobs and training associated with the project where possible. Such employment may exceed the entitlements necessary to restore EPs livelihood and provide an additional opportunity. Project-associated employment will be targeted to vulnerable groups, although not limited to them. Certain of the collective entitlements may require labor for construction, operation and maintenance. These jobs will be offered to EPs and PAPs before other local people. A clause will be incorporated in project construction documents requiring contractors to give a small percent of the employment opportunities to eligible PAPs and local people when they possess necessary qualifications and ability.

5.3.3 Entitlements for Project-Affected Groups

In some cases, in addition to direct losses of assets or livelihood within the impact corridor, the project will produce negative impacts on the population living nearby improved roads. The RAP addresses this category of impacts and losses through several assistance actions and support mechanisms that groups affected by the project are entitled to receive.

The project will produce many indirect impacts on the population living in the vicinity of the road corridor. While most of these impacts are positive, some are negative and will be mitigated. These include impacts on traffic safety, access to water and sanitation, access to common property resources, and impacts on non-motorized transport such as pedestrians and animal carts. Increased long-distance traffic has been shown to lead to increases in roadside prostitution, AIDS and other Sexually Transmitted Diseases.

Similarly, community-owned assets such as schools and temples may be affected by the project and the project may result in loss of common property resources. Through designs, provision of infrastructure, and other support mechanisms, the project will replace lost assets and minimize negative impacts on groups. Group-oriented support will be particularly targeted at more

vulnerable and weaker groups. Even where there is no discernible negative impact, the project will seek to benefit the local population, for example by providing bus stops and landscaping enhancements where none existed previously.

Where the project affects tribal groups living in the vicinity of the road corridor, the World Bank's Operational Directive 4.20 on Indigenous Peoples, GOI policies, and provisions of the Draft GOR resettlement and rehabilitation policy apply. Special attention in the RAP is directed to developing assistance and support mechanisms that are culturally appropriate to the affected tribal groups.

The RAP provides eleven compensation and assistance actions for project-affected groups (PAGs):

1. *Restoration and improvement of community assets such as public water pumps, sanitation and drainage facilities, schools, temples and shrines, and cultural heritage resources.*
2. *Restoration and improvement of common property resources, such as access to water, fodder, and fuelwood; and landscaping of community common areas in urban environments.*
3. *Provision for women's needs, particularly related to location of sources of water and firewood.*
4. *Provision of safe space and access for business purposes, local transport, and public use.*
5. *Safety measures for pedestrians, particularly children, and other non-motorized transport.*
6. *Provision of roadside areas, midways, and other amenities for highway travelers.*
7. *Improved access and opportunities for disabled people.*
8. *Provision of programs for AIDS and Sexually Transmitted Disease (STD) awareness, prevention, and treatment.*
9. *Provision of targeted assistance to tribal and ethnic groups including advocacy and legal assistance supporting tenure security.*
10. *Provision of enhanced emergency response and accident-induced trauma treatment for road-users and roadside residents.*
11. *Provision of limited assistance to migrant labor camps and impacted host communities during road construction.*

Any other group-oriented impacts not yet identified, shall be documented and mitigated based on the principles agreed upon in the RSHP social impacts and resettlement policy. The specific nature of the entitlements shall be agreed upon between the Government of Rajasthan and the World Bank.

5.4 Targeted Support to Vulnerable Groups

Compensation and assistance components of the RAP package will be tailored and targeted to vulnerable groups. PAP census and survey and other studies have identified several groups among the affected population that will be considered as vulnerable, at risk, and likely to be excluded from the normal benefits of growth and development. These groups, including the poor (i.e. below poverty line families (Rs.24,000/year), landless laborers, Scheduled Tribes and Castes, women-headed households, children, the elderly, and the disabled receive special attention in the RAP and will be provided more options and support mechanisms than the non-vulnerable. The issue of options is discussed in the next section.

5.5 Options and Choices

The project will provide options and choices among different entitlements to the affected population. As part of the project consultation and participation mechanisms, people will be informed and consulted about the project and its impacts, and their entitlements and options. The affected population will be counseled so that they are able to make informed choices among the options provided. This will be done particularly in the case of vulnerable group PAPs, who will be encouraged to choose those options of low risk.

Because cash compensation carries a high risk and is normally inadequate in helping poor and vulnerable groups reestablish their lost assets, the project where possible will provide the option of compensation in kind as well as other support mechanisms to those deemed as vulnerable or at risk. Replacement land of equal or better productive value will be offered as an option to those losing substantial amounts of land, or where loss of land threatens the economic viability of the household.

By allowing people to choose among different options, the project will seek to make people active participants in the development process, and to achieve greater acceptance of the project.

5.6 Detailed Project Entitlements

Specific elements of the entitlements provided in the package of compensation and assistance that will be delivered by the project RAP are detailed in Table 5.2 and discussed in the subsections that follow. These discussions parallel the loss categories and impact types introduced above and shown in the Summary Entitlement Matrix. Any impact not falling within any of the categories mentioned will be addressed within the general spirit of the Entitlement Framework.

**TABLE 5.2
DETAILED PROJECT ENTITLEMENTS**

CATEGORIES	TYPE OF LOSS	RAJASTHAN STATE HIGHWAYS PROJECT ENTITLEMENTS
Private Property	A. Agriculture land and other assets	
	Case 1: Residual land is economically unviable	<ul style="list-style-type: none"> • If the residual plots are not viable (i.e., less than 2 acres if irrigated land or less than 4 acres if unirrigated land), there are several options to be given to the entitled household 1. For both vulnerable and non-vulnerable group, compensations for the land will be at replacement value of the land. It will also include a payment of 30% solatium on the market value - payment of 12% interest per annum from the date of notification to the date of award or taking possession. 2. EH may elect to either retain ownership of residual portion and receive compensation, as above, for only the portion acquired for the project or to receive compensation, as above, for the entire plot for which full ownership of residual is not taken by PWD, giving EH usufruct rights thereon, which may be transferred to PWD with notice of six months.
		<ul style="list-style-type: none"> • Maintenance Allowance of Rs.2000 per month for one year. • Assistance in finding suitable alternative land from RAP implementation agencies • All fees, taxes and other incidental charges and damages, as applicable under relevant laws, accrued in relocation and resource reestablishment to be borne by the project • Alternative Economic Rehabilitation Scheme and training for the same if required
	Case 2: Residual land is economically viable	<ul style="list-style-type: none"> • Compensation at replacement value
		<ul style="list-style-type: none"> • Maintenance Allowance of Rs.2000 for 3 months • In case of severance of agricultural land, an additional grant of 10% of the amount paid for land acquisition • All fees, taxes and other incidental charges as applicable under laws, to be borne by the project
	B. Loss of Residential Land/ Structures	
	Case 1: remaining structure unviable	<ul style="list-style-type: none"> • Compensation for lost land/structure at replacement value • If acquisition leaves EH with less than recommended unit and property size for their income group, there are several options to be given to the EHs: <ol style="list-style-type: none"> 1. Compensation at replacement value 2. A house site equal to the area lost or maximum of 25-35 sqm under LIG housing scheme and for BPL family a plot of 15 - 25 sq m under EWS housing scheme, whichever is less 3. House Construction Loan of Rs. 100,000 for LIG scheme and Rs.30,000 for EWS housing scheme. 4. Assistance in accessing housing schemes or other targeted support for vulnerable groups to assist in reestablishing homes.
		<ul style="list-style-type: none"> • Shifting Allowance of Rs.600 • Maintenance Allowance of Rs. 2,000 per month for a year • Rental Assistance of Rs.500 per month for 6 months • Right to salvage materials from the demolished structure • Option of housing in resettlement sites in cases of cluster relocation

CATEGORIES	TYPE OF LOSS	RAJASTHAN STATE HIGHWAYS PROJECT ENTITLEMENTS
	Case 2 : remaining structure viable	<ul style="list-style-type: none"> • Compensation for lost land at replacement value • Compensation for structure at market value or replacement cost • Right to salvage materials from the demolished structure
	Loss of commercial land/structure	
	Case 1 : remaining structure unviable	<ul style="list-style-type: none"> • Compensation for lost land at replacement value • Compensation for structure at replacement cost • Maintenance Allowance of Rs. 2000 for a period of one year • Free of cost shop site equal to the area lost or a maximum of 15 sqmts whichever is less
		<ul style="list-style-type: none"> • Shifting Allowance of Rs.600 • Shop Construction Loan of Rs. 30,000 • Rental Allowance of Rs.500 per month for 6 months.
	Case 2 : remaining structure viable	<ul style="list-style-type: none"> • Compensation for lost land at replacement value • Compensation for lost structure at replacement cost
Tenants	A. Loss of rental accommodation	<ul style="list-style-type: none"> • Shifting Allowance of Rs.600 • Rental Assistance of Rs.500 per month for 3 months • Amount deposited as advance money to landlord will be returned after deducting the same from the landlord • Assistance in finding suitable relocation site.
	B. Loss of rented commercial structure	<ul style="list-style-type: none"> • Same as above.
Livelihood	A. Losing only source of income	<ul style="list-style-type: none"> • A grant equal to 6 months lost income / or to be debit on case to case basis • Alternative Economic Rehabilitation Scheme and training for the same if required.
	B. Non perennial crops	<ul style="list-style-type: none"> • Standing crops be allowed to harvest • If standing crops are lost due to forced relocation prior to harvest, twice the cost of market value of the crops be paid.
	C. Perennial crops	<ul style="list-style-type: none"> • Compensation for perennial crops equal to the capitalised value (i.e., net present value of production of such crops, at a discount of 12% per year)
Illegal use of the ROW	A. Encroachers	<ul style="list-style-type: none"> • Will not be entitled for any compensation for land but will be compensated for the structure and other lost assets at replacement cost. • Encroachers on agriculture land will not be entitled for any compensation for land, but will be given advance notice for harvesting of standing crops. • Right to salvage materials from the demolished structures • Will be assisted, case by case according to household income and existing assets (including ownership of viable plot of land) in cases fulfilling both of the following conditions : a) Not owning the land adjacent to land encroached, and b) Being a member of a vulnerable group
	B. Squatters	<ul style="list-style-type: none"> • Squatters will not be entitled for any compensation for land but will be compensated for the structure and other lost assets at replacement cost. • Where squatters are from vulnerable group, they will be assisted case - by - case. • Shifting Allowance of Rs.600
Loss of other private facilities/assets		<ul style="list-style-type: none"> • Compensation at replacement cost
Loss of Community infra-structure	A. Community Assets	<ul style="list-style-type: none"> • Community assets such as public water pumps/wells, sanitation and drainage facility, schools, temples and shrines are cultural heritage resources will be restored and improved (by means of special protection, relocation, replacement, etc) in consultation with the community.
	B. Common Property/Resources	<ul style="list-style-type: none"> • Common property resources such as access to water, fodder, fuelwood, etc will be restored and improved. Loss of fuelwood for example will be compensated by involving the communities in social forestry schemes, in coordination with the Department of Forest, where ever possible

CATEGORIES	TYPE OF LOSS	RAJASTHAN STATE HIGHWAYS PROJECT ENTITLEMENTS
		<ul style="list-style-type: none"> Landscaping of project affected community common areas in urban environments will be provided where ever possible
	C. Women's Needs	<ul style="list-style-type: none"> Loss of trees will be replaced by compulsory afforestation Women's needs particularly related to location of sources of water and fuelwood, will be provided for through for example provision of additional wells handpumps
	D. Safe Space and Access	<ul style="list-style-type: none"> Safe space and access for business purposes, local transport, and public use will be provided for in project designs through, for example adequate parking, bus stops and lay bys, footpaths and other features
		<ul style="list-style-type: none"> Contract documents require that private and public access is to maintained and disruption minimized during construction. Where unforeseen circumstances result in severe disruption beyond that normally expected and losses can be substantiated, assistance will be considered for business and crop/seed loss.
	E. Pedestrian/Non-Motorized Transport Safety	<ul style="list-style-type: none"> The project will provide for pedestrian safety, particularly for children, through designs incorporating speed control features, signage and other measures; and in urban areas kerbs, footpaths, and crosswalks. In cooperation with other government agencies and NGOs the project will also provide for safety awareness programmes in schools and impacted communities.
		<ul style="list-style-type: none"> The project will provide for non - motorised transport safety through design features such as adequate shoulders and access. In cooperation with other government agencies and NGOs, the project will also provide for safety programmes including the distribution of safety reflectors.
	F. Amenities for Highway Users	<ul style="list-style-type: none"> In coordination with other government agencies and the private sector, the project will include provision of roadside rest areas, midways and other amenities for travellers and other highway users where possible.
	G. Disabled Persons	<ul style="list-style-type: none"> The project will maintain and improve where possible access and opportunities for disabled persons and will include an audit of design and construction phase plans by knowledgeable experts to enhance incorporation of appropriate measures.
	H. Highway-Associated Health Concerns	<ul style="list-style-type: none"> The project design incorporates measures to improve drainage and minimise conditions conducive of transmission of water-related diseases.
		<ul style="list-style-type: none"> The project in cooperation with other government agencies and NGOs will include provisions to enhance awareness, preventions and treatment of sexually transmitted diseases including AIDS that may be associated with highway improvements
	I. Tribal and Ethnic Groups	<ul style="list-style-type: none"> The project will comply with lending agency policy directive on indigenous peoples and in cooperation with other government agencies, NGOs and other will provide measures to enhance project benefits and mitigate project impacts on affected tribal and ethnic groups including roadside communities, nomadic pastoralists, and other itinerants. Advocacy and legal assistance to enhance tenure security, facilitate compensation and maintain community cohesion, where warranted will be provided
	J. Emergency Response/Accidents	<ul style="list-style-type: none"> The project in cooperation with other government agencies, road user groups and impacted communities will include provisions to enhance emergency response capabilities and upgrade treatment facilities for victims of highway accidents
	K. Labor Camps/Host Communities	<ul style="list-style-type: none"> The project will include provisions to enhance health, safety, and work condition of migrant labour groups involved in project construction and to promote positive impacts on impacted host communities
		<ul style="list-style-type: none"> Where resettlement colonies of more than 200 persons or greater than 10% of the receiving communities population are necessary, the project will provide appropriate infrastructure and other assistance in consultation with the impacted host communities

CATEGORIES	TYPE OF LOSS	RAJASTHAN STATE HIGHWAYS PROJECT ENTITLEMENTS
		The project will include provision of employment opportunities in the project for local residents, particularly those project affected persons from vulnerable groups
	L. Other Community/Group Losses	Any other group oriented impacts not yet identified shall be documented and mitigated based on the principles agreed upon in the RSHP social impacts and resettlement policy. The Government of Rajasthan and the lending agency shall agree upon specific entitlements.

NOTE :

1. All project-affected persons are entitled to consultation, counselling regarding alternatives and assistance in identifying new sites and or opportunities for relocation/ rehabilitation.
2. If the replacement cost of land or other assets is more than the compensation (at market price as determined by the Land Acquisition Officer) then the difference will be paid by the project in the form of assistance. The replacement cost or actual market price will be decided by an independent agency.
3. Vulnerable groups include ST, SC, Women headed households, BPL families, landless, marginal and small farmers.
4. Any case not falling under the above listed categories will be dealt with in the general spirit of the social assessment, land resettlement entitlement policy.
5. Cost of land has been estimated as per field data.
6. Maintenance Allowance of Rs.2000 per month includes Rs.1666 (poverty line) and 25% incentive. Inflation rate of 10% will be added for every year project is delayed.
7. Rental Assistance of Rs.500 and Shifting Allowance of Rs.600 are based on field survey data on typical rents and anticipated moving expenses. Inflation rate of 10% will be added for each year project gets delayed.
8. Housing and commercial relocation entitlements for urban PAP households will be adjusted to appropriate levels per LIG and HIG schemes of HUDCO.
9. Compensation and cash assistance provided to households will be deposited in joint accounts of household family head and spouse.
10. The shifting allowance is a one-time grant.

5.6.1 Loss of Land and Other Assets

Features of the entitlements provided in the package of compensation and assistance that will be delivered by the project RAP for loss of land and other assets are described below.

Consultation and counselling

All PAPs will be provided opportunities for consultation and counseling regarding the project, entitlements to which they are eligible, available options, and the process and procedures by which compensation and assistance will be provided. In addition to counseling regarding entitlement packages and alternatives, PAPs will also be assisted in identifying suitable relocation sites and advised on alternative economic rehabilitation schemes and opportunities for training and skills development.

During RAP implementation representatives of the PIU and assisting partner NGO/CBOs will conduct well-advertised village-level meetings in each impacted settlement to which all project-affected persons will be invited. PAPs will be informed about those entitlements to which they are

eligible and, where warranted, advised and assisted in identifying new vocational opportunities and/or relocation sites. For vulnerable sections of the society, such as women, additional separate meetings will be held as necessary.

Compensation for land

Those losing land will be provided compensation for land at replacement cost through a combination of government-provided payments under the Land Acquisition Act and supplemental project-provided assistance. Compensation for land will be given only to those against whom the land is recorded in the Record of Rights (ROR). All fees, taxes, and other charges incurred in the process of compensation and subsequent relocation and re-establishment of entitled households will be met by the project.

Title-holding households losing homestead lands will be provided free homestead land equal to the area lost, or a maximum of 25-35-m² under the government Lower Income Group (LIG) Housing Scheme for families above poverty line or 15-25-m² under the Economically Weaker Section (EWS) Housing Scheme for Below-Poverty-Line (BPL) families, whichever is less. Land for land will be made available from either government land or by purchase from private land owners by Land Purchase Committees established under the Project Implementation Unit (PIU).

In the case of those losing commercial structures, cash compensation at replacement value for land will be given and those affected will be provided a free shop site equal to the area lost to a maximum of 15-m², whichever is less.

Those losing agricultural land will be provided compensation for land at replacement cost through a combination of government-provided payments under the Land Acquisition Act and supplemental project-provided assistance including a Maintenance Allowance of Rs.2000 for three months. When the remaining land is reduced below the minimum economic holding, i.e., 4 acres of unirrigated land or 2 acres of irrigated land, the entitled household will be termed adversely affected.

In the case of total or adverse loss, affected households will be offered land for land. However, given the limited land availability this option may not be feasible. Land that the Government of Rajasthan may be able to provide may not be close to the affected zone and may not be of good quality. As a result, affected PAPs may not elect this option. In such cases, PIU/SDRC-established Land Purchase Committee will assist PAPs in purchasing land of their own choice. In addition, the project will provide a maintenance allowance of Rs.2000 per month for a period of one year. All fees, taxes and other charges as applicable under law will be borne by the project.

In cases where adversely affected PAPs wish to shift to some other non-agricultural vocation, training for skills development and alternative employment will be provided by the project as discussed under entitlements for lost income/livelihood.

Squatters are not entitled to compensation for land utilized within the public ROW. Encroachers losing land are also not eligible for compensation for land utilized within the public ROW but will be compensated, as above, for land legally owned outside the ROW which is acquired for the project. Squatters and encroachers, where warranted, will be assisted by the project in identifying new alternative sites.

Loss of property of undetermined category

During the census and socio-economic survey it was found that in certain cases people hold patta (document for ownership of land) on PWD land. The nature of patta varies from the one issued by panchayat to the other issued by individuals claiming to be the owner of the land. Such PAPs will be dealt on a case by case basis by the PIU/SDRC. Before relocating such PAPs the PIU/SDRC will verify the ownership. PIU will be assisted by revenue officials in such exercises.

Notice to harvest/compensation for lost standing crops

All affected households, including those encroaching on the ROW, will be given advance notice to harvest standing crops on lands acquired for or utilized by the project. In the event that sufficient advance notice cannot be served, compensation will be paid at twice the market price of the crop lost.

Compensation for trees/perennial crops

Households losing trees and perennial crops will be compensated. Compensation will be calculated as the capitalized value, i.e. the net present value of future production at a discount rate of 12% per annum.

Replacement/compensation for structures and non-land assets

Project-affected households are eligible for compensation at replacement value for structures and other non-land assets through a combination of government-provided payments under the Land Acquisition Act and supplemental project-provided assistance. Replacement value represents prevailing market rate of the structure, often in excess of the official rate, which will enable PAPs to replace structure and non-land based assets without taking loans. Loss of non-land assets may include losses of house or commercial structure, boundary wall, sitting place, etc. All entitled households losing private property will be offered cash-based compensation.

Entitled households losing house totally or adversely are entitled, over and above compensation, to rehabilitation assistance. Such assistance includes free homestead land equal to the area lost or a maximum of 25-35 sqmts under LIG housing scheme for families above poverty line or 15-25 sqmts under EWS housing scheme for BPL families, whichever is less.

Rental Assistance of Rs.500 per month for a period of 6 months would be provided against alternative accommodation until the new house comes up. For construction of new residential accommodation, displaced families are entitled to a House Construction Loan of Rs.30,000 under the EWS housing scheme for BPL families and Rs.100,000 under LIG housing scheme for non BPL families.

Households experiencing partial loss of residence where the remaining house is viable are entitled only for compensation at market value for the lost structure. Households losing smaller structures or facilities such as boundary walls, sitting places, cattlesheds, pump houses, well, ponds, etc., will be similarly compensated at replacement value for these losses.

Those losing commercial structures totally or adversely are entitled to cash compensation at replacement value for the lost structure. For construction of new commercial structure each EP will be entitled to a Shop Construction Loan of Rs.30,000. They will also receive Rental Assistance of Rs.500 per month for a period of 6 months against alternative commercial space until the new structure is available. A Maintenance Allowance of Rs.2000 per month will also be provided for a period of one year.

In cases where the loss of commercial structure is partial and the remaining structure is economically viable. EPs will be entitled to only compensation at replacement value for the lost structure.

Tenants losing rented residential accommodation are not entitled to compensation but will receive Rental Assistance of Rs.500 per month for a period of 3 months. If the household has deposited advance money with a landlord, the amount will be returned after deducting the same from the landlord's compensation. In such cases, the tenant must furnish proof of deposit.

Tenants losing rented commercial structures are not entitled to compensation but will be provided Rental Assistance of Rs.500 per month for a period of 3 months. If the commercial tenant has deposited advance money with a landlord, the amount will be returned after deducting the same from the landlord's compensation. In such cases, the tenant must furnish proof of deposit.

The project will also assist those vendors who lose business locations. Although, fully mobile vendors will not be entitled to assistance, as their mobility is not affected, ambulatory vendors holding licenses for fixed locations will be assisted in relocating and resuming operation. They will be provided help in identifying suitable alternative sites and a Maintenance Allowance of Rs.2,000 for a period of three months.

Encroachers and squatters within the ROW losing commercial or residential structures will be compensated for them at replacement value. PAPs settled on government land other than PWD's such as Military, Revenue, or Forest lands, will also come under the category of squatters and will be eligible for such assistance.

Rights to salvage

All affected households losing private structures, including squatters and encroachers will be entitled to salvage materials from demolished structures or those portions of structures that are to be demolished.

Access to housing schemes

Affected households belonging to vulnerable groups are eligible for existing housing schemes for the weaker sections of the society.

For construction of new residential accommodation, displaced families are entitled to House Construction Loans of Rs.30,000 under the EWS housing scheme for BPL families and Rs.100,000 under LIG housing scheme for non-BPL families.

Housing options

All project-affected households will have the option of voluntary relocation to sites chosen by themselves.

In cases of cluster relocation, affected households will be offered the option of moving to resettlement sites incorporating provisions for shelter and livelihood. PAHs will also retain the option of voluntary relocation to self-chosen sites

Shifting assistance/transition stipends

All displaced households including tenants and squatters and ambulatory vendors licensed for fixed locations acquired by the project will receive a shifting allowance of Rs.600 to move their belongings to new residential or commercial sites.

Households losing residences totally or adversely will also be provided rehabilitation assistance including a Maintenance Allowance of Rs.2000 per month for a period of one year. This Rs.2000 Maintenance Allowance includes Rs.1666 (official poverty line) and 25 percent inflation. They will also receive Rental Assistance of Rs.500 per month for a period of 6 months against alternative accommodation until replacement housing is available.

5.6.2 Lost or Diminished Livelihood

Features of the entitlements provided in the package of compensation and assistance that will be delivered by the project RAP for lost or diminished livelihood are described below.

Rehabilitation and assistance

The project will provide rehabilitation and assistance for loss of livelihood to those persons adversely impacted by the project. PAPs losing sources of income will be provided access to alternatives, other economic rehabilitation measures, and associated training if required for upgradation of skills. PAPs losing their only source of income and those from vulnerable groups will be additionally assisted on a case by case basis and may be provided support equivalent to six month's salary to compensate loss.

Additional support mechanisms will be made available to re-establish or enhance livelihood prospects of affected PAPs through existing government poverty alleviation programs. If available, employment associated with the project will also be provided. All adult persons in a household i.e. above the age of 21 years are eligible for assistance for loss of income and diminished livelihood. Thus, there may be more than one person eligible in each household.

The project will provide information on, facilitate access to, and support PAP participation in appropriate programs available under a variety of government poverty alleviation initiatives including Asset Endowments and Income Generation (AEIG), Employment Generation, Training, and Infrastructure Development.

Most of the AEIG programs are based on subsidy-loan combinations and are available under the Self Employment for Educated Unemployed Youths (SEEUY), Forest Farming for Rural Poor (FFRP), Development of Women and Child in Rural Areas (DWACRA), and other programs. There are also various sectoral development programs in fisheries, sericulture, horticulture, floriculture, small scale and cottage industries, and other sectors where below poverty line families are assisted in establishing their economic base.

Training programs include Training for Rural Youth for Self-Employment (TRYSEM) and others organized by various government departments.

Employment and infrastructure development programs that offer potential PAP access include the Jawahar Rozgar Yojna (JRY) under which social and other infrastructure are developed by employing local unemployed people, and the Employment Assurance Scheme (EAS).

Special attention will be paid to the vulnerable groups. For PAPs belonging to vulnerable groups, several of the above-mentioned programs can be harnessed to promote economic rehabilitation. Scheduled Tribes and Castes are also eligible for loans from the Scheduled Castes and Scheduled Tribes Finance Development Corporations. The project authority with the partnering NGO/CBOs will be responsible for channeling these programs to entitled PAPS and assuring coordination with Block officials. The NGO/CBO will motivate PAPs to avail of offered schemes, provide ancillary training, and provide liaison with Block officials and others who will process individual cases for assistance. The project authorities will stand as guarantor for loans received by PAPs.

The project will also assist, with training and alternative employment opportunities, those households whose agricultural holding are reduced below the minimum economic holding by project land acquisition and who wish to shift to non-agricultural vocations.

To provide such assistance the PIU with NGO/CBO partners will either hire external professionals and livelihood specialists or establish links with government training agencies such as KVIC, DIC, etc. Provision for R&R-related training costs have been included in the project budget.

Support for vulnerable groups

The project will provide a variety of targeted support mechanisms to vulnerable groups in re-establishing or enhancing livelihood and residence. Apart from other entitlements and relocation assistance if required, vulnerable groups will receive counseling on income alternatives, guidance on appropriate training programs and advice on marketing new products. PAPs from vulnerable groups, as discussed earlier, will be provided facilitated access to income generating schemes, vocational training, existing government housing programs, and other development and poverty alleviation schemes of the Government of India and Government of Rajasthan for vulnerable sections of society. These programs will be dovetailed to promote economic rehabilitation of the vulnerable PAPs.

Encroachers and squatters from vulnerable groups will be further assisted on a case by case basis by the project.

Employment opportunities

PAPs, especially those from vulnerable groups, will be provided preferential access to employment opportunities connected with the project to the extent possible. These job opportunities will be over and above project assistance provided to restore lost income. The project has included related provisions in construction contracting.

5.6.3 Indirect, Group-Oriented Impacts

Features of the entitlements provided in the package of compensation and assistance that will be delivered by the project RAP to mitigate indirect and group-oriented impacts are described below. Group-oriented impacts not yet identified shall be documented and mitigated based on the principles agreed upon in the RSHP social impacts and resettlement policy. The Government of Rajasthan and the lending agency shall agree upon specific entitlements.

Community assets

Community assets affected by the project such as public water pumps or wells, sanitation and drainage facilities, utility services, recreational and meeting areas, bus stops, schools, temples and shrines, and cultural heritage resources will be restored and improved in consultation with the affected communities by means of special protection, relocation, or replacement as necessary.

Vital community infrastructure will receive priority attention from project authorities and will be replaced without delay at sites selected in consultation with affected communities.

Common property resources

Common property resources such as access to water, fodder, fuelwood, etc. will be restored and improved. Loss of trees, fuelwood, and fodder species, for example, will be compensated by involving the communities in social forestry schemes, in coordination with the Department of Forest, wherever possible. Tree and shrub loss in the ROW will also be mitigated via compensatory afforestation that will be undertaken by the project. New plantations and other plantings will be sited in consultation with affected communities. Costs will be borne by the project, technical support will be solicited from the Forest Department, and communities will be responsible for watch and ward committees.

Where feasible, the project will incorporate in designs, or otherwise provide, community-oriented environmental enhancements. These may include landscaping or improvement of common areas in project-affected urban communities, proper sheds for bus stops, drinking water facilities in deficient areas, re-greening, and other measures as identified in community consultations.

Women's needs

The project will maintain sensitivity during both design and RAP implementation to potential differential impacts on women PAPs and women in affected roadside communities. Women's needs, particularly those related to the location of drinking water sources and fuelwood, will be provided for, where appropriate, through provision of additional wells/handpumps, social forestry, and other measures identified in consultation with project-affected women.

Safe space and access

Safe space and access for business purposes, local transport, and public use will be provided for in project designs through, for example, adequate parking, bus stops, lay-byes, footpaths, and other features.

Contract documents that require private and public access is to be maintained and disruption minimized during construction. During construction, project authorities will make maximum effort to provide temporary access to frontage premises so that business activity is not significantly

affected. Where unforeseen circumstances result in severe disruption beyond that normally expected and losses can be substantiated, assistance will be considered for both business and crop/seed loss associated with the project.

Pedestrian/non-motorized transport safety

The project will provide for pedestrian safety, particularly for children, through designs incorporating speed control features, signage and other measures including curbs in urban areas, footpaths, and crosswalks. In cooperation with other government agencies, PIU-affiliated NGO/CBOs will also provide safety awareness programs in project-impacted roadside schools and communities.

The project will provide for enhanced non-motorized transport safety through design features such as adequate shoulders and access. In cooperation with other government agencies, PIU-affiliated NGO/CBOs will also provide safety programs and other measures, including the distribution of safety reflectors.

Amenities for highway users

In coordination with other government agencies and the private sector, the project will include promotion and/or provision of roadside rest areas, midways and other amenities such as toilet and drinking water facilities for travellers and other highway users.

Disabled persons

Where possible, the project will maintain and improve access and opportunities for disabled persons and will include an audit of design and construction phase plans by knowledgeable experts to enhance incorporation of appropriate measures

Highway-associated health concerns

The project design incorporates measures to improve drainage and minimize conditions conducive to transmission of water-related disease.

The project in cooperation with other government agencies and PIU-affiliated NGO/CBOs will include provisions to enhance awareness, prevention and treatment of sexually-transmitted disease including AIDS that may be associated with highway improvements increasing traffic and expanding associated commercial sex operations.

Tribal and ethnic groups

The project will comply with World Bank policy directives on indigenous peoples; and, in cooperation with other government agencies, PIU-affiliated NGO/CBOs, and others, will provide measures to enhance project benefits to and mitigate project impacts upon affected tribal and ethnic

groups including roadside communities, nomadic pastoralists, and other itinerants. Advocacy and legal assistance to enhance tenure security, facilitate compensation and maintain community cohesion, where warranted, will be provided.

Emergency response/accidents

The project in cooperation with other government agencies, road-user groups, and impacted communities will include provisions to enhance emergency response capabilities and upgrade treatment facilities for victims of highway accidents

Labor camps/host communities

The project will include provisions to enhance health, safety, and work condition of migrant labor groups involved in project construction and to promote positive impacts on impacted host communities.

Where resettlement colonies of more than 200 persons or greater than 10% of the receiving communities population are necessary, the project will provide appropriate infrastructure and other assistance in consultation with the impacted host community.

5.7 Phased RAP Implementation

The project has three design phases: Phase-1, Phase-1A, and Phase-2. Resettlement planning and RAP implementation will occur in parallel with preparation of designs for successive phases, and in coordination with construction contracting and civil works. This RAP provides entitlements, procedures, and implementation capacity responsive to needs identified in detailed surveys carried out for Phase-1 designs and anticipated requirements of successive phases. It also provides a process for updating, revising, and augmenting RAP provisions and resources as necessary to accommodate PAPs and additional impacts and issues.

The World Bank and the Government of Rajasthan have agreed that during the appraisal process, final designs will be prepared for Phase- I and I A roads. This means that for those roads, exact numbers, identities and socio-economic characteristics of the project affected population will be made available and included in the Resettlement Action Plan.

Pending completion of Phase-1A designs and associated PAP census and survey, this RAP provides Phase-1 figures and estimates based on preliminary designs, initial studies, and extrapolations for the remainder of the project. The RAP is a 'living document' and will be updated through revisions and addenda, as more complete information becomes available and feedback from implementation monitoring and evaluation is incorporated.

During the project implementation phase, additional studies will be undertaken to update the Action Plan, in coordination with designs. Principles for socio-economic studies are described in following sections.

5.8 Delivering RAP Entitlements

The project RAP is designed to deliver a phased package of compensation and assistance to project-affected persons, households, and groups. It has been tailored to mitigate impacts identified by the project's social assessment and the detailed field studies carried out during preparation of Phase-1 of the project. It is designed to both respond to Phase-1 requirements and to anticipate and accommodate requirements of subsequent project phases. It contains principles and procedures for delivering entitlements, establishes appropriate planning and implementation mechanisms, and provides necessary resources.

The total package of entitlements to be delivered by the RAP for Phase-1 of the project is shown in Table 5.3. This Table provides the project's entitlement matrix "filled-in" with the actual number of specific entitlements by type and category that the RAP will deliver in Phase-1. It will be revised to incorporate Phase-1A and Phase-2 entitlements as these figures become available. The table provides a graphic representation of the array of entitlements to be delivered and indicates where RAP emphasis, priority, and resources will be directed.

Table 5.3 also indicates the significant number of PAP households both within and outside the ROW that are characterized by indeterminate or otherwise uncertain tenure status. While for planning purposes these households have classified as squatter/encroachers, the high proportion of PAPs in these categories mandates special attention to tenure status during RAP implementation and the provision of sufficient resources to permit prompt and effective resolution of ambiguities on a case by case basis by the PIU and affiliated NGO/CBO implementing partners.

**TABLE 5-3
RAP-DELIVERED PHASE-1 ENTITLEMENTS**

Impact and assistance criteria	Types of Project-Affected Persons											
	Outside Public Right of way (Land Acquisition)						Inside Public Rights of Way					
	Title Holders		Indeterminate Tenure		Tenants		Squatters and Enchroachers 252		Title Holder and/or Potentially Tenured		Tenants	
	V	NV	V	NV	V	NV	V	NV	V	NV	V	NV
LOSS OF LAND AND OTHER ASSETS	Unit of Entitlements : Project-Affected Household (PAH) Project Affected Family (PAF)											
1. Consultation, counseling regarding alternative and assistance in identifying new sites and opportunities	64	35	108	73	189	117	370	213	159	101	534	2
2. Compensation for land at replacement cost free of fees or other charges	55	31	93	68	-	-	-	-	159	101	-	-
3. Advance notice to harvest non-perennial crops, or compensation for lost standing crop	29	9	39	17	74	37	179	115	73	33	161	-
4. Compensation for perennial crops and trees, calculated as annual net product value multiplied by number of years required for new crop to start producing	29	9	39	17	74	37	179	115	73	33	161	-
5. Replacement or compensation for structures and other non land assets	22	7	32	17	-	-	48	30	47	19	-	-
6. Rights to salvage materials from existing structures, trees and other assets	55	31	93	68	-	-	370	213	159	101	-	-
7. Assistance in accessing housing schemes or other target support to assist poor and vulnerable in reestablishing their homes	3	-	16	-	-	-	23	-	19	-	-	-
8. Option of housing in resettlement sites in cases of cluster relocation	3	3	16	8	-	-	23	8	19	4	-	-

9. Shifting assistance and transition stipends	3	3	16	8	17	11	21	8	19	4	19	1
LOSS OF DIMINISHED LIVELIHOOD												
Within Corridor of Impact:						Unit of Entitlements : Project-Affected Person (PAP) Adult Individuals (in family)						
10. Rehabilitation and assistance for lost of diminished livelihood	(37) 48	(13) 17	(46) 59	(23) 29	(53) 68	(29) 37	(223) 290	(151) 196	(79) 103	(59) 77	(71) 92	4 5
11. Additional support mechanisms for vulnerable groups in reestablishing livelihood	37	13	46	23	53	29	223	151	79	59	71	4
12. Employment opportunities in connection with project	37	13	46	23	53	29	223	151	798	59	71	4
Any other impact not yet identified, whether loss of assets or livelihood shall be documented and mitigated based on the principles agreed upon in the RSHP social impacts and resettlement policy framework	The specific nature of the entitlements shall be agreed upon between the Government of Rajasthan and the World Bank											
INDIRECT, GROUP-ORIENTED IMPACT						Unit of Entitlements						
Vicinity of the Road Corridor						Project-Affected Group						
13. Restoration and improvement of community assets such as public water pumps, sanitation and drainage facilities, schools, temple and shrines, and cultural heritage resources												
14. Restoration and improvement of common property resources such as access to water fodder and fuelwood and landscaping of community common areas urban environments												
15. Provision for women's needs particularly related to location of sources of water and fuelwood												
16. Provision of safe space and access for business purposes, local transport and public use												
17. Safety measures for pedestrians, particularly children and other non-motorized transport												
18. Provision of roadside areas, midways, and other amenities for highway travelers												
19. Improved access and opportunities for disabled people												
20. Provision for AIDS and Sexually-Transmitted Disease (STD) awareness, prevention and treatment												
21. Provision of targeted assistance to tribal and ethnic groups including advocacy and legal assistance supporting tenure security												
22. Provision of enhanced emergency response and accident-induced trauma treatment for road-users and roadside residents												
23. Provision of limited assistance to migrant labor camps and impacted host communities during road construction												
Any other group-oriented impact not yet identified shall be documented and mitigated based on the principles agreed upon in the RSHP social impacts and resettlement policy. The specific nature of the entitlement shall be agreed upon between the Government of Rajasthan and the World Bank.												

Note: - V - Vulnerable; NV- Non-Vulnerable

6. RESETTLEMENT SITES

6.1 Need for Resettlement Sites

During the Phase-1 socio-economic survey, PAPs were specifically consulted about their preferences for relocation and choice of area for resettlement. The majority opted for self-relocation to sites of their own choosing. Displacement anticipated under Phase-1 is relatively low (144 households) and widely scattered over the project length rather than concentrated in one locale.

For these reasons, voluntary resettlement will be encouraged. However, under the project entitlement framework, PAPs may always elect to be re-settled in a government resettlement colony (RC). The PIU/SDRC with the help of District-level CBOs and project-established Land Purchase Committees, will either assist displaced persons to identify land for relocation, assist their transfer to an existing resettlement site, or identify land to develop resettlement colonies and settle displaced persons. Displaced persons will be encouraged to identify and to enter into discussions with the land owner willing to sell.

The PIU/SDRC will assist displaced persons in the negotiating process with the private landowner. The PIU/SDRC NGO representatives along with the displaced will visit all potential host neighborhoods to encourage land owners to sell their land to PAPs at reasonable prices and to accept them as neighbors. Once the land is procured, the PIU/SDRC will assist in dovetailing HUDCO housing scheme provisions for EWS and LIG to entitled PAPS.

6.2 Host Community Survey

Although large-scale displacement will not occur in Phase-1 and is not anticipated in Phase-1.A, such displacement could take place in Phase-2. In the unlikely event that resettlement sites become necessary, a host community survey will be undertaken during the project preparation period. The objectives of such a host community survey are :

- * to assess the likely impact on and needs of PAP's hosts;
- * to help design appropriate income restoration programs for PAPs;
- * assist in identifying areas where there may be problems of integration between two communities and;
- * to assess the carrying capacity of existing resources and the potential for intensification in the receiving settlement.

RAP goals include, at minimum, the raising of PAP living standards to above the poverty level. The host community survey will provide insights to project authorities, on potential resentment of PAPs by members of the host community who may themselves live below the poverty level. Mitigation measures may then be considered to overcome potential disparities and promote local acceptance of resettled households.

It is unlikely that the PIU/SDRC will be able to locate 'green field' sites to relocate PAPs. In locating PAPs in an existing settlement, there is a risk that the increase in the population may

increase demands on the environment above the carrying capacity of the land and resources available to the hosts and newcomers. This makes host community survey all the more important.

6.3 Information checklist for Host Community Survey

If displaced PAPs need to be resettled in new community, there are number of concerns that will be addressed in the host community survey. The survey will examine:

- * Census data of host population with reference to total population, sex, ethnic composition, linguistic groups, caste, occupation, education, etc.;
- * Current landuse patterns, tenure status, and production systems;
- * The inventory of existing social infrastructure (schools, health centres, market, temples, community centres, etc.);
- * Use of area by non-residents (grazing land, foraging, etc.) and usufruct rights attached;
- * Carrying capacity of area and vulnerability to PAP influx.

Existing survey information will be reviewed and considered before actions are taken. Additional host community information will be collected using Rapid Appraisal methods. The host community will be included in community consultation exercises to allow them to voice concerns associated with the incoming population.

If displaced PAPs are resettled in host areas, pressure on existing infrastructure in the receiving area will increase. The PIU/SDRC will be responsible for upgrading existing host community infrastructure facilities to accommodate the increased population. The host area should be provided with all the facilities indicated in the GOR draft Resettlement Policy.

While upgrading infrastructure facilities, PIU/SDRC will consult both the host community and resettled population. A community needs assessment survey will be carried out using participatory research methods. The creation of infrastructure will be as per the requirement of both the host as well as the resettled community.

6.4 Requirements for new settlements/host communities

In section 4.3 of the GOR Resettlement Policy (~~March 1998~~), resettlement centres and host population concerns are addressed. The policy states the following:

1. Displaced families shall be resettled, in accordance with their preferences, maintaining the existing structure of social groups, in the command areas or near the periphery of the affected area.
2. Adequate physical and social infrastructure and community services including conservancy service should be provided at the new sites. Where the population does not get displaced but loses a community asset like school etc., such community assets shall be made good by the Government.

3. The resettlement centre will be established around or in the vicinity of existing human habitations.
4. To ensure good quality of construction of rehabilitation works, participatory committees with representatives of affected and displaced persons will be constituted to oversee the construction of such works.
5. In order to motivate the displaced persons to move to their new place of settlement/rehabilitation, the resettlement centres and works should be brought to such a stage, prior to asking the displaced and affected persons to move, so that they can start living and working at the new place without any material inconvenience.
6. There should be no/minimum adverse social, economic and environmental effects of displacement on the host communities.
7. Where the displaced persons are resettled among already settled communities, they must be resettled as far as possible in such a manner that they are integrated with the host community on the basis of equality, mutual respect and understanding.
8. Efforts shall be made by the rehabilitation organisation of the relevant project to set up co-operative societies, adult education or literacy centers etc. at the new rehabilitation centers with forums for interaction between displaced and affected persons and the host population.

In Annexure 1 of the GOR draft Resettlement Policy, the civic amenities/community facilities recommended for new settlements include the following:

- ◆ At new settlements, suitable provisions shall be made for civic amenities like drinking water, wells/hand-pump, road, school, panchayat ghars, grazing land, village wood lot, medical facilities etc. Sanitation facilities shall also be provided.
- ◆ School buildings will be as follows:

S.No.	No. of Families	Educational facilities
1.	25 & above	One room school
2.	50 & above	Two room school

One primary school on a population of 150 (as provided in norms of Education Dept. for SC & ST) and one medical sub-centre for a population of 1500 along with a delivery room and a staff quarter shall also be provided.

- ◆ Each colony shall be linked by road.

- ◆ Each colony having a cluster of 50 families or less shall be provided one drinking well/hand pump and where there is no cluster, it shall be ensured that no family is to walk more than 0.5 km to fetch drinking water.
- ◆ Every colony having a population of 500 persons shall be provided with a community hall.
- ◆ Other facilities;

Chaupal (Tree platform): For community meetings a platform shall be constructed at the new settlement site.

Village pond: A village pond shall be constructed, if feasible, at such new colonies where more than 50 families get settled.

Electrification: The colonies having more than 50 families, will be electrified, provided the power line is within 8 kms distance. The new colonies will, however, be electrified at Govt. cost in case the earlier village was electrified.

Irrigation facilities: Irrigation facilities should be provided to irrigate the land allotted to the displaced persons in the new colony provided a suitable site for construction of a minor irrigation work is available.

Tribal people & or pastoralists enjoying traditional usufruct rights to community land: For the tribal people and / or pastoralists enjoying traditional usufruct rights on the community land, if common property resource (CPR) at the new place of resettlement.

7. INCOME RESTORATION

7.1 Rehabilitation Entitlements

The basic objective of RAP income restoration activities is that no project-affected person shall be worse off than he or she was before the project. Restoration of pre-project levels of income is an important part of rehabilitating individuals, households, and socio-economic and cultural systems in affected communities.

To achieve this objective, preparation of income restoration (IR) programs under this RAP will be approached as if they were economic development programs in their own right. Income restoration schemes will be designed in consultation with affected persons and they will explicitly approve programs designed to benefit them.

Income Restoration entitlements provided in this RAP to PAPs losing livelihood or suffering loss of income as a result of the project will be developed and delivered in the following steps:

First, basic information on IR activities of PAPs contained in the census and socio-economic surveys will be carefully reviewed. Data from base line surveys is available on features of economic activities of PAPs includes:

- Land based economic activities
- Non-land economic activities
- Total income of PAPs from various sources

Based on this information IR strategies can be framed and activities planned. RAP-provided IR activities are of two types: short term and long term.

Short Term IR activities

Short-term IR activities are intended to restore PAP's income in the periods immediately before and after relocation. Such activities will focus on ensuring that adequate compensation is paid before relocation, relocation and transit allowances, and providing short term, welfare-based grants and allowances such as:

- one time relocation allowance;
- free transport to resettlement areas or assistance for transport;
- free or subsidized items;
- transitional allowances or grants until adequate income is generated, with special allowances for vulnerable groups; and
- promoting PAP access to project-related employment opportunities such as work under the project itself, work on SDRC relocation teams (e.g., Village-level Workers, driver, food provision, etc), work on resettlement sites, if any (such as construction, maintenance, etc.)

Long Term IR Activities

PAPs will participate in developing a range of feasible long-term options. Long-term options are affected by the scale of resettlement which may affect the feasibility of various non land-based and land-based IR options. The long-term options to be developed during RAP implementation are either project-financed or government-financed. Project officials will coordinate with District administrations, including Tribal Development and Social Welfare Departments, to assure PAP access to all existing government schemes that can contribute to income restoration.

Project-financed programs will include a specific time frame for handing over the activity to local administrations at the end of a stipulated period. Long term IR activities will be generated once the census survey and PAP consultations are completed and analyzed. These IR activities will be generated in consultation with PAPs. Mechanisms to dovetail existing government poverty alleviation programs will be designed eloped in consultation with the community and officials of the District administration and District Rural Development Agency (DRDA).

7.2 Impact Categories and IR Schemes

As discussed in Chapter 5, project-induced displacement may lead to loss or diminished income for Project Affected Person (PAPs). The main categories of impacts expected as a result of project land and property acquisition include:

- Loss of farmland in part or full
- Loss of commercial establishments (permanent)
- Loss of commercial space (temporary structure or mobile vendor)
- Loss of livelihood

Because projects like highway improvements primarily involve acquiring thin, linear strips of land, the impacts on agriculture are not expected to be significant. Never the less, mitigation measures to address the relatively minor impacts anticipated have been planned and will be implemented if required.

In the event of major loss of farmland, RAP entitlements will assist PAPs to buy equivalent farmland in a nearby area using the land compensation received. Land for land is recognized as the best and most sustainable option for income restoration. This option will only be exercised when a PAP has lost a significant amount of land; as it would be difficult and inadvisable to replace small strips of land.

In such cases, the compensation received may be deposited in blocked bank accounts. When this option is the preference of PAPs, the interest accruing in the interim will supplement PAPs income from other sources, as the money will only be released for buying replacement land. This will discourage dissipation of compensation money for consumption expenditure or the paying-

off of loans by the vulnerable sections of PAPs, in this case, PAPs whose landholding is below minimum economic holding (MEH) of two acres of irrigated land or four acres of unirrigated land. More well-off PAPs can be exempted from this provision and directly paid in cash, as land compensation will be paid at market value and will be sufficient for buying replacement land.

Loss of permanent commercial structures is a more complicated problem since the complementary issue of retaining the present customer base must also be tackled. Another problem is that of tenants and owners, with the majority of affected structures being occupied by tenants. Mitigation delivered under this RAP will promote re-constructing demolished commercial structures in an adjacent area so that the present customer base is retained. The means of accomplishing this and addressing ownership of the new structure will be carefully considered.

Although the project authority could acquire the required land and construct the structures for allotment, a more practical option may be to let PAPs arrange their own replacement structures with the guidance and support of the PIU/SDRC. Regarding ownership, the status quo can be maintained, i.e., ownership remains with the owner while the tenant occupies the replaced structure. As in the previous case of agricultural land, the compensation money can be deposited in blocked bank accounts to be released only for constructing or buying the replacement structure. Since the construction will involve phased activities, the money can be released in installments coinciding with pre-determined stages in construction.

Loss of commercial space (for temporary structures and mobile vendors) will receive special attention since this often involves vulnerable sections of the PAPs. These vulnerable groups include PAPs whose annual income is less than Rs.2000 per month, Scheduled populations (SC/ST/OBC), and women-headed households. These need to be assisted in identifying alternative space in adjacent areas for continuing their trade or vocation. Their temporary structures may often be shifted to the new locations and the SDRC will use its good offices with local municipal or Panchayat authorities to obtain the alternative space.

In addition to the mitigation measures for specific impacts discussed above, there is also the need to respond to more generalized impacts of disturbance in the life and livelihood of PAPs associated with displacement. These will be mitigated through payments of a Maintenance Allowance. Where income restoration cannot be fully achieved by using the compensation provided, RAP provisions make possible a rehabilitation grant, at least for vulnerable PAP groups, that will enable them to reach or improve upon their former standard of living. As per provisions of the GOR draft Resettlement Policy, PAPs will be assisted in improving or, at minimum, regaining their former status of living at no cost to themselves.

7.3 Alternative Individual Income Restoration Schemes

The SDRC will consider the resource base of PAPs and their socio-economic characteristics and preferences to tailor individual income restoration schemes IR schemes when appropriate. Among factors that will be considered in such cases are:

- Education level of PAPs
- Skill possession
- Likely economic activities in the post-displacement period
- Extent of land left
- Extent of land purchased
- Suitability of economic activity to supplement the income
- Market potential and marketing facilities

Although, it is widely recognized that the best option is to allow the PAPs to continue their former occupations, circumstances may not permit this option or PAPs may elect to change activities. A list of possible income restoration options that will be explored in consultation with PAPs and considered in light of local conditions and opportunities is provided below:

IR Option	Requirement
Land	<ul style="list-style-type: none"> - PAPs are physically relocated and are primarily agriculturists - It is adequately available - There is transferable title - Land is of good quality - Land development needs can be covered by the project - PAPs are not exposed to market economics
Cash	<ul style="list-style-type: none"> - PAP negatively impacted but not relocated - Land is unavailable in adequate quantity and quality - PAP prefer cash to land - Cash can be held in joint account - PAP's occupations are diverse - PAP exposed to cash economy - Interest ensuring deposits to be released when feasible IR activity is defined
Small Business	<ul style="list-style-type: none"> - PAP familiar with cash - Demand for goods/services - Sustained capital and working capital is available - There is local or project finance and capacity to provide training - Business builds on/uses existing skill of the PAP - Local markets are not adversely affected by project activities
Continuing Previous Employment	<ul style="list-style-type: none"> - Reasonable time and money required for access to employment from new sites - Project assistance for previous and/or maintenance of other facilities
Preference of PAPs in Project Employment	<ul style="list-style-type: none"> - Work is available in main investment project - Clear eligibility criteria are established - PAPs are linked to existing government job programmes (like Maharashtra legislation reserving 5% of government jobs for PAPs) - There is good coordination between project and government authorities

7.4 Non Land-Based Income Restoration Schemes

As land in project corridors is scarce and not all PAPs are agriculturists, non-land based IR schemes will be important entitlement modes. Potential non-land based rehabilitation options are profiled below. The SDRC will assist PAPs in identifying appropriate alternative economic rehabilitation schemes through counseling and consultation. These options include:

Allied Agriculture Activities

Under allied agriculture activities, various IR options are available such as, dairy, poultry, goatery, sheep rearing, piggery, etc. PAPs who are former agriculturists can take up any of these options. These will require training that can be imparted by KVIC / DRDA. A loan of Rs.10,000 to Rs.15,000 is available under IRDP. The SDRC will facilitate access to the DRDA to arrange for loans for PAPs from commercial banks.

Petty Traders

Under this scheme, potentially available options include grocery, vegetable, fruit, and *pan* shops, stationary, cloth, tea and snacks; readymade garments; etc. PAPs who are already in the trade and business sector are suitable for these activities.

Skill-related Schemes

The options available under this scheme are tailoring, carpentry, masonry, gold smith, black smith, motor-winding, cycle/motor cycle/auto repair, driving (auto/Matador/etc), T.V./tape recorders/watch repairing, pottery, leather works, etc. PAPs who are in such trades, can undergo training for skills upgradation to supplement their annual income. Training in such trades are imparted by DIC / KVIC / ITI.

Others

Other options include loans for various agriculture implements to increase productivity viz, pump sets, dugwell, borewell, bullock cart, etc. PAPs who are engaged in agriculture and do not have any irrigation facilities can avail of such loans that are given by banks after applications are processed by DRDA.

Implementation of and access to the above mentioned options will be facilitated by SDRC-sponsored credit camps where feasible. Extending financial credit support is a critical component of non-land based IR schemes and these camps will include participation of local government officials, NGOs and PAPs. Their purpose is to promote local financial institutions to inform participants of credit options and how to avoid procedural delays. With SDRC assistance, formalities related to processing of applications for credit assistance can be completed at these sessions, and the SDRC will coordinate closely with the Lend Bank managers and other commercial banks operating in the affected Districts.

7.5 Training

Strategies for promoting economic recovery of PAPs also include assisting them to improve their production levels or to acquire new or upgraded skills through training. As quite a significant number of PAPs are dependent on agriculture and many have low skill endowments, training will be an important component of RAP-delivered IR efforts. For PAPs who opt to diversify economic activity, suitable income restoration schemes will be identified on an individual basis and training needs will be assessed. Besides training in scheme-specific skills, general entrepreneurship development will also form part of the training program to improve the management capabilities of PAPs.

Training will be organized during RAP implementation by the SDRC itself, where warranted, and also made available through training programs regularly conducted by District Rural Development Agency (DRDA) through its program on "Training of Rural Youths for Self Employment" and training programs organized by other government agencies. Experiences in typical R&R programs have shown that roughly three-fourths of PAPs may require training. SDRC will act as a facilitator and training will be imparted either by the government agencies such as DIC, KVIC, ITDA, etc. or a professional and competent outside agency. The local Industrial Training Institutes (ITIs) will also be approached.

7.6 Monitoring of IR Schemes

Monitoring of IR schemes will be carried out along with the monitoring of other components of RAP by an outside agency contracted for the purpose. The contract will specifically provide for regular (every six months) monitoring of income restoration of PAPs. The monitoring will be carried out based on economic indicators.

IR schemes will also be internally monitored by the partnering NGO. SDRC will field a team consisting of its representatives, representatives of influential segments of affected villages, educated youths, and representatives of beneficiary PAPs. This team will supplement the external monitoring and submit reports every six months. The PIU will compile reports submitted by the external agency and the NGO to gain insight on the actual success rate of IR scheme and make corrective adjustments where indicated.

7.7 Withdrawal policy

R&R experience has shown that PAPs often completely depend on the project authorities for rehabilitation and continue to do so even after the completion of the implementation period. For this reason, during the implementation period, the SDRC will assist PAPs in capacity building to manage resources created as a part of rehabilitation after the project authorities withdraw. The SDRC will identify volunteers from PAP CBOs who will receive training in operations and maintenance of assets created. Once PAPs are trained, project authorities will gradually withdraw and promote PAP resource management.

As indicated above, in conjunction with income restoration schemes, PAPs will be provided training in entrepreneurship and marketing of produce. Where warranted, SDRC will assist PAP marketing and conduct action research studies for evolving PAP income restoration and marketing strategies that are sustainable and avoid inducing PAP dependency.

8. INSTITUTIONAL ARRANGEMENTS

8.1 Implementation Capacity and Institutional Commitment

Implementation of this Resettlement Action Plan requires staff, resources, and close coordination with other project components and among different agencies and organizations, working in diverse districts and jurisdictions. This RAP reflects an institutional assessment and provides a strategy for developing required implementation capacity and minimizing risks. Staffing needs have been analyzed and this RAP incorporates a plan for recruitment and training of personnel at different levels. Capacity building and training are coordinated with the project implementation schedule to ensure that skilled staff is available to implement the RAP without delay in civil works.

The capacity building will require consultancy services for completing and implement the RAP, and an important objective is to develop the capacity within the PWD to plan and implement resettlement programs.

PWD will focus effort in three critical areas to commence RAP implementation.

First, to initiate the process, orientation and awareness seminars will be organized for the PIU and other RAP implementers.

Second, establish a Social Development and Resettlement Cell (SDRC) within the Project Implementation Unit (PIU). Recognizing that this project-specific cell will provide the nucleus of a broader function that will eventually be integrated in the Department.

Third, NGOs with experience in social development and a track record in resettlement and rehabilitation will be partners in RAP implementation. Selected NGOs will be engaged to support District-level RAP implementation and counter-parted with PWD personnel to foster transfer of skills and experience.

In addition, PCC will provide technical assistance in resettlement and rehabilitation planning during the transition to project and RAP implementation.

The institutional context of resettlement in the project is reviewed below and major features of RAP implementation are described in sections that follow.

RAP provisions for overall coordination of project resettlement and RAP implementation are outlined. These include the role and composition of the Social Development/Resettlement Cell (SDRC) to be established within the Project Implementation Unit (PIU), the instrumental role of non-governmental and community-based organizations (NGOs/CBOs) in RAP implementation, and the District-level Committees that will be established to focalize local coordination. An independent agency will provide services for monitoring and evaluating the R & R components.

Implementation-associated institutional arrangements and responsibilities are highlighted, including the responsibilities that will be assumed by PWD during the transition from project and RAP preparation to implementation.

High priority actions PWD will initiate to establish institutional linkages necessary for timely delivery of PAP entitlements and assure coordination across agencies and districts, and between the various social and economic mitigation measures the RAP will orchestrate are also identified.

8.2 Institutional context

Effective implementation of the RAP will require institutional relationships and responsibilities, rapid organizational development, and unprecedented collaborative efforts by PWD, State government, involved NGOs, and affected communities.

To operate effectively the project's implementation unit has built-in representation of several of the more important GOR Departments whose cooperation is required, Forest, and Revenue. To meet the unique challenges of scale, and direct and service the multiple construction contracts involved, the PIU has PWD-mandated oversight, coordination, and management functions.

To address the project's expanded scope; extensive social and environmental assessments have accompanied project design and preparation. These have produced comprehensive action plans for resettlement and environmental management and blueprints for PIU-based entities to execute them. The Resettlement Action Plan includes an agenda of actions and commitments by GOR and specifications for the Social Development/Resettlement Cell (SDRC) to co-ordinate the work of the district level committees and NGOs that will become the PIU's principal vehicle for RAP implementation.

8.3 Overall R&R Coordination

The RAP specifies and details institutional and organizational mechanisms required to implement project-associated resettlement and rehabilitation. The Project Implementation Unit (PIU) will have responsibility for coordinating resettlement with other project components. Within the PIU, the specific aspects of resettlement and rehabilitation and the delivery of entitlements will be implemented and managed by a Social Development/Resettlement Cell (SDRC) affiliated with the projects Environmental Management Unit (EMU).

The SDRC will be established by early September. The Rehabilitation Officer, a Revenue officer will be the co-ordinator. The PWD will appoint an experienced Social Scientist (on contract) who will work with a counterpart from PWD. The SDRC will establish operational links within PWD and with other agencies of government involved in project-induced resettlement. It will bridge the distance between the project and project-affected persons and communities. It will provide the means and mechanisms for coordinating the delivery of the compensation and assistance entitled to those who will suffer loss.

It will contribute social development perspectives and inputs to on-going project design and implementation by working closely with PCC project planners, contractors, and construction supervision consultants. It will link the project with state government agencies, provide liaison with PWD field units and impacted communities, establish district-level committees to coordinate social development and resettlement operations in the field, mobilize assisting NGO partners, and support the organization of local community-based organizations (CBOs) representing PAPs. It will also engage required training services, oversee a grievance redressal process, actively monitor RAP implementation, and cooperate with planned project evaluations. The key actions included in the RAP implementation schedule are provided in Table 9.1.

8.4 Coordination with Government Agencies

Several of most important coordinative relationships that will be established by SDRC during RAP implementation are reviewed below. The overall institutional framework and SDRC operational links are shown in Figure 8.1.

On behalf of PWD, the SDRC with PCC will assume responsibility for representing the social impacts and resettlement components of the project in Ministry of Environment and Forests (MOEF) environmental clearance proceedings. The SDRC will also be responsible for disseminating this information to the public and providing additional opportunities for public comment.

Among other government agencies involved in RAP implementation, the Revenue Department has the largest and most influential role. Land acquisition proceedings and Revenue Department award of compensation for project-acquired property initiate the resettlement process. Effective cooperation between the project SDRC and Revenue Department is essential to smooth functioning of the resettlement program in several important ways. First, unless the compensation process is prompt and efficient, RAP implementation will stall and project delays will ensue. Second, under the project's resettlement policy, Revenue Department-provided compensation will be 'topped-off' by productive asset assistance to reach replacement cost of the land or other asset taken.

The SDRC will be responsible for both coordinating actions of PWD's Land Acquisition Cell to facilitate proceedings and coordinating actions with the Revenue Department within each District where property is to be acquired so that physical possession of land acquired, payment of compensation, and establishment of project ROW are not unduly delayed. Given both the large volume of land that must be acquired and the typically small parcel size, SDRC will establish early liaison with the District level officers for the demands and assure the land acquisition proceedings are in place.

In addition to private land, acquiring ROW for the project will entail transfers of public land currently under the jurisdiction of GOR Forest and Revenue Departments and the military. Forest and Revenue Department representatives in the PIU will facilitate transfers from these departments, but responsibility for preparing requests and coordinating the process will lie with

SDRC. In the case of required Forestlands, this is likely to require extensive efforts at the District-level. SDRC will also have to coordinate with the Indian Army to transfer jurisdiction of military lands to PWD.

Aside from its land acquisition and compensation components in which Revenue Department and the project jointly provide entitlements, RAP entitlements for income restoration and project-affected groups are solely the project's responsibility. Many of these entitlements are comprised of services and benefits normally provided by other development programs, such as vulnerable groups' housing schemes. The extensive array of government poverty alleviation programs that may be tapped to replace housing and restore lost livelihood is referenced in Table 5.2 (Detailed Entitlement Framework) and discussed in Section 5.6. SDRC will establish liaison with these programs at the State and District levels to facilitate PAP access and take advantage of services and programs already in place. Where feasible, it will negotiate cost-sharing arrangements.

Restoration of community assets such as pumps and sanitation and drainage facilities will, for example, require coordination with PHED. Where schools are impacted, SDRC coordination with Education Department District offices will be necessary. A variety of state and central government programs addressing women's needs may be associated with other group entitlements, including those responding to potential transmission of sexually transmitted disease.

8.5 NGO Partnerships

As introduced above, PWD will engage the services of NGOs with experience in social development and with a track record in resettlement and rehabilitation to partner RAP implementation in each district and to work closely with the District-level Resettlement Committees. To assure effective internal coordination and maximize transfer of skills, PWD staff will work closely with the NGOs.

While land acquisition and compensation are essentially standardized, technical procedures, delivery of other entitlements and the effectiveness of their contribution to actual PAP recovery and rehabilitation have a more extensive social dimension. NGO participation at all levels is expected to foster increased appreciation of social development factors and promote responsible delivery of RAP benefits, particularly to vulnerable groups. NGO social awareness will enhance implementation of several RAP components encouraging productive use of compensation and rehabilitation assistance, such as land purchase or self-employment, over consumptive ones.

NGO involvement is also important because the population impacted by the project, as is typical in long linear projects, is a thin slice of hundreds of roadside settlements. Unlike PAPs of site-specific infrastructure impacting an entire community, project PAPs are disparate, widely separated, social fragments characterized by little or no community organization representing their common interests. NGO involvement is especially vital in the short-term, pending project-promoted PAP organizations, when it will extend the RAP's social research and mediate the

project's interface.

NGO partnership will provide the PIU's Social Development and Resettlement Cell with the grass-roots skills and capacity for field activities it will require. It will also bring the benefits of previous social development experience among Rajasthan communities. These attributes will substantially enhance RAP-provided PAP counseling encouraging productive utilization of compensation and rehabilitation grants, facilitate PAP access to financial assistance under various subsidy-related development programs, and increase the social acceptability and effectiveness of training programs organized for PAPs electing participation in self employment schemes.

Key tasks that will be carried out by the partnering NGO include:

- Develop rapport with PAPs and between PAPs and PIU;
- Assess the level of PAP skills and efficiency in pursuing economic activities, identify needs for training and organise programmes either to improve the efficiency and/or to impart new skills;
- Assist PAPs in receiving resettlement and rehabilitation entitlements due to them; particularly compensation and/or assistance for land and property losses;
- Motivate and guide PAPs for proper utilization of benefits under R&R policy provisions;
- Facilitate purchase of land for relocation and agriculture by negotiating price and settling at a reasonable price, or expedite the same through the Land Purchase Committees (LPC);
- Assist PAPs in obtaining benefits from appropriate development programmes.
- Help PAPs in increasing their income through provision of income restoration activities;
- Ensure marketing of produce and other goods, particularly those under self-employment activities.
- Complete consultations at the community level and provide support by describing the entitlements to the entitled PAPs and assisting them in their choices
- Accompany and represent PAPs at the Grievance Committee meeting.
- Assist PAPs to take advantage of the existing government housing schemes and employment and training schemes that are selected for use during the project; and
- Carry out other responsibilities as required and identified by the PIU.

Criteria and procedures to assure selection of a genuinely constituted, committed, and capable NGO with appropriate experience will govern the contracting process, and PWD will solicit the participation of publicly respected experts and institutions and PAP representatives in its decision. To assure shared responsibility,

In the event that a qualified NGO cannot be secured from Rajasthan, the project will engage services from outside the state.

NGO services will be required over the entire project period and provided for in the R&R component of the project budget. NGO(s) will be contracted on specified terms and conditions with appropriately secured financial accountability. Contract payments will be linked to task performance within an agreed-upon work plan and schedule and released quarterly on certification of progress. The project's Monitoring and Evaluation component will include indicators and criteria assessing NGO performance. Draft Terms of Reference for NGO implementation partners are provided in Annex 8-1.

8.6 Role of Community-Based Organisations

The project will promote, with the help of the NGOs, the formation of community-based organizations (CBOs) representing project-affected persons, groups, and communities as far as possible. It will also work with and through existing allied community-based organizations in project areas where such opportunities are present. These groups will be involved to the maximum extent possible in local aspects of resettlement planning, implementation and monitoring.

Resettlement negotiations, carried out with the community leaders favors good bargainers over bad bargainers and, as negotiating ability is often related to income level, it favors the more affluent over the poorer and more vulnerable sections of the displaced population.

CBO's will not only strengthen PAP capacities to receive RAP benefits. Their representation will provide an important link between local communities and the project that will facilitate the development of micro-level plans for resettlement and rehabilitation. This will assist project authorities in making arrangements for the smooth relocation of PAPs and their businesses.

PAP CBO formation will be encouraged in each adversely affected settlement/village or group of contiguous villages, depending on the number and clustering of affected households. These groups will be involved in participatory monitoring of RAP implementation.

8.7 District-level Committees

RAP implementation will be mediated through District-level Committees that will be established in each District where the project is active. These committees will provide coordinating nodes for land acquisition and compensation, relocation and resettlement, distribution of most project-provided assistance, and PAP access to most government programs in the entitlement package. SDRC will service district committees with field staff allocated to multi-districted construction contracts. PWD Contract Coordinators assigned to each construction contract let by the project will represent the resettlement program in the contract-covered districts and oversee and support district committee activities.

District-wise RAP implementation parallels corresponding government administrative infrastructure and organization and provides the best basis for coordination with both local

government authorities and field offices of GOR line Departments and agencies. District committees will be established during the social assessment of each project phase and will provide a venue for dissemination of project information; public consultations; and, potentially, the public hearings required by GOI environmental clearance regulations.

District Committee composition will include District Collectors, Tehsildars of affected Tehsils, Pradhans and Block Development Officers of affected Panchayat Samitis, Sarpanchs of affected Gram Panchayats, an officer of Revenue Department Land Acquisition Wing, district officers of PWD (Contract Resettlement and Rehabilitation Officer), Forest Department, and other GOR Departments as appropriate, NGO and other public representatives, and representatives from PAP CBOs once these are established.

8.8 SDRC Structure and Staffing

The Social Development/Resettlement Cell (SDRC) to be established within the PIU to implement and manage the project Resettlement Action Plan will be structured to provide coordination, technical support, and services at several levels of project implementation. SDRC organizational structure and staffing are shown in Figure 8-2.

Key institutional accountabilities and links and between SDRC, the project PIU, PWD, GOR Departments and agencies, and the World Bank are depicted in Figure 8-1. This figure also shows schematic links with local government units (LGUs), university and research centers, NGOs, CBOs, project stakeholders, and the public.

The structure of the staffing will be at two levels.

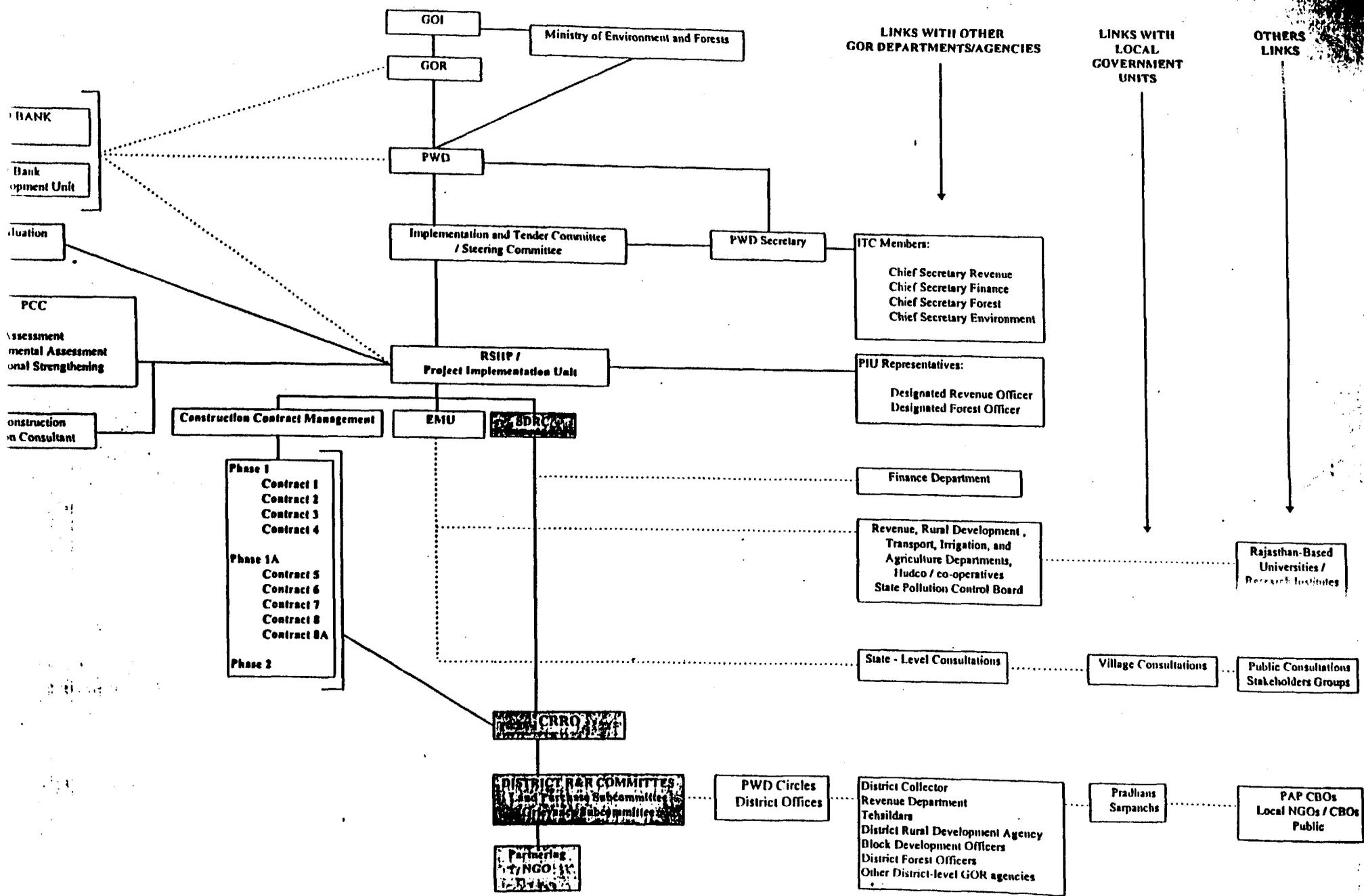
- SDRC with three people, Revenue Officer, as the head, a Social Scientist and a counterpart from the PWD.
- In each contract, the PWD executing Engineer will have a Contract Resettlement and Rehabilitation Officer (CRRO) from the PWD.

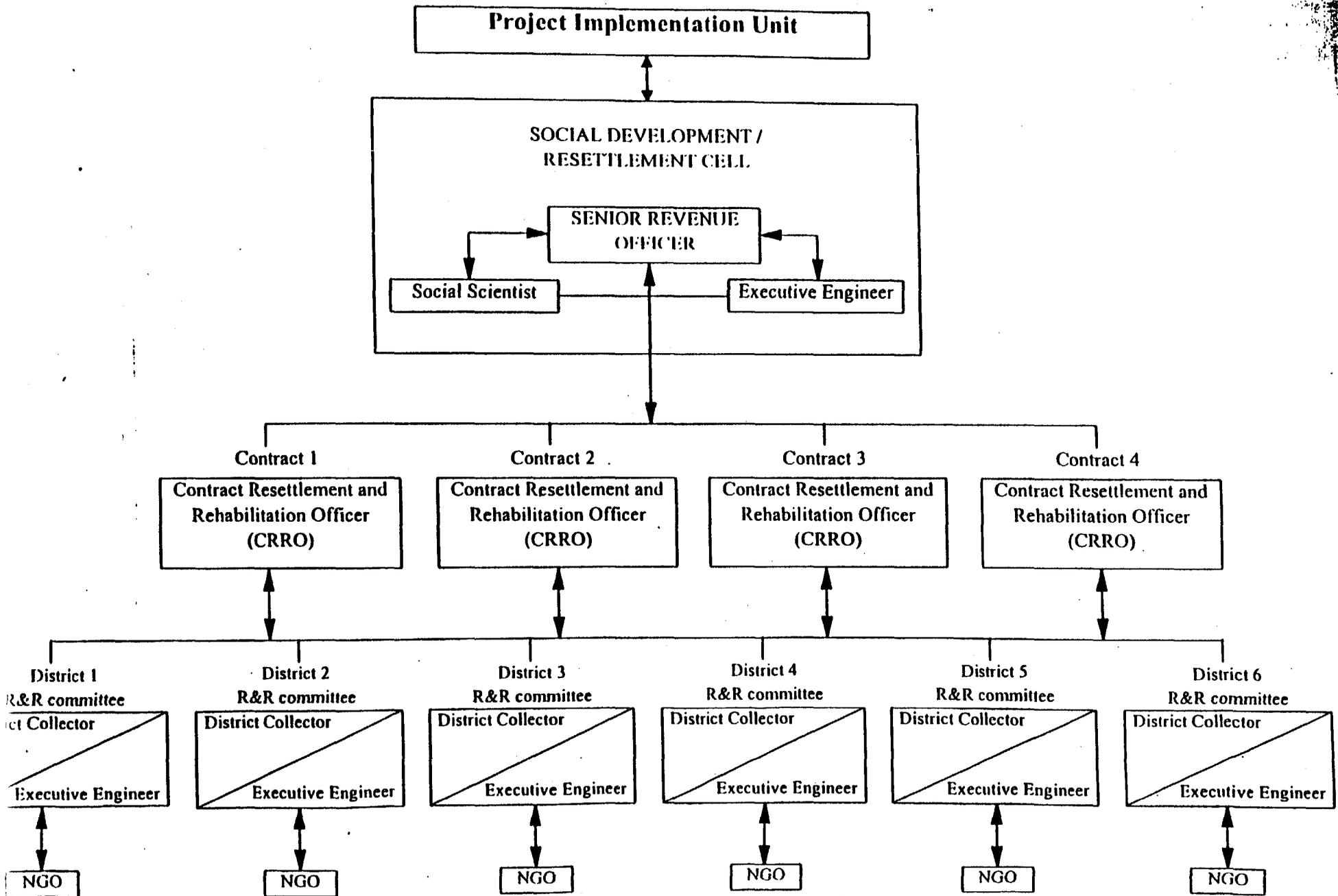
Draft Terms of Reference for the partnering NGO/NGO Consortium are provided in Annex 8-1.

8.9 Transparency and Accountability

Through information campaigns and other consultation mechanisms, the project will ensure that there is full transparency and accountability regarding the resettlement program and peoples' entitlements. ~~Whenever possible,~~ payment of compensation, assistance, and other support will be done in group/public settings to avoid any accusation of impropriety. The project will also respect the rights and interests of PAPs by following standard procedures of land acquisition and by avoiding invoking emergency provisions of the Land Acquisition Act

Transparency and accountability will be built in from beginning through informed participation,





freedom of information about the project and RAP, and presentation of this document, for example at public hearings. NGOs and CBOs will play a significant role in this. Project and World Bank loan-related documents will be made available to project affected persons and the World Bank Public Information Center.

8.10 Training and Capacity Building

Establishing sufficient implementation capacity to launch and carry out those components of project resettlement that must be completed before civil works.

To enhance capabilities, the SDRC staff and the Contract Resettlement and Rehabilitation Officers will be sent on learning visits to other projects with good resettlement programmes as well as sponsored for training courses in Resettlement and Rehabilitation (R&R). A two weeks course in R&R is conducted by the Administrative Staff College of India (ASCI) in Hyderabad along with Economic Development Institute of the World Bank followed with refresher course. The training would also cover techniques in conducting participatory rural appraisal for micro-planning, conducting census and socio-economic surveys, dissemination of information, community consultation and progress monitoring and evaluation.

9. IMPLEMENTATION SCHEDULE

9.1 RAP Implementation

During project implementation, the resettlement program will be coordinated with the completion of designs and the likely timing of civil works. The project will provide adequate notification, counseling and assistance to affected people so that they are able to move or give up their assets without undue hardship before commencement of civil works. The RAP implementation schedule indicating this coordination is provided in Table 9-1.

In the case of land acquisition, the Land Acquisition Act contains rules for the time required from when people are first notified about the State's intent to acquire the land, to the time they are required to vacate their holdings. The normal procedures for Land Acquisition will be followed in this project. Although the Land Acquisition Act has a provision for emergency acquisition requiring shorter time, this clause will not be invoked unless it is documented that an emergency exists and it is impossible to follow the normal procedures. In such eventuality the GOR will request World Bank concurrence.

The project will ensure that civil works are not started on any road segment before RAP implementation has been initiated and mutual agreement on compensation and assistance to the affected population has been obtained and provided in accordance with the project's policy framework. Inadequate attention to this issue will lead to costly delays. The required coordination has contractual implications, and will be considered in procurement and bidding schedules, award of contracts, and release of cleared ROW sections to project contractors.

As shown in the Implementation Schedule, resettlement planning and updating of studies will be a continuous process throughout the project. The PIU will coordinate these efforts to assure that RAP implementation and phasing is appropriately sequenced with designs and civil works.

Planning, surveying, assessing, policy development, institutional identification, participation, income restoration and implementation are typical activities of the RAP. While these activities have discrete components that can be put on a time line, there is a close inter relationship of each activity to the whole. The breakdown of each activity according to a specific timeframe has been given for Phase-1, 1A and Phase-2 to assist the PIU/SDRC in implementation of the RAP at various stages.

It is further cautioned, however, that circumstances may require an increase in time allotted to a task. Such circumstances include, but are not limited to, local opposition, seasonal factors, social and economic concerns, environmental clearances, training of support staff and financial constraints. The RAP implementation schedule will require detailed coordination between the project authorities and various line departments and agencies. The implementation plan, as indicated in Table 9-1, is shown for the five-year life of project and includes all project Phases

9.2 Implementation Procedure

The implementation of the RAP will consist of four major stages:

- * Identification of cut-off date and notification
- * Verification of properties of EPs and estimation of their type and level of losses.
- * Preparation of EPs for relocation
- * Relocation and resettlement of the EPs

- **Identification of the cut-off date and notification:** According to GOR and World Bank policy agreements, project cut-off dates for those who do not have legal titles will be the date of the socio-economic survey. For legal titleholders it is notification under Section 4 of the Land Acquisition Act.

In July 1997, sample survey of 5% of the entire Phase-1 roads was conducted to estimate number of potential PAPs. From September / October 1997 - till March 1998 census and socio-economic survey was conducted based on the drawings provided by design team. The census and socio-economic surveys were conducted assuming a corridor of Impact (COI) as 30 m from Kota to Katunda, 20 m from Katunda to Chittorgarh on Road 3 and again 20 m from Jaipur to Nagaur on Road 1. Approximately 27,000 potential PAPs were encountered during the survey. The project design team, in an effort to reduce the number of PAPs modified the design in terms of by passes, realignments and urban improvements. Based on the final designs of Phase I roads, resurvey for verification of EPs completed in May 1998. The first formal step in the implementation of RAP will be to notify and publicise a cut-off date (census and survey dates from September /December 1997). The PIU will be responsible for completing this exercise.

- **Verification of properties of EPs and losses:** The second stage of the RAP implementation is to clearly identify all EPs. The verification procedure includes checking of recorded addresses, type of property with their survey identification number, and estimation of type and level of losses. This stage also involves consultations explaining the entitlement framework to the EPs, as well as the process of payment of compensation and assistance, the grievance procedures, involvement in implementation, etc. This exercise is the responsibility of the PIU/SDRC.

An entitlement Identity Card (ID) will be prepared for each EP giving details of the type of losses and type of entitlements. Each EP will be given an identification code. This card will be verified by the three parties present and signed by each of them. Each EP will be given a copy. In case of household entitlement, both the EP and his/her spouse will sign the ID card. For individual entitlement concerning the loss of livelihood, every adult who is of 21 years of age on the cut off date will be identified and given documentation of their entitlements. Additional discussion and a facsimile of the EP identity card are provided in Figure 9-2. PIU/SDRC will be responsible for the completion of this exercise.

- **Preparation of EPs for relocation :** The next step will be to prepare the PAPs for relocation and resettlement through various methods including community based meetings, dissemination

of information in written form and individual interviews. The role of the SDRC partnering NGO in this respect will be very important. Community consultation will continue through out the project. Efforts will be made to restrict all developmental activities with the exception of capital resource funding during the land acquisition and resettlement period for the EPs. No Physical relocation from agriculture land, residential units, commercial establishments or other immovable properties will begin before alternate arrangements are made.

- **Relocation and Resettlement :** During the period of transition, the EPs will be allowed to have access to their original property and any assets located there until they become unusable or access is denied. The EPS will be given relocation and other allowances, as given in the entitlement framework. Provisions for the transfer of facilities including building access road to new neighborhoods, if needed will be responsibility of the PIU. In Phase-1 and 1A roads, there is no need for new resettlement sites, but in case resettlement sites are required for Phase II, a joint committee having representation of PAPs and host community will be formed to identify such sites. The new resettlement sites will be regularly visited by the PIU officials. These two steps will facilitate resettlement and resolve any issues that arise, in case of large influx of EPs into an existing neighborhood:

Timing of resettlement : The resettlement process must be completed by the start of civil works.. Requisite procedures will be developed by the PIU to carry out resettlement of PAPs located within the COI, before the civil work starts on any section of the project road. PAPs will be given at least two months notice to vacate their property before civil works begin.

Timing of legal possessions of land and eviction notice: Table 9-2 gives the timing of the steps of the land acquisition process under the LAA and Figure 9-1 shows Land Acquisition procedures. In the context of the overall project, these steps are indicated in the Implementation Schedule. They include:

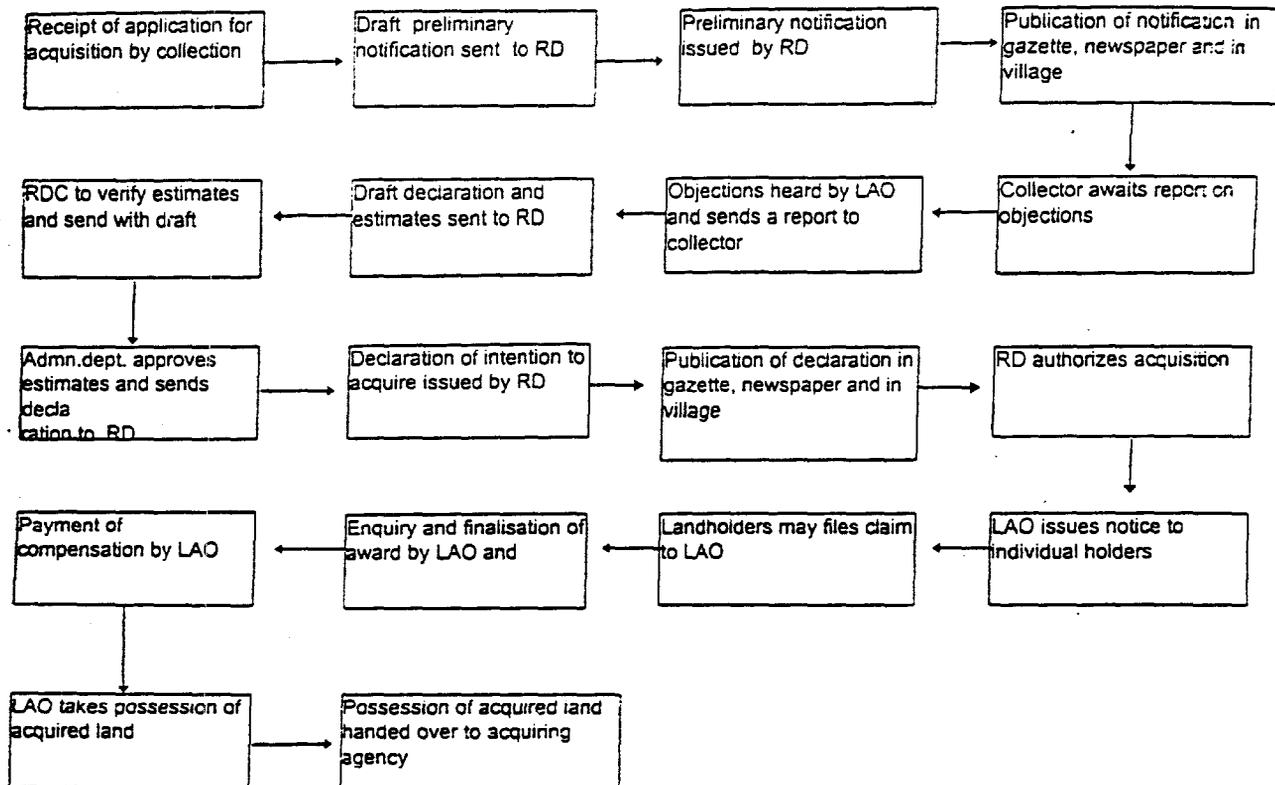
1. Complete detailed SES and input to RAP
2. GOR endorsement fo Final RAP & Project Entitlement Framework
3. Clearance of RAP by WB
4. Appointment of Social Scientist
5. LA notification
6. Prelim Survey for LA
7. Appointment of NGO / CRRO
8. Hearing of objection
9. Declaration of boundaries
10. Completion of LA
11. Establishment of LPC
12. Consultation for Entitlement
13. ID card distribution
14. Training and capacity building
15. Implementation of RAP
16. Repeat Consultation

17. Mid term review
18. Corrective measures
19. Appointment of M&E agency
20. M&E of RAP
21. Group Entitlements

TABLE 9.2
LAND ACQUISITION PROCESS

Step	Steps of Land Acquisition Process	Length of Time
1.	Preparation of Plans and Scheduled by R&BD and Submission to LAO	
2	Publication of Preliminary Notification Under Section 4 in Gazette and Newspapers.	2 to 4 months including Hearing of Objections.
3	Preliminary survey to determine exact portion of land required and filling of objections under 3a.	15 to 30 days after the preliminary notification under Section (3)
4	Hearing of Objections	15 days after notification.
5	Declaration of Precise Boundaries in Newspapers under Section 5 : Duration of time between notification of Sections 3 and 5	2 to 6 months, including Hearing of Objections, beyond which the procedure lapses
6	Order from State Government to Possess Land under Section 6 Step 1 to Step 5	6 to 12 months
7	Individual Notices sent to Affected People under Section 7, land is marked and plans prepared.	
8	Valuation and Compensation set under Section 8 and 9. Landowners submit claims for compensation	2 to 4 months
9	Payment of Compensation and Possession of the Land Under Section 1.1	2 to 12 months
10	Total Maximum Amount of Time Allowed	2 years

Figure 9-1
Land Acquisition Procedures



RDC = Revenue Division Commissioner

RD = Revenue Department

Admin. Dept. = The department implementing the project requiring land acquisition

9.3 Implementation Responsibility

It is the responsibility of the PWD to ensure that the RAP is successfully implemented in a timely manner. The implementation plan or RAP for a specific road corridor will be prepared by the PIU/SDRC. The implementation schedule proposed will be updated, as more information becomes available.

9.4 Immediate Action

In anticipation of scheduled project implementation GOR/PWD will take immediate action as follows:

- Provide orientation and awareness-building activities for PWD ~~leadership~~ and other key RAP implementers to prepare them for their roles in RAP implementation and impress the urgency of preparatory action to assure readiness.
- Establish the project Social Development/Resettlement Cell (SDRC). PWD will effect appropriate administrative action and implementing orders establishing the SDRC within the project PIU and creating the PWD positions required to staff it..
- Designate, dedicate, and post PWD personnel to fill SDRC positions. PWD will identify, assign, and effect the immediate posting of qualified personnel to fill SDRC-established PWD positions. PWD will guarantee the stability of their assignment over at least the first year of the project.
- Mobilize, under PIU guidance and with the participation of SDRC PWD staff,, a task force to activate the land acquisition process for Phase-1 contracts. This includes public notifications under the Land Acquisition Act; and arrangements for the transfer of project-required public lands from other Departments.
- Conduct orientation and preliminary training of PIU and SDRC personnel. As soon as SDRC PWD personnel are in place, PWD will arrange for PCC-provided project orientation. and provide a preliminary training program for both PIU and SDRC personnel that will include modules on project-associated resettlement and rehabilitation responsibilities under GOI, GOR and World Bank policies; project-induced displacement, resettlement and rehabilitation; project R&R goals and objectives; and basic provisions of the project RAP. Orientation and training will emphasize respective roles of PWD and include seminar/workshops and initial field exposure to Phase-1 contracts.
- Secure additional services of a Social Scientist to supply technical assistance supporting RAP implementation.
- Initiate NGO search, selection, and contracting. PWD will ~~mount accelerated efforts to~~ identify the NGOs that will partner PWD and provide the primary basis of RAP implementation at the District-level. Project authorities will refine selection criteria, specify contracting procedures, and establish a search committee, including representatives of the project, PCC, respected Rajasthan social scientists, and NGOs that will assist a time-bound process of NGO identification and recommendation that contributes to transparent contracting of a qualified organizations prior to project approval.

9.5 Entitled Person Identity Cards

All affected families will be issued Identity Cards. These cards will be issued in the name of head of the family. The card will contain the following particulars:

- * Name and passport size photograph of head of the household along with his age, sex, caste, whether below poverty line or not, and occupation.
- * Name, age, sex, caste, occupation and relation with the head of the family of other members of the family.
- * Type and extent of loss.
- * Compensation and Entitlements as per R&R package

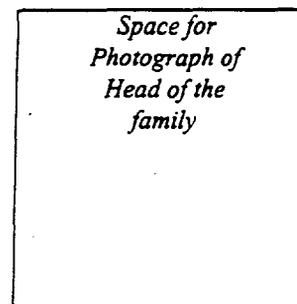
The card will be delivered prior to acquisition of properties and properly acknowledged. Along with the ID card a booklet carrying information related to the project and salient features of R&R policy will be distributed. A facsimile of the proposed ID card is given in Figure 9-2 below.

Figure 9-2

**PUBLIC WORKS DEPARTMENT
GOVERNMENT OF RAJASTHAN
IDENTITY CARD FOR PROJECT AFFECTED PERSON OF
RAJASTHAN STATE HIGHWAYS PROJECT
(Not valid for any other purpose)**

General Information

Name of the head of the family
 Fathers' Name
 Husbands' Name (incase of women headed family)
 Age
 Caste
 Sex
 Occupation
~~Annual Income~~
~~Whether~~ Below Poverty Line family Yes NO.



Address

House Number (in case of an urban area)
 Colony (in case of an urban area)
 Village
 Block
~~Police Station~~
 District
~~Nearest Railway Station / Bus Station~~ _____ ~~Distance (in Kms)~~ _____
~~Distance from the Block / District HQs~~ _____

Information on other family members

Sl. No.	Name	Relation with Head of the family	Age	Sex	Caste	Occupation
1						
2						
3						
4						
5						
6						

~~The entitlement should reject the options provided in the entitlement framework that will help in indicating the choice of the EP as it will be followed with an box that will be filled after consulting with them.~~

* BPL as defined - BPL+25% above it.

- Type of loss:**
- (i) Loss of Agricultural land
 - (ii) Loss of residential structure
 - (iii) Loss of business establishment
 - (iv) Loss of source of income
 - (v) Loss of private property (specify)

- Status:**
- (i) Owner
 - (ii) Tenant
 - (iii) Encroacher
 - (iv) Squatter

Extent of loss: _____

Area affected:

- (i) Land (in hac.): _____
- (ii) Structure (in sq.mts): _____
- (iii) Other (e.g. well, tubewell, tree, etc.) in number (and specify) _____

- Entitlement:**
- (i) Compensation at replacement value
 - (ii) Maintenance Allowance
 - (iii) Shifting Allowance
 - (iv) Assistance in finding alternate land
 - (v) Assistance in finding alternate house
 - (vi) Assistance in finding alternate comm. Estab.
 - (vii) Training for self employment
 - (viii) All fees, taxes & other charges to be borne by project
 - (ix) A house site under LIG / EWS

- scheme
- (x) A house construction loan under
LIG / EWS scheme
- (xi) Rental Assistance
- (xii) Right to salvage materials from
demolished structure
- (xiii) Free shop site
- (xiv) Shop construction loan
- (xv) Right to harvest standing crops
- (xvi) A grant equal to the loss of 6
months salary
- (xvii) Twice the value of loss of
standing crops
- (xviii) Compensation for perennial
crops equal to the capitalized value
(not percent value of production of
such crops, at a discount of 12% per
year)

Compensation Amount:

<u>Heads</u>	<u>Amount (in Rs.)</u>
(i) Land	_____
(ii) Structure	_____
(iii) Well	_____
(iv) Trees	_____
(v) _____	_____
(vi) _____	_____
(vii) _____	_____
(viii) _____	_____
(ix) _____	_____
(x) Total	_____

10. COSTS AND BUDGET

10.1 Costs and Budgets

A consolidated overview of estimated costs of the Resettlement Action Plan is provided below. It supplies and justifies a cost-wise, item-wise budget estimate for the entire direction of resettlement implementation, including land and asset acquisition compensation, assistance, administrative expense, monitoring and evaluation, and contingencies. This budget is summarized in Table 10-1, and a detailed breakdown for Phase-1 by construction contract is shown in Table 10-2. The cost of resettlement has been included in the overall costs of the project. Values for compensation amounts and other support mechanisms will be adjusted, if required, annually based on inflation factors. The budget incorporates provision for this, and mechanisms for budgetary adjustments and updates are included.

The GOR will pay for costs related to Land Acquisition and compensation for transfer of title to property from private individuals to the State. Some of the RAP-proposed extension of existing GOR poverty alleviation, housing, and other programs will also be paid by the GOR. Other support mechanisms, such as cash assistance or equivalent, training, capacity building, income-generating schemes etc., and most of the entitlements for project-affected groups will be provided by funds from the overall project budget.

Experience from similar projects in India and worldwide show that resettlement costs in road projects are low compared with overall project costs. R&R costs account for approximately 5% to 7 % of civil costs for Phase-1. Phase 1-A R&R costs represent 3.5% of civil costs and R&R costs for Phase-2 5.5% of the civil costs. Although ROW and roadside settlement conditions in Rajasthan necessitate substantial land acquisition and expense, costs of project resettlement remain a relatively small fraction of the project budget. Delays or inadequacies in implementing the RAP could however lead to costly delays in overall project implementation, since progress in civil works depends on satisfactory completion of the resettlement program.

The costs used for budget estimates are based on information collected during census and socio-economic surveys of PAPs during Phase-1 project preparation. Market value surveys were also conducted for the Phase-1 roads; and the resettlement budgets, particularly, the compensation and assistance payment components for land and non-land assets, has been computed on this basis.

The detailed budget for the different phases are given in the following table. However, the budget for Phase-1A and 2 are only estimates based on Phase-I Roads. With the completion of survey work and design the estimates for Phase-1A and 2 will change.

An independent Committee on Market Value Assessments will assess costs and revalidate estimates during Phase-1 land acquisition. Budget adjustments, if necessary, will be effected.

The basis of budget cost estimates for major RAP-provided entitlements is briefly reviewed below:

TABLE 10-1

BUDGET ESTIMATE FOR RESETTLEMENT ACTION PLAN - PHASE 1, 1A AND 2

(Rupees in lakhs)

S.L.NO.	ITEM	PHASE I			PHASE IA			PHASE II		
		GOR	WB	TOTAL	GOR	WB	TOTAL	GOR	WB	TOTAL
1	Acquisition of private land: Compensation	969.79		969.79	176.87		176.87	1,083.20		1,083.20
2	Acquisition of private residences: Compensation	186.20		186.20	170.99		170.99	345.67		345.67
3	Acquisition of private businesses: Compensation	141.75		141.75	130.17		130.17	263.15		263.15
4	Acquisition of private wells	28.50		28.50	28.17		28.17	52.00		52.00
5	Acquisition of private trees	3.25		3.25	2.08		2.08	6.03		6.03
	Sub Total : Compensation	1,329.49		1,329.49	507.18		507.18	1,750.96		1,750.96
6	Productive asset assistance (Business)		60.75	60.75		55.79	55.79		112.78	112.78
7	Productive asset assistance (Residence)		79.80	79.80		73.28	73.28		148.14	148.14
8	Assistance to encroachers & squatters		6.25	6.25		5.71	5.71		11.55	11.55
9	Additional Assistance to Vulnerable Groups		84.53	84.53		77.63	77.63		156.93	156.93
10	Shifting Assistance		3.37	3.37		2.93	2.93		5.93	5.93
11	Restoring livelihood/income		82.00	82.00		75.30	75.30		152.23	152.23
12	Restoration of common property resources		20.20	20.20		18.55	18.55		37.50	37.50
13	Assistance to tenants		135.00	135.00		123.97	123.97		250.62	250.62
14	Community Infrastructure		40.40	40.40		37.10	37.10		75.00	75.00
15	Conservation of Temples		6.08	6.08		5.58	5.58		11.29	11.29
16	Extension of Government programmes	6.00		6.00	5.51		5.51	11.14		11.14
17	Group Entitlements *		18.00	18.00		25.20	25.20		40.00	40.00
	Sub Total : Assistance	6.00	536.38	542.38	5.51	475.84	481.35	11.14	961.97	973.11
	Sub Total : Assistance+Compensation	1,335.49	536.38	1,871.87	512.69	475.84	988.53	1,762.10	961.97	2,724.07
18	Training for Social Scientist, Revenue Officer & EE PWD		1.00	1.00		0.75	0.75		1.50	1.50
19	Public Consultation through NGOs before settlement		12.00	12.00		9.18	9.18		18.00	18.56
20	NGO assistance for RAP implementation		12.00	12.00		11.00	11.00		21.00	21.00
21	M&E Consultants		40.00	40.00		36.73	36.73		74.28	74.28
	Sub Total		65.00	65.00		57.68	57.68		115.32	115.32
	Total	1,335.49	601.38	1,936.87	512.69	533.50	1,046.19	1,762.10	1,077.29	2,839.39
	Contingencies @ 10%	133.55	60.14	193.69	51.27	53.35	104.62	176.21	107.73	283.94
	Grand Total	1,469.04	661.52	2,130.56	563.96	586.85	1,150.81	1,938.31	1,185.02	3,123.33

Assistance over and above compensation under Land Acquisition Act, in order to provide replacement value will be met from the World Bank loan. Social Scientist will be supported by Subject Specialist who will be hired for the purpose. Provision for hiring a specialist has been made in the budget. Social Scientist will be responsible for dissemination of information under group entitlements. Social Scientist will be supported by Subject Specialist who will be hired for the purpose. Provision for hiring a specialist has been made in the budget. Group entitlement would include a) women and child needs b) Information Dissemination on Sale Space and Access, Pedestrian / Non motorised Transport Safety, Amenities for Highway Users, Highways associated health concerns c) Tribal and Ethnic Groups, d) Labor camps / Host Communities and e) Disabled Persons

TABLE 10-2

PHASE 1 RESETTLEMENT ACTION PLAN BUDGET BY CONSTRUCTION CONTRACT

(Rupees in lakhs)

ITEM	CONTRACT 1			CONTRACT 2			CONTRACT 3			CONTRACT 4			GRAND TOTAL
	GOR	WB	TOTAL										
Acquisition of private land: Compensation	480.12		480.12	193.04		193.04	59.56		59.56	237.07		237.07	969.79
Acquisition of private residences: Compensation	11.55		11.55	62.30		62.30	53.90		53.90	58.45		58.45	186.20
Acquisition of private businesses: Compensation	14.28		14.28	41.58		41.58	37.59		37.59	48.30		48.30	141.75
Acquisition of private wells	7.50		7.50	6.50		6.50	6.00		6.00	8.50		8.50	28.50
Acquisition of private trees	0.82		0.82	0.79		0.79	0.67		0.67	0.97		0.97	3.25
Sub Total : Compensation	514.27		514.27	304.21		304.21	157.72		157.72	353.29		353.29	1,329.49
Productive asset assistance (Business)		6.12	6.12		17.82	17.82		18.11	18.11		20.70	20.70	60.75
Productive asset assistance (Residence)		4.95	4.95		26.70	26.70		23.10	23.10		25.05	25.05	79.80
Assistance to encroachers & squatters		1.39	1.39		1.59	1.59		1.49	1.49		1.78	1.78	6.25
Additional Assistance to Vulnerable Groups		15.54	15.54		20.09	20.09		21.61	21.61		27.29	27.29	84.53
Shifting Assistance		0.47	0.47		0.89	0.89		0.91	0.91		1.10	1.10	3.37
Restoring livelihood/Income		17.02	17.02		21.12	21.12		28.50	28.50		15.38	15.38	82.02
Restoration of common property resources		5.45	5.45		5.95	5.95		3.55	3.55		5.25	5.25	20.20
Assistance to tenants		22.00	22.00		41.00	41.00		27.00	27.00		45.00	45.00	135.00
Community Infrastructure		10.90	10.90		11.90	11.90		7.10	7.10		10.50	10.50	40.40
Conservation of Temples		1.28	1.28		1.60	1.60		1.44	1.44		1.78	1.78	6.08
Extension of Government programmes	1.40		1.40	1.80		1.80	1.20		1.20	1.60		1.60	6.00
Group Entitlements *		4.32	4.32		2.88	2.88		7.20	7.20		3.60	3.60	18.00
Sub Total : Assistance		89.44	90.84	1.80	151.54	153.34	1.20	138.01	139.21	1.60	157.41	159.01	542.40
Sub Total: Assistance+Compensation	514.27	89.44	605.11	308.01	151.54	457.55	158.92	138.01	296.93	354.89	157.41	512.30	1,871.89
Training for Social Scientist, Revenue Officer & EE PWD		0.25	0.25		0.25	0.25		0.25	0.25		0.25	0.25	1.00
Public Consultation through NGOs before settlement		3.00	3.00		3.00	3.00		3.00	3.00		3.00	3.00	12.00
NGO assistance for RAP Implementation		2.50	2.50		3.50	3.50		4.00	4.00		2.00	2.00	12.00
M&E Consultants		10.40	10.40		11.50	11.50		8.00	8.00		10.10	10.10	40.00
Sub Total		18.15	18.15		18.25	18.25		15.25	15.25		15.35	15.35	65.00
Total	514.27	105.59	621.26	306.01	169.79	475.80	158.92	153.26	312.18	354.89	172.76	527.65	1,936.89
Contingencies @ 10%	51.43	10.58	62.13	30.60	16.98	47.58	15.89	15.33	31.22	35.49	17.28	52.77	193.69
Grand Total	565.70	116.15	683.39	336.61	186.77	523.38	174.81	168.59	343.40	390.38	190.04	580.42	2,130.58

ance over and above compensation under Land Acquisition Act, in order to provide replacement value will be met from the World Bank loan.

1) Scientist will be responsible for dissemination of information under group entitlements. Social Scientist will be supported by Subject Specialist who will be hired for the purpose. Provision for hiring a specialist has been made in the budget.

2) entitlement would include a) women and child needs b) Information Dissemination on Safe Space and Access, Pedestrian / Non motorised Transport Safety, Amenities for Highway Users, Highways associated health concerns
c) Dalit and Ethnic Groups, d) Labor camps / Host Communities and e) Disabled Persons

10.2 Land Value

Land valuation was accomplished through market value surveys on Phase-1 corridors and consultation with Revenue Department specialists. Table 10-3, below, shows the average values for major land categories that were employed in cost estimates.

**TABLE 10-3
AVERAGE LAND VALUES FOR MAJOR LAND CATEGORIES**

Land Category		Value per sq. foot (in Rs.)
Residential	Main Road	90
	Off the Road	75
Commercial	Main Road	468
	Off the Road	350
Agricultural		Value per hectare (in Rs. lakhs)
Irrigated	Main Road	9.68
	Off the Road	8.0
Unirrigated	Main Road	4.4
	Off the Road	3.08

The project resettlement policy specifies that the true market or replacement value of lost assets will be provided to project-affected persons. Government compensation paid by the Revenue Department is typically well beneath actual market value—often leading to legal disputes that significantly delay projects. For this reason, a solatium of 30% of compensation value is added to government compensation. Further, interest @ 12% per annum would be paid to the PAP for the delay in award of compensation. The compensation to be paid for the land is indicated Tables 10-1 and 10-2.

Land value figures shown above and used in budget estimates are based on a preliminary market value survey for land that was conducted in conjunction with the R&R socio-economic survey. During the survey, prices for various categories of land viz, irrigated, unirrigated, mines, homestead, etc. were asked from respondents directly and indirectly. The price quotes were cross-checked by repeating the same questions to people not affected by the project. The local *patwari* (official of Revenue Department) was also consulted, as and when available, and requested to assess the local market value of the same land. This exercise was repeated in each District traversed by Phase-1 roads.

10.3 Value of Buildings

Field surveys indicated average size of project-affected residential structures as one and a half stories, and that of commercial buildings as one story. On some road sections, for example Nawa City on Contract 2 of the Jaipur-Nagaur corridor, larger residential units of up to three stories were encountered.

Construction costs used in budget calculations of building value are based on PWD's Basic Schedule of Rates (BSR) and assume similar construction types characterize both residential and commercial structures. Values for typical project-area building types are shown in Table 10-4 below.

TABLE 10-4
VALUE OF BUILDINGS BY BUILDING TYPE

Building Type	Value per sq. mt. (in Rs.)
RCC roof, concrete floor and brick masonry	4000
Dry store masonry	700
Mud mortar house	1000
Tin/asbestos/thatched roof	400

10.4 Other Values

The basis of cost estimates included in the RAP budget is described below for shrines, wells, trees, government housing, shifting allowances, and income generation and vocational training.

Shrines

Religious shrines are frequent features of Rajasthan roadsides. During PAP census and verification of assets, more than seventy-five shrines were identified within the project's potential corridor of impact. As a result of careful design, slight shifts in alignment and adjusted cross-sections all but fifteen will be avoided. These shrines will be relocated in consultation with communities to sites of their choice. Most of the affected structures are small, averaging less than two square meters. Based on BSR costs of *pucca* construction of Rs.4000 per sq. mt., the cost of replacing a shrine has been estimated at Rs. 8,000.

Wells

Fifty-seven wells will be affected by construction in Phase-1 of the project. Thirty-three are hand-pumps, twelve are borewells, and twelve are tubewells with electric pumps. In addition, nine government water huts and three pump-houses will need to be replaced. Costs of typical well types found on project roads were collected from the Office of the Assistant Engineer, PHED and used in budget estimates. These costs are shown in Table 9-5 below.

**TABLE 10-5
COSTS OF WELLS BY WELL TYPE**

Well Type	Cost per unit (in Rs.)
1. Handpump (25-30 meters deep)	45,000
2. Tubewell with electric pump	300,000
3. Borewell (60-100 meters deep)	100,000-120,000

Trees

Afforestation to replace trees that will be removed from the ROW in project construction is provided in the project's Environmental Management Action Plan (EMAP). More than 250 trees on private land will also be affected. The costs of these trees were estimated by owners at between Rs.400 to Rs.1200, depending upon species, maturity, and productivity. For budget purposes an average figure of Rs.800 was used in estimates.

Income and Rent

Based on PAP census and socio-economic survey data, the average annual income of tenants was Rs.24, 627. The average tenant paid Rs.300 per month for residential accommodation, and Rs.425 for commercial space. Six months of lost rent from a residential tenant would total Rs.1, 800; and from a commercial tenant, Rs.2, 500. Six months of income loss by a tenant would total Rs.12, 314. The average annual income of property-owning PAPs is Rs.33, 314. Six months of income loss for a property owner would total Rs.16, 657. Lost of rental income by a property owner is calculated as the total value of owned land and property multiplied by a factor of 5%. These figures provide the basis of budget estimates for losses of income and rent.

Squatters and Cost of Government Housing

Survey data indicates that 17% percent of squatting is residential in nature. Vulnerable groups comprise 67% of all PAPs. These figures were used to calculate potential budget costs of RAP-provided government housing and vocational training programs.

As per HUDCO categories, the average cost of providing housing to PAPs in the Economically Weaker Sections (average monthly income below Rs.2000) is Rs.27, 000. Of this total, 75%, or Rs.20, 250 would be provided under HUDCO and the remainder by beneficiary. Similarly, for a PAP within the low-income group, the average cost of providing housing is Rs.1, 00,000. Of this total, HUDCO would provide Rs.70, 000 and the remainder, Rs.30, 000 would be borne by the beneficiary. Under RAP entitlements, the beneficiary share of PAPs will be paid by the project as assistance, and drawn from World Bank loan funds.

Shifting Allowance

Estimated moving costs used in budget calculations are Rs.600 per affected household or commercial establishment.

Income Generation and Vocational Training

Estimates of per capita training costs used in budget calculations were based on the following norms:

• Fees of NGO per PAP trainee	Rs. 600
• Food/Stay per PAP trainee (10 days)	Rs. 700
• Cost of training materials	Rs. 500
Total	Rs. 1,800

Eligible PAPs will be provided their choice of skills training under available programs. PAPs from vulnerable group PAPs will be given preference for this support. Training will be provided under the District Rural Development Agency (DRDA) scheme of the TRYSEM program.

Other Cost Items

The budget also contains estimates for costs of monitoring and evaluation, NGO-provided services, and SDRC staff training.

1. For Community Infrastructure an estimated figure of Rs.10, 000/- per Km has been considered for the purpose of budget.
2. For Restoration of CPR's an estimated figure of Rs.5, 000/- per km has been considered.
3. For dissemination of information under Group Entitlements Rs. 3,60,000 has been estimated for each district considering the fact that each district would have six specialists for two weeks each. The cost of hiring one specialist per day comes to Rs.4000.
4. For NGO cost household is the unit and Rs.350/- per household has been considered.
5. For M&E Consultants cost has been considered on per km basis which comes to Rs.10, 000/- per km.
6. For public consultation Rs.10, 000 per meeting has been estimated. There would be total of three meetings in every village.

11. GRIEVANCE REDRESSAL

11.1 Grievance Redressal

The RAP-provided participatory process, as well as its generous compensation and solid support mechanisms, are expected to enhance acceptance of the resettlement program and reduce complaints. There will nevertheless be individuals or groups who feel that they have not received adequate support, or that their needs have not been properly addressed.

The project will therefore establish a Grievance Redressal process, with district-level committees. In addition to local government officials and project representatives, each District Grievance Redressal Committee will have representation from the local affected population and the NGOs/CBOs involved in RAP implementation. These committees will hear complaints and facilitate solutions; and the process, as a whole, will promote dispute settlement through mediation to reduce unnecessary litigation.

The step-by-step process for registering and addressing grievances is sketched in the flow chart shown in Figure 11-1.

Details regarding registering complaints, response times, communication modes, and mechanisms for appeal or approaching civil courts if other provisions fail are provided below as per the GOR draft Resettlement Policy.

11.2 District-level Grievance Redressal Committee

The District-level Grievance Redressal Committees will be headed by the District Collector of respective districts. The committee will comprise of two local NGOs, local MLA, Pradhan of affected blocks, representatives of line departments and representatives of affected persons.

The functions of the grievance committee shall be:

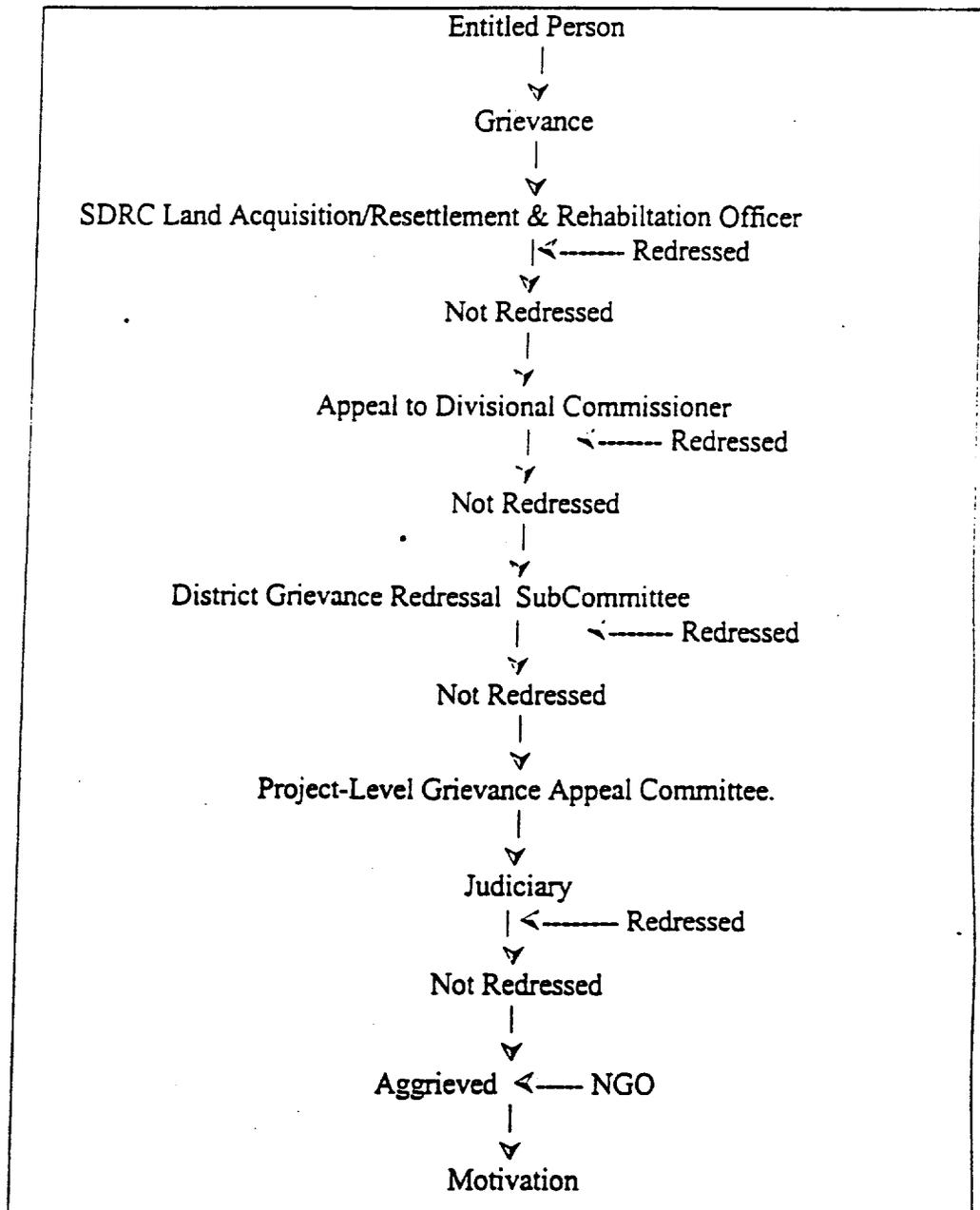
- * to provide support to PAPs on problems arising out Land Acquisition Act property acquisition, eligibility for RAP-provided entitlements, and compensation and assistance provided;
- * to record the grievances of the PAPs, and categorise, prioritise and solve them within one month;
- * to inform PIU of serious cases within an appropriate time frame; and
- * to report to the aggrieved parties about the developments regarding their grievance and decisions of the PIU.

The Grievance Committees will meet regularly (at least once a month) on a pre-fixed date during implementation of the RAP. The committees will suggest corrective measures at the field level itself and fix responsibilities for implementation of its decisions. The committees will deliver their

decision within a month of case registration. Appeals against the decisions of the Grievance Redressal Committee will be heard by the Divisional Commissioner.

Decisions of Divisional Commissioners will be final and not contested in any other forum excepting the Project-level Grievance Appeal Committee, or, if required, in the courts of law. In cases where the court fails to satisfy the aggrieved party, SDRC partnering NGOs will attempt to motivate the PAP to smooth implementation of the R&R program.

**FIGURE 11-1
GRIEVANCE REDRESSAL PROCESS**



11.3 Lok Adalats

Upon the recommendation of the SDRC and District Collector to the PIU, there is a scope for augmenting the activities of the District-level Grievance Redressal Committees by establishing Lok Adalats. This option may be exercised in the event that land acquisition grievances reach a scale beyond the capacity of the District-level Committee or otherwise threaten the orderly implementation of the RAP or project. The structure and functions of Lok Adalats are described below.

To promote expedited disposal of PAP grievances related to award and payment of compensation which are sub-judice in the courts, committees on Lok Adalat comprised of the following functionaries may be constituted :

- * District Collector as Chairman;
- * Chief Engineer of the project may be represented by Executive Engineer as member;
- * Government pleader of the district concerned as member;
- * Secretary, State legal aid and advice board as member;
- * Two conciliators appointed by the State legal aid and advice board as members;
- * Land Acquisition Officer as member secretary; and
- * Coordinator of SDRC of respective districts as member.

Functions of Committee on Lok Adalat:

1. Identification of Cases

All pending cases of land, structure, or other property acquisition pertaining to the project seeking enhanced compensation registered under section 4(I) of LA Act 1894 (amendment 1984) may be listed with the help of the courts and district government pleader by the LAO who is the member secretary of the Lok Adalat.

2. Prioritisation of Cases:

Since it may not be possible to take up all pending cases at one time, those may be prioritized as follows by the LAO:

- a) Cases pertaining to the land and structures of displaced persons
- b) Cases pertaining to the land and structures of adversely affected PAPs
- c) Cases pertaining to the land and structures of partially affected PAPs

3. Updating the Record of Rights

The Collector of the concerned district may advise the respective revenue department to update land records in respect of deceased claimants and to bring the legal representatives on the record of

rights by effecting mutations wherever necessary before commencement of inquiry by the committee on Lok Adalat for settlement of claims on inadequate land compensation.

4. Information Campaign

Handouts should be distributed among all the affected persons highlighting the prospects of amicable settlement of the dispute in question, outside the court, speedy and at a lesser expense along with the timetable of inquiries and spot inspections of the committee on Lok Adalat. Besides public announcements may be made in the affected areas. Press notes may be released in Hindi newspapers to aid publicity.

Gram sabhas or village council meetings may also be conducted by the LAO along with the district coordinator of the RC, Tehasildar, Executive Engineer/Assistant Engineer, etc in the affected villages. Attention of the PAPs will be invited to the present system of quick, inexpensive and amicable settlement of claims for the enhanced compensation through the Lok Adalat. They will also be advised to get their records of rights updated. All possible efforts will be put forth to motivate the affected land owners for a voluntary and amicable settlement of their claims outside the court.

Meetings should be conducted by the Collector as Chairman of Lok Adalat with other members of the Lok Adalats. Informal discussions may be held regarding (1) the situation of land / structures values/ price, (2) the compensation expected by the PAPs, (3) the legal remedies available through the mediation of Lok Adalat, (4) the rehabilitation measures undertaken by government and collection of information, etc with a sole objective of building a rapport and conviviality between the machinery of the Lok Adalats and claimants.

5. Spot Inquiry by the Committee

The committee on Lok Adalat for the settlement of the claims of enhanced compensation may visit the lands and structures to be acquired by the project on the appointed date and obtain the views of the property owners regarding enhancement of their properties original valuation. The committee may also verify (1) cropping pattern and average yield, (2) the nature of land and soil, (3) construction typology and material used, (4) age of the structure, (5) market price of land and structure of similar nature in non affected areas, etc.

6. Compromise through Conciliation / Mediations:

In every identified case, compromise/consent for a specific price of land/structure is very essential. This is obtained at an ultimate product of the series of conciliation, mediation and negotiation held by the Chairman, Conciliators and other members of the committee. PAPs are compelled to accept any suggestions made by the committee. So the mediations may be held at the appointed places by the committee under the Chairmanship of concerned District Collectors and willingness of the PAPs to take part in these proceedings with an open mind is solicited. If the above process facilitates to arrive at a mutually acceptable price of the property in question, necessary proceedings

to that effect will be drawn. If these conciliation fails, the case will proceed before the Court where it is pending.

7. Compromise Decree

The committee on Lok Adalat will prepare a report on the compensation payable to the parties and submit the same to the government within a period of one month for approval. The parties and their counsel will be advised to file compromise petition before the jurisdiction Courts praying for passing of a compromise decree as soon as a government order (GO) is issued. The court on being convinced of voluntary settlement will pass a compromise decree.

12. MONITORING AND EVALUATION

12.1 Introduction

Monitoring and Evaluation (M&E) are critical activities in involuntary resettlement. Monitoring involves periodic checking to ascertain whether activities are going according to the plan. It provides the feed back necessary for project management to keep the programs on schedule. By contrast, evaluation is essentially a summing up, the end of the project assessment of whether those activities actually achieved their intended aims. As per World Bank O.D. 4.30 "Monitoring provides both a working system for project managers and a channel for the resettlers to make known their needs and their reactions to resettlement execution".

RAP implementation will be closely monitored to provide PIU and SDRC project managers 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 SDRC Administrative Support Division and reported regularly to project management.

This RAP includes indicators and benchmarks for achievement of the objectives under the resettlement and rehabilitation program. These indicators and benchmarks are of three kinds:

- process indicators, indicating project inputs, expenditures, staff deployment, etc.
- output indicators, indicating results in terms of numbers of affected people compensated and resettled, training held, credit disbursed, etc.
- impact indicators, related to the longer term effect of the project on people's lives

The benchmarks and indicators are limited in number, and combine quantitative and qualitative types of data.

The first two types of indicators, related to process and immediate outputs and results, will be monitored internally by the project. This information will serve to inform project management about progress and results, and to adjust the work program where necessary if delays or problems arise. The results of this monitoring will be summarized in reports that will be submitted to project authorities and the World Bank on a regular basis.

Monitoring will pay close attention to the status of project-affected vulnerable groups such as small and marginal farmers, landless laborers, mobile vendors, tribal populations, ethnic minorities, women, children, elderly and disabled. Provisions have also been made for participatory monitoring via PAP CBOs and other sources that will involve project-affected people and beneficiaries of the resettlement program in assessing results and impacts.

Longer-term impact indicators will be examined in project evaluations. The project will contract an external agency, such as an academic institute, which will undertake independent evaluations at least twice during the lifetime of the project. These evaluations will provide input to a mid-term review, and to a project completion report. These independent evaluation will focus on assessing whether the overall objectives of the project are being met, and will use the defined impact indicators as a basis for their evaluation.

Data from the baseline socio-economic surveys undertaken for each Phase of the project data provides the benchmark for measuring and evaluating the success of the RAP. Monitoring will also include:

- Communications and reactions from PAPs;
- Information from PAPs on entitlements, options, alternative developments and relocation timetables;
- Visits by PAPs to potential sites;
- Valuation of property;
- Use of the Grievance Procedures;
- Disbursement of compensation; and,
- Trends in the retail and residential land markets in PAPs old and new communities.

Monitoring will also cover the physical progress of project-provided resettlement sites should these be required. This monitoring 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 location. This monitoring will also cover the relocation of people and their goods to the new sites as well as the allocation of replacement assets. Quarterly reports will be made to the PIU by the SDRC on the progress of resettlement site provision. In the event that they are necessary in subsequent phases of the project.

Developing an early warning system to alert PIU/SDRC managers of the RAP to any potential problems of the PAPs is essential. This can be accomplished by selecting sensitive indicators and monitoring them over time. Two such indicators are the number of productive assets owned and the health status of children. For example, PAPs may be having difficulty if they are selling assets such as livestock, farm equipment and vehicles to satisfy basic needs. Progress can be measured when PAPs purchase such things. Monthly weight gain in children aged 12 to 60 months is also a sensitive measure of health and nutrition, which if not at the average for children in the same age group can point to serious problems.

In the sections that follow, RAP mechanisms and procedures for internal and external monitoring and evaluation and action-oriented thematic studies are described. The overall Monitoring and Evaluation system is outlined, key monitoring indicators are specified, and a monitoring schedule linked to RAP and project implementation is provided. Table 12-1 provides an overview of the RAP monitoring and evaluation.

**TABLE 12-1
OVERVIEW OF RAP MONITORING AND EVALUATION SYSTEMS**

Internal M & E	External M & E	
Focus : Operational Mgt. Agency: PIU / SDRC	Focus : Project goals and objectives Agency : External M & E agencies (to be contracted)	
Data base on :	Data base on:	
1. Physical 2. Financial 3. Programme Planning 4. Progress reporting 5. Establishment	PAPs w.r.t. 1. Physical 2. Socio-Cultural 3. Economic 4. Project Perception 5. Grievance & Redressel system	
Feed back	Feed back	
1. Operational trouble shouting 2. Time frame 3. Budget framework	Indicator	Output
	1. Compensation package & entitle framework: 2. Information & awareness about the project: 3. Participation: 4. Standard of living: 5. Earning capacity: 6. Dwellings: 7. Literacy level: 8. Accessibility to common facilities: 9. Relation with hosts: 10. Income generation schemes: 11. Govt. Poverty Alleviation schemes: 12. Status of vulnerable groups: 13. Project precept on: 14. Grievances:	Acceptance Degree of awareness In planning & execution Improvement Increased Improved Improved Enhanced Smooth Successful Dove tailed Improved Changed / remains the same Redressed
Methodology	Methodology	
1. Regular field visit by PA (officials) 2. Weekly progress report by NGO 3. Stock taking exercise by PA	1. Sample survey to validate baseline data. 2. Quarterly evaluation study. 3. Final evaluation study at the end of the implementation stage.	

12.2 Internal Monitoring

Monitoring of involuntary resettlement operations require in essence, an application of general project monitoring procedures and methods to the processes occurring in resettlement with particular attention to the specific high risks intrinsic in such operations. This means that monitoring of R&R requires certain specialized skills.

To meet this need a small sub-unit within the Social Development and Resettlement Cell (SDRC) will be established. This sub-unit will also have responsibility for management and maintenance of the extensive PAP database documenting results of the PAP census, asset verification information, and socio-economic survey data which will be employed as the baseline for assessing impacts of RAP implementation.

Internal monitoring will be carried out by the Social Scientist, who will be part of PIU/SDRC.

The SDRC monitoring sub-unit will issue job charts to the Contract R&R Officer (CRRO) and the L.A.Os, as well as to the technical officers concerned with the land acquisition and resettlement and rehabilitation works wherein targets to be achieved during the month will be laid down. Monthly progress report shall be prepared and submitted to the Monitoring sub-unit by the L.A.Os and CRROs and other technical officers concerned reporting their actual achievements against the targets fixed in their respective job charts and reasons for shortfalls, if any.

12.3 External Monitoring and Evaluation

While internal monitoring by the SDRC sub-unit will track conventional indicators such as the number of families affected, resettled, assistance extended, infrastructure facilities provided, etc., and other financial aspects, such as compensation paid, grant extended, etc., an external M&E agency will be appointed to meaningfully and realistically monitor and evaluate R&R programs on a periodic basis.

This additional perspective on RAP implementation is useful because conventional monitoring through government machinery often misses certain vital aspects of importance to implementers. The role of the external agency will not be faultfinding. Rather, it will act as a catalyst in smoothing the process of R&R and provide a helping hand in the proper implementation of rehabilitation programs. It will endeavor to bring problems and difficulties faced by the PAPs to the notice of PIU so as to help in formulating corrective measures.

External M & E will be initiated simultaneously with the implementation of the RAP. As a feedback to the PIU and other concerned parties including the World Bank, the external agency will submit half yearly reports on the progress of RAP implementation identifying issues and concerns that require attention from project managers. Financial provisions for the appointment of an external agency for M & E have been included in the RAP budget.

12.4 Thematic Studies

In the course of RAP implementation, it is likely that unexpected issues, obstacles, and snags will be encountered. The M & E component will therefore have capacity to rapidly deploy

problem-solving, action-oriented research in support of corrective action by implementers. Provision for such action research and studies have been included in the M&E budget of this RAP. Among thematic topics that are typically encountered in R&R programs are the following which may be suggestive of the types of studies provided for:

- * Resource ownership and tenure rights
- * Roadside natural resource use and management
- * PAP Survival Strategies
- * Housing and settlement pattern
- * Causes and extent of indebtedness and resource loss
- * Gender, ethnic or other variation in adaptation to relocation and resettlement
- * Participation of local community as R&R managers
- * Rates of withdrawal from resettlement areas and target areas for out-migration
- * Emergence of new value systems and positive and negative attitudes toward R&Rs from a social cultural, economic, technological and organizational perspective.
- * Dominance roles and activities between oustees and host communities; political organization and labor relations.

12.5 The Monitoring and Evaluation System

In the implementation of this RAP, the M&E system will perform the following key tasks:

- **Administrative monitoring** to ensure that implementation is on schedule and that problems are dealt with on a timely basis;
- **Socio-economic monitoring** during and after the relocation process utilizing the baseline established by the PAP socio-economic survey undertaken during project preparation to ensure that people are settled and recovering; and
- **Impact evaluation** to determine that recovery has indeed taken place and, in time, succeeded.

Each of these monitoring tasks is detailed in the subsections that follow.

12.5.1 Administrative monitoring

Administrative monitoring will be carried out by the SDRC monitoring sub-unit which will use the data within the management information system (MIS) viz, physical and financial parameters, details of inputs and services provided to the beneficiaries, and data collected through census survey by PCC.

The objectives of administrative monitoring are:

- Daily Operations Planning (DOP)
- Management and Implementation (M & I)
- Operational Trouble Shooting and Feedback (OTSF)

The periodicity of administrative monitoring will be daily or weekly depending on the issues and level.

For administrative monitoring the following information will be required :

- Individual files on each project affected person
- Village schedules
- Action Plan and Progress reports

Internal administrative monitoring and reporting systems will include:

- Crisis and day to day management and monitoring will require its own improved action plans, regular coordination, onsite training sessions, and an MIS internal system. It also requires trouble-shooters and informal networks of feed back from the communities, NGOs, external M & E agencies and other government bodies.
- Physical monitoring of movement and progress reporting of input stocks, finance, and service resources in the system to ensure management and financing function in a timely and effective manner.
- Monitoring and verification of the quantifiable progress of the resettlement program to indicate the timeliness of the financial disbursements already agreed to and deviations from the critical path for over all project completion .

12.5.2 Socio-economic monitoring

The socio-economic monitoring will be carried out by the external agency specialized in M&E.

The objectives of socio-economic M&E are:

- To track resettler and host population over time in order to document the restoration of incomes and standard of living.
- Determine remedial action if required.

Information required for socio-economic monitoring includes:

- Baseline survey data (conducted by PCC)
- Sample survey (to be conducted by M & E agency)
- Case studies/Thematic studies (Issue based research to be conducted by M&E agency)
- Participatory research (to be carried out by M & E agency)
- Target group monitoring (to be carried out by M & E agency)

The external agency will submit either quarterly or semi-annual reports to the PIU.

The socio-economic monitoring and reporting systems will include:

- Continuous monitoring of the process of R&R preparation, evacuation, resettlement adaptation, and integration to understand the process and issues;
- Monitoring of the impact of the resettlement process by observing and appraising various specific parameters and processes as objectively as possible. Periodic evaluation of these indicates where and when policy changes could occur or where deficiencies in

- Creating an evaluation methodology which can provide a holistic view of how the overall process is achieving or diverging from the project objectives, or creating unforeseen problems or opportunities, that would require some adaptation to the concepts, arrangement and prescriptions of the project as originally designed. The boundaries of this assessment will need the M & E agencies to examine the multiplier effects and linkages outside of the project definition of affected people and areas.

12.5.3 Impact evaluation

The impact evaluation will be carried out by an external agency contracted for this specific purpose.

The objective of impact evaluation is to determine:

- If income and standard of living of the PAPs has at least been restored and has not declined;
- In case of host population, whether income and standard of living of host population have not declined due to influence of resettlers; and
- Whether resettlers and host populations have integrated with each other.

The impact evaluation will be carried out after the implementation of RAP is over. Timing of this task may be problematic as financial considerations often require an impact evaluation shortly before or after the project concludes. If this is the case, a second impact evaluation should be carried out three to five years after project conclusion.

The Impact Evaluation reporting system will include:

- Impact evaluation will look at all the affected populations; self relocators, assisted resettler population and host population. These populations will be further broken down into vulnerable segments.
- Impact evaluation will be carried out on randomly selected segments of the PAP population.

12.6 Monitoring Indicators

RAP process, output, and impact monitoring indicators are divided into the six primary categories detailed below. Table 12-2 provides the RAP monitoring schedule.

Physical

- * extent of land acquired
- * number of structures demolished
- * number of land users and private structure owners paid compensation
- * number of families affected
- * number of government agricultural land identified for allotment
- * number of EPs allotted agriculture land
- * extent of agriculture land allotted
- * number of families approaching Land Purchase Committee for purchase of agriculture land

- * number of families purchasing land and extent of land purchased.
- * extent of government land identified for house sites
- * number of EPs receiving assistance/compensation
- * number of EPs provided transport facilities/shifting allowance
- * number of EPs allotted house under EWS/LIG housing scheme number of EPs granted free plot/house construction allowance

Economic

- * entitlement of EPs-land/cash
- * number of business re-established
- * utilization of compensation
- * extent of agricultural land/house sites/business sites purchased

Financial

- * amount of compensation paid for land/structure
- * cash grant for shifting oustees
- * amount paid to NGOs
- * consultancy fee paid to M & E agency
- * establishment cost -
 - Staff salaries
 - Vehicle maintenance
 - Operational expense of office

Social

- * Area and type of house and facility
- * Morbidity and mortality rates
- * Communal harmony
- * Dates of consulting Project and District level committee
- * number of time Project and District level committees met
- * number of appeals placed before PIU/grievance redressal cell
- * women- time disposition

Establishment

- * Staffing position
- * Availability and use of office equipment
- * Use of vehicle

Grievances

- * cases of LA referred to court, pending and settled
- * number of grievance cell meetings
- * number of village level meetings
- * number of field visits by RRO
- * number of cases disposed by RRO to the satisfaction of EPs.

ANNEXURE

ANNEX 8-1

RAJASTHAN STATE HIGHWAYS PROJECT

NGO CONSULTANCY TO ASSISTANCE WITH IMPLEMENTATION OF
RESETTLEMENT ACTION PLAN - PHASE I ROADS

DRAFT TERMS OF REFERENCE

I. BACKGROUND OF THE PROJECT

Rajasthan State Highways Project (RSHP) is being funded by the International Bank for Reconstruction and Development (IBRD) in various currencies equivalent to about US\$ 363 million.

The aim of the project is to improve the performance of the State's road transport sector. The project will improve road conditions and capacity of the state road network along with development of in-house capabilities of the Public Works Department (PWD) to plan, develop and maintain the Rajasthan road network.

Based on the results of the strategic option study conducted in 1995, the Government of Rajasthan has identified 2500 kms of high priority roads covering 21 districts. Of this, about 1500 kms were identified for improvement with assistance from the World Bank. Improvements to these roads consist mainly of upgrading consisting of, strengthening, widening and minor realignment. These roads will be improved in three phases :

Phase-I	404 Kms
Phase-Ia	371 Kms
Phase- II	750 Kms

The 1500 Km of roads pass through 24 districts of Rajasthan. Maps of the projects included in Appendix-1.

Most of the road improvement will be confined to public land i.e. the existing Right of Way (ROW) which is controlled by the PWD. However, road improvement includes realignment of the road at some locations which will involve expropriation of land from the current owners/users. The project improvement will also necessitate the eviction of squatters and removal of agricultural encroachments from within the ROW. Expropriation of land, eviction of squatters and removal of agricultural encroachments may cause social disruption and economic loss for project affected persons (PAPs) and their families. It is therefore important that disturbances and losses of PAPs due to project are minimised through proper planning.

It is against this background that PWD has carried out a social assessment of Project Affected Persons (PAPs) on 1500 kms of state highways and prepared a Resettlement Action Plan. The encroachers and titleholders of various types of properties were identified in the social assessment and a detailed Action Plan was prepared for the

resettlement and rehabilitation of displaced persons. The R&R policy containing entitlement packages for various categories of PAPs was prepared and approved by the GOR. To keep the negative impact to a minimum, various measures were undertaken such as redesigning of project roads where large numbers of people are likely to be affected and avoidance of common properties from possible impact. These measures have considerably reduced the number of affected families. The total number of affected families is 9168 with a total affected population of 59,594.

The PWD require an NGO to assist with the implementation of the RAP.

II. OBJECTIVES

The objectives of the NGO consultancy are to facilitate the resettlement process on Phase I of the Rajasthan State Highways Project by:

1. Educating the PAPs on their rights, entitlements and obligations under the RAP.
2. Ensuring that PAPs obtain their full entitlements under the RAP. Where options are available, the NGO shall provide advice to PAPs on the relative benefits of each option.
3. Assisting PAPs in the redressal of grievances through the system implemented as part of the RAP.
4. Collect data to allow PWD to monitor and evaluate the implementation of the RAP.

III. TASKS OF THE NGO

The NGO will work as a link between the project represented by the PWD Contract Resettlement and Rehabilitation Officer (CRRO), the XEN Representative, and the affected community. The NGO will be responsible for assisting the PAPs during the resettlement and rehabilitation process and shall ensure that all of the provisions of the R&R Policy and the RAP with regard to the well being of the PAPs, are implemented.

Specifically, the selected NGOs will :

1. Develop rapport between the PAPs and the project authorities particularly the CRRO. This will be achieved through regular meeting with both the CRRO and the PAPs. Meetings with the CRRO will be held at least fortnightly and meetings with PAPs will be held at least monthly. All meetings and decisions taken are to be documented.
2. Assist the CRRO to undertake a public information campaign at the commencement of the project to inform the affected communities of:
 - i. the need for LA
 - ii. the need for eviction of squatters and encroachers
 - iii the likely consequences of the project on the communities economic livelihood
 - iv identifying PAPs and verifying on the basis of the census survey carried out and facilitating the distribution of the identity cards
 - v the R&R policy and entitlement packages
 - vi assist PAPs in getting the compensation for their land and properties acquired for the project.

- vii using the R&R Policy document as well as the RAP, the NGO will determine the entitlements of each PAP and compare it to the offer being made by the CRRO. If there is a discrepancy, between the two, the NGO will be responsible for assisting the PAP in coming to some agreement with the CRRO and, if necessary, pursuing the matter through the grievance redressal mechanism.
- viii help PAPs identify suitable land for relocation and for agricultural purposes. The NGOs will identify with PWD and the Revenue Department suitable government land and assist in negotiating its transfer to the PAP. Where suitable government land is not available, the NGO will assist the PAP to locate a land owner willing to sell his land and will assist in the negotiation of the purchase price.
- vii ensure benefits due to the PAPs under the R&R policy and RAP are provided to the PAPs. From the policy and the RAP, the NGO will determine the entitlements of each PAP and compare it to the offer being made by the CRRO. If there is a discrepancy, between the two, the NGO will be responsible for assisting the PAP in coming to some agreement with the CRRO and, if necessary, pursuing the matter through the grievance redressal mechanism.
- viii help project authorities in making arrangements for the smooth relocation of the PAPs and their business. This will involve close consultation with the PAPs to ensure that the arrangements are acceptable to them.
- ix ensure proper utilization by the PAPs of various grants available under the R&R package. The NGO will be responsible for advising the PAPs on how best to use any cash that may be provided under the RAP. Emphasis should be placed on using such funds in a sustainable way e.g. purchasing replacement land for that acquired.
- x assist PAPs in getting benefits from various government development programs particularly for house construction. There are a number of government housing and training programs for livelihood programs that can be used by PAPs. The NGOs will investigate the availability of places in these programs and shall inform the PAPs of the opportunities that exist and their relative merits. The NGO will co-ordinate the training programs for sustainable livelihood and assist in developing the required skills for livelihood rehabilitation. The NGO shall coordinate with the Revenue Department and other government departments and other NGOs working in the area to ensure that all of the options available to the PAP are known and can be communicated to them.
- xi help PAPs in the redressal of their grievances. The NGO shall make PAPs aware of the grievance mechanism set out in the RAP and shall assist PAPs who have grievances to pursue a suitable remedy.
- xii develop micro level plans for resettlement and rehabilitation (R&R) in consultation with the PAPs and the CRRO. A plan shall be prepared and agreed for each PAP and will include such things as:
- a. list of options open to and the choices made by the PAP. The NGOs will explain to the PAPs the options available for their R&R and assist them in making their choices
 - b. site for relocation
 - c. a list of benefits due to the PAP
 - d. arrangements for moving
 - e. proposed utilization of any grant moneys due to the PAP
 - f. involvement of PAP in existing government development programs
 - g. update information available on PAPs and collect information on PAPs coming in the project due to any changes. PWD will be monitoring the

implementation of the RAP and will require data from the NGO to monitor input, output and impact indicators.

h. any other responsibility as may be assigned by the CRRO for the welfare of the affected community.

IV. METHODOLOGY

In order to carry out the above tasks, employees of NGOs are to be stationed in the project area. Besides contacting PAPs on an individual basis to regularly update the baseline information, group meetings and Gram Sabhas (village level meetings) will be conducted by the NGOs on a regular basis. The frequency of such meetings will depend on the requirements of the PAPs but should occur at least once a month, to allow the PAPs to remain up to date on project developments. NGOs will encourage participation of individual PAPs in such meetings by discussing their problems regarding LA, R&R and other aspects relating to their socio-economic lives. Such participation will make it easier to find a solution acceptable to all involved.

V. REPORTING

a. The NGO shall submit an inception report detailing plan of action, manpower deployment, time schedule, and detailed methodology within 21 days of the commencement of the assignment. The NGO should also submit fortnightly progress reports on the activities carried out during that fortnight and proposed activities for the coming month. The fortnightly progress reports will include data on input and output indicators as required by the CRRO.

b. Updated data on PAPs and data on additional PAPs coming due to changes will be submitted within two months of the commencement of the assignment.

c. Data on PAPs for monitoring of impact indicators will be submitted to the CRRO on an as required basis.

d. Micro level plans for each PAP on the project will be submitted to the CRRO for information as within 3 months of the commencement of the services. Where changes occur during the project requiring changes to the micro level plans, the NGO will update the relevant plans and resubmit them to the CRRO.

e. At the completion of the assignment the NGO shall submit a final report summarising the actions taken during the project, the methodology and manpower used to carry out the work, and a summary of assistance given to each PAP on the project.

VI. TIME SCHEDULE

It is estimated that the NGO services will be required for two years for participating in the implementation of RAP.

APPENDIX-II

NGO PROFILE

1. Name of the NGO :

- Society Registration Details :
(Enclose registration certificate)

Registration Number :
Year of Registration :
Place of Registration :

3. Address of head Office :

4. Number of branch / field offices :
(Enclose a separate list giving addresses and staff strength at branch /
field offices)

5. Total strength of the organisation :

Managerial / Professional :
Field :
Support staff :

6. Infrastructure facilities (own) :

No. of buildings :
No. of vehicles (Types) :
Computers :
Type Machines :
Others (Specify) :

7. Area of operation :

Districts :
Mandals :
Villages / Towns :

8. Sources of funding :
(Enclose latest audited financial statement)

9. Type of activities :

(Enclose brochure and latest annual reports)

10. Mode of working :
(Discuss about the methods / approaches involving local communities)
- 11 Name some successful experiences / Projects :
(use separate sheet)
12. Experience in income generation / Community development / land acquisition activities :
13. List the Govt. Departments / Agencies associated with :
(use separate sheet)
14. Any experience in R&R :
15. Indicate your major achievements :
16. Willingness to work in Rajasthan High Ways R&R Project :

ANNEX 8-2

NGOs IDENTIFIED FOR IMPLEMENTATION OF RSHP

Name of NGO	Key Person(s)	Location	Area
1. Marudhara,	Dr. R. K. Gurjar	Friends Colony Lal Kothi, Jaipur	Environment, watershed development
2. Human Environment Action Research Society	Dr. R.C. Swarankar	8C/6 Pratap Nagar Tonk Phatak Jaipur	R&R research, development, social impact studies, reproductive health, education issues
3. Environmental Society	Mr. Prahlad Dube	A/28, Babji Nagar Baran 325205	Environment
4. ASSEFA	Mr. P. Chaudhary	Civil Lines Baran	
5. Indira Gandhi World Health Organisation	Dr Siddharth	D-100/3, Meera Marg Bani Park Adjacent to Family Court Jaipur	Education, health
6. Samajshatriya Anusandhan	Prof. Mohan Advani	5 Ga 12, Hiran Magari Udaipur Rajasthan	Population and resettlement research
7. Forest Protection and Management Committee		Datiyar Village Chittorgarh District	Eco-system conservation
8. Tarun Sanstha Bharat Sangh		Village Bheekham pura P.O. Kishori Via Thanagazi, Dist. Alwar	environment, education

9. ASTHA	Ginny Shrivastav	39 Kharol Colony Udaipur 313001	Development and women issues
10. Prayas	Dr. Narendra Gupta	Vill. Devgarh (Devlia) Via Pratapgarh Chittorgarh 312 621	Education, environment, health
11. Adarsh Gyan Mandir	Shri Anand Singh	38/121 Kiran Path Mansarovar. Jaipur	Literacy, health