

IV. Income Restoration

The RETA theme emphasizes that income and livelihood of poor and other vulnerable people should be improved as part of an income restoration strategy in the resettlement program. An attempt has been made to review the core component of resettlement, i.e., whether a project has minimized the impoverishment risks associated with resettlement. Defining income restoration operationally depends on the economic conditions in the project area. Income restoration is often a fairly long and dynamic process. Mere reestablishment of preproject income levels deprives APs of any benefits of growth (or protection from inflation) generated in the intervening years. Therefore, conceptually “income restoration” should be recovery of income levels that would have prevailed in the absence of the project. Temporary employment in

project construction and temporary living support, for example, may be desirable forms of short-term assistance, but they do not constitute long-term income restoration. They are necessary, as their absence would impede prompt income restoration. APs cannot be made to suffer loss during the transition to income restoration. Income restoration refers to recovery of aggregate household resource flows, as livelihoods are often based on both the formal and informal economic activities of all members of the household. Income restoration measures are different from compensation at replacement value. Table 13 describes the difference between compensation and income restoration.

Under this RETA, four main areas of income restoration have been covered, i.e., planning, implementation, institutional support, and sustainability.

Table 13: Differences between Compensation and Income Restoration

Compensation	Income Restoration
It is usually a] single payment, often received before the move and before APs fully recognize options or constraints inherent in new circumstances.	It is usually conceived in more dynamic terms as plans or actions required to reestablish an income stream over time.
If it is provided as a lump sum, no recurrent monitoring is likely to be provided.	As it involves a series of steps or stages over time, recurrent monitoring is essential.
Strategies assume the existence of replacement assets or appropriate substitutes, so APs remain responsible for their own welfare.	Supplemental income strategies are necessary where markets are thin, replacement assets are scarce, or loss of human or social capital may be debilitating.
The principle is enshrined in the Land Acquisition Act and National Highways Act.	The National Policy on Resettlement and Rehabilitation has provision of income restoration measures.
ADB and World Bank define it as the amount required to obtain equivalent assets at the time of the expropriation.	ADB and World Bank define it as income streams over time, in comparison with incomes at the time of taking or at the time of project initiation, whichever is higher.
It is normally paid before displacement or the initiation of civil works.	It may take many years and remain incomplete even after the closure of the main project.

ADB = Asian Development Bank, AP = affected person.

Source: RETA field survey, 2004-2005.

A. Planning

As a generic process, designing income restoration strategies involves three stages. The first is to analyze existing sources of income. The productive activities and existing income sources of APs are identified, and this information is used to assess the APs' capabilities and to establish a baseline for subsequent comparison. The second stage is to survey and analyze existing economic conditions to identify resource bases and assess market conditions. The third stage is to identify new opportunities, matching APs with appropriate opportunities in consultation with APs and identifying implementation requirements such as training. Each stage is considered in turn in the following subsections.

Historically, R&R has been limited to payment of compensation and some training for upgrading skills to support income-generation activities, which have generally been unsustainable. But there has been an increasing realization that this is not enough and, therefore, R&R activities must also take up higher responsibilities including income restoration activities aimed at improving or at least bringing the income of project-affected people to preproject levels (income restoration has been emphasized in the NPRR and the R&R policies of various state governments, parastatal organizations, and R&R policies of NHAI projects funded by multilateral agencies). ADB and the World Bank have been pioneers in bringing about this awareness within the government and other agencies engaged in planning and implementing infrastructure projects involving displacement of people. The following steps are necessary for planning of income restoration.

1. Baseline Information

Income restoration needs to be based on productive income-generating activities. Although cash payment may be appropriate under certain circumstances, in other cases APs may use the cash payment for other things than productive assets. Therefore, the first step toward income restoration planning is to identify the precise parameters of the problem through a census and socioeconomic survey, aimed at creating a complete inventory of socioeconomic status of the people and property affected. A socioeconomic survey is carried out to collect data regarding the social and economic status of the project-affected people, including data on their caste, income and expenditure, etc. These two

surveys, which lead to the generation of baseline data, are used for working out the entitlement matrix, on the basis of which financial aid and other kinds of project assistance are provided to the APs. Steps are taken to ensure active participation of project-affected people, including intensive and extensive public consultations, in developing and finalizing the matrix.

2. Constraints

The end-product of income restoration planning is in the form of a resettlement plan, which includes all the baseline data including the total list of APs and their affected properties, analysis of the available data in terms of its implications for designing interventions, and the actual interventions designed and proposed to be implemented. The efficacy of this plan obviously lies in its effective implementation. But often the problem lies with the quality of the plan itself, as the income restoration component is not given adequate attention either in terms of baseline data collected or the interventions designed (Table 14). As a result, income restoration remains a concern, largely unaddressed in actual resettlement practice.

Current practice for preparing resettlement plans, and the income restoration component, is not based on any perception mapping (i.e., involvement of affected persons by considering their views, skill level and need) and, therefore, is often lopsided, unrealistic, and impractical, which suits the project functionaries more than the APs. In most cases, there is the customary chapter on income restoration in such plans, but more often than not, there is hardly any concrete income restoration activity (other than some routine training). Moreover, absence of adequate budgetary provisions to support income restoration activities makes any implementation of these activities more a distant dream than a real issue of concern and action.

3. Way Forward

Income restoration activities have to go beyond the practice of payment of compensation and some customary project assistance to help APs rebuild their livelihoods, by creating appropriate institutional mechanisms and capacity to provide sustained assistance in accessing information, constructing their new asset and resource base, reestablishing their socioeconomic networks and linkages, and basically to help them reconstruct their lives in a better fashion.

The following information should be collected for adequate income restoration planning:

- (i) Generation of baseline data of APs before the cut-off date in resettlement plans (such as socioeconomic background including age, gender, and literacy level; past occupation; skills possessed if any; past income; extent of land left if land-losing APs; participation in any centrally sponsored poverty reduction program and benefits accrued; and level of access to secondary income sources—particularly CPRs or employment opportunities in a nearby town);
- (ii) Inventory of prevalent economic activities specifying existing demand for products and services, general availability of labor and other resources, profitability, and present marketing practices and relationships;
- (iii) Generation of information on likely economic activities in the postproject period;
- (iv) Vulnerability issue with specific reference to income, i.e., whether APs are below the poverty line;
- (v) Identification of appropriate menu of options for income restoration/generation along with suitability of each option to supplement income; market potential and marketing facilities; formal and informal financial services available; capacity and experience of local institutions for income restoration; and opportunities created by the project itself for employment if any—for example, with the highway as a hub of economic activity, the provision of wayside amenities;
- (vi) Option-sharing mechanism and facilitation for selection of appropriate options by APs;
- (vii) Training needs assessment for skill upgrading of groups of APs as per requirement;
- (viii) Comparison of skills possessed by APs with training needs assessment; and
- (ix) Working out an entitlement matrix as per local conditions and realities.

The best option is to allow the APs to continue in their former occupations. However, in any development program, occupations always change.

4. Income Restoration Planning in Case Study Projects

Efforts made by consultants to prepare income restoration plans in the case study projects were analyzed. Information was collected from project implementation units and resettlement plans prepared for TNHP and WTC. As Table 14 shows, income restoration plans were extremely poor in both case study projects.

B. Income Restoration Strategies: Short- and Long-term Measures

Mere planning for income restoration is not enough for achieving the desired results. There have to be both short-term and long-term strategies to implement plans effectively. The entitlement matrix of both TNHP and WTC has well laid down short-term income restoration measures and provision for long-term measures. Both sets of measures are discussed below.

1. Short-Term Income Restoration

Short-term income restoration activities aim to restore APs' income during the period immediately before and after relocation. According to the entitlement matrix of TNHP and WTC, the following short-term income restoration measures were included:

- (i) Compensation at replacement value before relocation;
- (ii) Provision of short-term, welfare-based grants and allowances such as:
 - One-time economic rehabilitation grant for vulnerable APs losing their livelihood;
 - Shifting allowance for transportation to resettlement areas;
 - Transitional allowance or grant until adequate income is generated (duration and eligibility criteria are linked to degree of loss);
 - Training for skills upgrading; and
 - Rental allowance for commercial tenants.

Table 14: Income Restoration Planning in Case Study Projects

Components	TNHP	WTC
Baseline data	Very limited primary data were collected. The following information is not in the resettlement plan: age, past occupation, skill possessed, past income, extent of land left for land-losing AP, participation in any centrally sponsored poverty reduction program and benefits accrued, and level of access to secondary income sources. Consultants depended more on secondary data, hence no consultation with APs was carried out.	Very limited primary data were collected. The following information is not in the resettlement plan: skill possessed, past income, extent of land left for land losing AP, participation in any centrally sponsored poverty reduction program and benefits accrued, and level of access to secondary income sources. Consultants depended more on secondary data, hence no consultation with APs was carried out.
Inventory of prevailing economic activities	✗	✗
Economic activities in postproject scenario	✗	✗
Vulnerability	✓	✓
Identification of appropriate options	✗	✗
Option-sharing mechanism	✗	✗
TNA	✗	✗
Comparing skills with TNA results	✗	✗
Entitlement matrix	✓	✓

AP = affected person, TNA = training needs assessment, TNHP = Third National Highway Project, WTC = Western Transport Corridor.

Source: RETA field survey 2004–2005.

- (iii) Coordination with contractors for preferential treatment to APs for labor activities at construction sites (not mentioned in entitlement matrix, but appears in the body of the policy of both the case study projects); and
- (iv) Continued access to affected areas for income-generation activities between relocation and the beginning of project work.

2. Long-Term Economic Rehabilitation

Short-term income restoration measures are mainly compensation and R&R assistance, which prepares the APs to face the immediate losses. However, cash compensation is usually neither adequate nor invested productively and therefore, cash compensation alone

may not be adequate to ensure that the APs regain their living standards. In addition to compensation and other assistance, the APs require long-term sustainable income restoration measures that can help them regain the level of livelihood they would have had. It is in this context that Cernea (1999) considers that the backbone of a resettlement plan is the “development package”, meaning the set of provisions aimed at reconstructing the production base of those displaced. The development package must offer sufficient opportunities and resources for the economic and social reestablishment of the APs as self-sustaining producers or wage earners. Long-term options depend on the scale of resettlement and may affect the feasibility of various non-land-based and land-based income restoration options.

a. Categories of impacts

To develop a strategy for long-term income restoration planning, it is important to understand the target groups. Project-induced displacement may lead to loss or diminished income for APs. The main categories of impact are:

- (i) Loss of agricultural or farm land in part or full;
- (ii) Loss of commercial establishments (permanent); and
- (iii) Loss of livelihood (commercial tenants or employees, agricultural laborers).

Table 15: Short-Term Measures Taken in Case Study Projects

Measures	TNHP	WTC	Remarks
Compensation at replacement value	✓	✓	Though compensation at replacement value was paid in both projects, it could not be paid at a single point of time. As a result very few APs could purchase agriculture land.
Economic rehabilitation grant to the vulnerable	✓	✓	Though the policy states that the grant has to be paid to the family, in TNHP it was paid to the household. As a result, the amount of Rs24,000 was distributed among every adult member of the household, rather than each member getting Rs24,000. This certainly affected the bottom line of the household.
Shifting allowance	✓	✓	Was paid promptly.
Transitional allowance	✗	✓	Transitional allowance was paid to every affected family in WTC. The amount varied based on degree of loss. This certainly helped APs to continue with the same trade /business and helped them to sustain themselves during the lean business period immediately after displacement.
Training	✓	✓	Though training was provided in both projects, long-term sustainability of the trades identified was not established. As a result, some trades failed after some time. In both projects, such APs came back to their old trade along the highway, encroaching upon NHAI land. Generally speaking, training has helped APs to regain their lost income.
Rental allowance	✓	✓	Rental allowance was paid to commercial tenants in both the projects. The amount varied based on degree of loss. This allowed tenants to search for new locations to run the business.
Employment with contractor	✓	✓	Though not made explicit in the policy, CRRO/DRO coordinated through the NGO to ensure that contractors absorbed able-bodied APs as manual labor during construction. This happened in both projects.
Continued access to affected areas	✓	✓	In both TNHP and WTC, though on paper, stretches of the highway were made free of encroachment and other encumbrances, vendors, permanent shop owners, and even cultivators were not paid until the contractor reached that point for construction. In fact, vendors selling food items had more income as contractor's staff regularly visited them for tea and snacks.

AP = affected person, CRRO = Contract Resettlement and Rehabilitation Officer, DRO = district resettlement officer, NGO = nongovernment organization, NHAI = National Highway Authority of India, TNHP = Third National Highway Project, WTC = Western Transport Corridor.

Loss of farmland. The best way to tackle this is to help the AP to buy equivalent farmland in a nearby area using the compensation received. Land for land has been found to be the best sustainable option for income restoration. This option can only be exercised when an AP has lost a significant amount of land; it would be impossible and inadvisable to replace small pieces of land. The compensation received can be deposited in blocked bank accounts. The interest accruing will supplement their income from other sources. The money can only be released for buying replacement land. It is important to see that the compensation money is not frittered away for consumption expenditure or paying off loans, especially for the vulnerable sections of APs—the better-off can be exempted from this provision and directly paid in cash. The land compensation will be paid at replacement value and will be sufficient to buy replacement land.

Loss of commercial structures. This is a more complicated problem since the complementary issue of retaining the present customer base has to be simultaneously tackled. There is also the problem of tenants and owners with a majority of structures being occupied by tenants. The required mitigation would involve reconstructing the commercial structures in an adjacent area so that the present customer base is retained. The ways of achieving this together with the ownership of the new structure also need to be defined. While the project authority can acquire the required land and construct the structures for allotment, a more practical way would be to let the APs handle their own replacement structures with the guidance and support of the project authority. Regarding ownership, the status quo can be maintained, i.e., ownership remains with the owner while the tenant occupies it. As in the previous case, the compensation money can be deposited in blocked bank accounts to be released only for constructing or buying the replacement structure. Since the construction involves different activities, the money can be released in installments, coinciding with predetermined stages in the construction activity.

Loss of commercial space (for temporary structures). This should be given the utmost importance since it involves vulnerable APs. They also need to be given alternative space in an adjacent area for carrying on their trade or vocation. The temporary structure can be shifted to the new location and the mobile vendor can be stationed there. The project authority can coordinate with the local authorities (municipality or Panchayat) to secure alternative space.

While mitigation measures for specific impacts are discussed above, there is also the general impact of a disturbance upon displacement in the life and livelihood of APs. Such APs are normally paid a grant equivalent of 3 or 6 months of their remuneration. However, this kind of measure fails to improve upon their former standard of living.

b. Issues in long-term income restoration options

Factors that may determine the choice of specific options of income restoration programs (land-based or non-land-based) are:

- (i) Long-term income-generating opportunities generated by the project itself (for example, class IV employment for eligible educated APs or provision of fishing rights in a reservoir project);
- (ii) Dovetailing centrally or state-sponsored poverty reduction development programs in resettlement areas and AP eligibility or suitability for, as an example, employment under the National Rural Employment Guarantee Act. In such cases the local authority (panchayat) should be informed in advance to enlist APs for such programs;
- (iii) What government job preference or guarantee schemes exist and what are the eligibility requirements? For Maharashtra, for example, R&R policy reserves 5% of government jobs statewide for APs;
- (iv) Is there scope for developing existing informal credit sources?
- (v) Market requirement and demand analysis. For example, one of the NGOs (CRADLE) implementing a resettlement plan in the Jharkhand and Bihar section of TNHP conducted a market study and found that security guards were in high demand. Retired army officers trained APs as security guards.
- (vi) Financial or economic feasibility analysis of schemes. Analysis could include descriptions of alternative farm models that could be adapted by APs, with detailed farm budgets. The model should allow for varying levels of complexity, dependent upon household capacity and capital.

The terms of reference (TOR) for income restoration under resettlement implementation for highway sector projects are invariably different from other sector projects such as power, coal, and dams. This is due to the different nature of the projects in terms of their respective linear and nonlinear spatial spread. Whereas the projects related to power, etc. are nonlinear and more captive in nature, the highway projects are linear and certainly more diffuse in terms of APs. In the specific context of highway projects, this results in the relative isolation of APs across the project stretch.

**c. Long-term income restoration schemes:
Some project examples**

Land replacement is the preferred option for APs earning their living from the land and wanting to continue to do so. When only a few people are displaced or if APs are willing to travel far (e.g., Orissa Water Resource Consolidation Project-II), finding an equivalent amount of replacement land of similar quality is possible. However, when large numbers of people are displaced, finding equivalent land becomes difficult. Moreover, as land is a scarce resource, land for land becomes more of a theoretical option than a practical one. Hence, it becomes imperative to explore long-term income restoration schemes which are non-land-based. This section deals with some of the long-term income restoration measures implemented in the two case study projects as well as in some other projects such as power, coal, and dam projects. These projects usually involve large-scale displacement, often affecting thousands of families and people spread over hundreds of villages. However, in these sectors displacement is always associated with marginal occupational diversity, less labor market imperfection, and more landlessness and homelessness. As a result, income restoration measures in power, coal, and dam projects are relatively less complex and diversified in nature than in a highway project.

In highway sector projects, income restoration interventions are much more complex due to occupational diversity of APs. For example, there may be a mix of a large number of land titleholders (big, small, and marginal farmers and share croppers) due to bypass options and non-titleholders engaged in small business enterprises (vehicle repairing shops, small motels, other rural/semi-urban small activity-based shops, commercial squatters, etc.) as DPs. This occupational diversity poses a problem for mitigation

measures. The task becomes even more challenging due to the inherent pressure to complete highway construction within a fixed period, whereas income restoration activities may have to go beyond the civil construction phase.

An analysis of the TOR of implementation work of resettlement plans in current NHAI highway sector projects reveals that the implementing NGOs need to find out the option of convergence of government programs operational in the project area in the context of income restoration. The economic rehabilitation is the broader context within which income restoration activities are to be undertaken. Measures taken in case study projects include the following subsections, i. to vii.

i. Vendor markets for group rehabilitation

In the context of economic rehabilitation the option of vendor market (providing commercial space to the displaced commercial squatters) has been a successful venture in the villages in both case studies.

In the Western Transport Corridor, the traders' association of Tumkur and Chitradurga developed two vendor markets in the Tumkur–Haveri section of NH-4. In both cases, the non-titleholder commercial APs, with the help of the implementing NGO, formed an association to increase their collective bargaining power and negotiated with the Government for land to create an organized vendor market near the national highway. NHAI is providing complete infrastructure facilities to resettle the APs. This is an example of economic rehabilitation in a linear project where people's initiative has resulted in sustainable restoration of income. The project's response has been one of facilitating the process. The learning from this example is that people's participation could be used as an effective way of designing and implementing viable and sustainable income restoration interventions.

Similarly, in the Third National Highways Project, a vendor market was developed in Bagodar where 100 kiosk owners and 203 squatters were resettled. However, the approach was entirely different. Instead of the community coming forward, the NGOs carried out all base work, such as identification of land, obtaining the no-objection certificates, motivation of people to move to the relocation sites, and even distribution of space to displaced APs.

This type of economic rehabilitation is dependent on availability of land, especially government land in a good location.

ii. *Dovetailing with central government-sponsored poverty reduction programs*

Given the versatility of economic rehabilitation options associated with displacement in highway sector projects, a variety of options could be tried out according to people's preferences and local conditions.

The TOR for the implementing NGOs in both case study projects refer to the need for integration of the income restoration component with on-going government programs. The TOR suggested that the NGOs should contact financial institutions like the National Agricultural Bank for Rural Development, the Small Industries Development Bank of India, the *Rashtriya Mahila Kosh*, and the lead bank of the area to obtain credit required by individuals as well as groups of APs and women's groups.

The resettlement plan also specifically mentions integration with rural development programs, like the Integrated Rural Development Programme, *Jawahar Rozgar Yojana* etc., as part of their strategy for income restoration. For example, the resettlement plan prepared by Rail India Techno Economic Survey in January 2003, (for national highway sections in Gujarat for the ADB-funded East-West Corridor Project) states that the implementing NGO will work with panchayat governments to make available to the APs, benefits of some of the ongoing pro-poor programs for poverty reduction, and specifically mentions the above two programs.

Constraints on integration with long-term poverty reduction schemes. *Swarnajayanti Gram Swarozgar Yojana* is a well-designed scheme, but the scope of the program in terms of the possibilities of integration of the income restoration component of highway projects with this program is severely restricted by the program design itself. For example, there is substantial reservation of scheduled castes/Scheduled Tribes and women, whereas income restoration programs have to be implemented for all APs, many of whom may not be in these two reserved categories. *Sampoorna Grameen Rozgar Yojana* (see Box 8) provides employment to the poor, of a short-term nature. The basic objective of the R&R policy is to restore income of the APs by bringing it at least to preproject levels. Given this basic premise of R&R policy, a more reliable approach to restoring their income would need to be worked out, as any attempt toward integration with the government programs might take much longer

than desired, even in the few cases where a theoretical possibility to do so exists. An internal evaluation of these programs would be in order in this regard. According to a recent report by the Government of India (*Annual Report 2002–2003*, Ministry of Rural Development), the progress of the *Swarnajayanti Gram Swarozgar Yojana* program has been slow.

The implementation of these programs is based on the formation of self-help groups, which can take many years to enter the income-generation phase, and invariably involves establishing institutional linkages with banks and other institutions. The development functionaries engaged in facilitating the process have to be specially trained in doing this kind of work and must be able to devote time in pursuing generally elusive government officials and establishing effective backward and forward linkages.

In view of the limited time frame (2–3 years) that the implementing NGOs have to complete their tasks, integrating the income restoration component with government programs is almost impossible.

iii. *Alternative income restoration schemes*

Income restoration measures/plans rest on three pillars, i.e., APs' sociocultural characteristics, resource base, and preferences.

The steps followed under each task by the NGOs in TNHP and WTC are given below.

Box 8: Example of Dovetailing with *Sampoorna Grameen Rozgar Yojana* in a Highway Project

Despite all odds, Study Point Samiti, the nongovernment organization (NGO) working on NH-2, successfully dovetailed with *Sampoorna Grameen Rozgar Yojana* (SGRY) to rehabilitate commercial displaced persons. In package I.C of NH-2, 12 structures were affected. Although they were all temporary structures, they had good businesses running. In order to resettle them, the NGO approached the panchayat for land. The panchayat agreed to give land provided more shops were constructed by the National Highway Authority of India (NHAI). NHAI agreed to construct more shops; the cost was Rs25,000. The replacement value of demolished shops was rupees (Rs)10,000. To fill the gap, the NGO arranged for loans under SGRY. NHAI also provided access roads and hand pumps for drinking water in the new resettlement site. Loans ensured that the new shops were not sold off by the affected persons. Even after 2 years, the shops are still running.

Source: RETA field survey, 2004–2005.

Identification of target groups. The steps followed were:

- (i) All directly and indirectly affected persons were covered. (Indirectly affected persons included affected employees in highway eateries or in petrol pumps or persons who transported APs' goods for a living);
- (ii) For identification of indirectly affected persons, NGOs conducted focus group discussions in the affected settlements/villages, as it was difficult to identify such people merely through a quantitative survey; and
- (iii) Once these APs were identified, pretested structured questionnaires were completed for collection of socioeconomic information.

Identification of income restoration activities. The steps followed were:

- (i) Preparation of a list of possible and feasible income restoration options;
- (ii) Identification of government schemes and programs, which could be dovetailed with the options of the APs;
- (iii) In-depth interviews by NGOs with concerned District Rural Development Agency officials and managers of lead banks of the area to identify various economic activities (and their source of funding and forward and backward linkages), which could be carried out in the project area;
- (iv) Analysis of the data collected by DPR consultants during resettlement plan preparation. This analysis provided NGOs with the number of APs against each trade or option proposed;
- (v) Organization of consultation meetings with APs to elicit their views and preferences regarding income restoration options;
- (vi) In identifying income restoration options, the following factors were considered:
 - Education level of APs;
 - Skill levels;
 - Likely economic activities in the postdisplacement period;
 - Extent of land left;
 - Suitability of economic activity to supplement the income; and
 - Market potential and marketing facilities;

- (vii) The options of the APs were matched with their socioeconomic characteristics, according to the data already collected during the socioeconomic survey. Based on socioeconomic characteristics and options preferred by APs, the NGO reassigned trades to APs. This exercise provided the first level of screening;
- (viii) Following finalization of the draft list, NGOs worked out the input cost and monthly income that would accrue out of the individual trades, and market potential, etc. NGOs ensured that trades/activities selected had low initial costs and required low technology that matched the resources available in the area; and
- (ix) With the draft list of trades, NGOs approached APs for one-on-one consultation to finalize the trade. The NGO explained the reasons, expected income, input cost, and skills required to run the venture and other modalities regarding proposed trades. This helped the APs make an informed decision on trade selection.

Training. One of the strategies for economic sustenance of the APs is to help them improve their productive capability by imparting new skills or upgrading skills through training. Generally APs either depend on agriculture or have low skills endowment. Hence, training becomes an important component of income restoration. For APs who intend to diversify their economic activity, suitable income restoration schemes should be identified on an individual or group basis and training needs should be assessed accordingly. Besides training in scheme-specific skills, general entrepreneurship development should also form part of the training program, mainly to improve the management capabilities of entitled persons.

Training needs assessment. With trades finalized, NGOs conducted skill mapping among the APs. NGOs match the skill possessed and options preferred. If the option preferred does not match with the skill possessed, the NGOs provide the required training.

Identification of trainers/Training institutions. The steps followed were:

- (i) Based on trades selected, NGOs identified master trainers and/or training institutes for different trades/activities.
- (ii) For selection of trainers, NGO consulted the following officials:

- Project director, District Rural Development Agency;
- General manager, District Industries Centre, and Khadi Village Industries Commission;
- Representatives of various departments such as agriculture, minor irrigation, animal husbandry, etc.;
- District Dairy Development Board; and
- Manager, lead bank.

(iii) Apart from these officials, NGOs depending upon the trades, consulted private entrepreneurs, government departments, local NGO, etc.

Since these departments also provide training under various government schemes, consultation with these agencies helped NGOs to identify and finalize trainers.

NGOs should try to engage trainers/training institutes that can provide on the job training. For example, in package IV of TNHP, training for electricians was provided by a trainer who also took contracts for repair of electrical items and household electrical fittings. After providing classroom training, trainees are employed along with one of the old employees. Thus trainees are not only consolidating the training, but also earning an income.

Training arrangements. The steps to be followed are:

- (i) After identification of trainers and/or training institutes, NGOs form different groups of APs as per trades selected.
- (ii) NGOs discuss with CRRO to finalize the date for training, venue, arrangement of vehicle for ferrying APs to training venue, training material required, etc.
- (iii) NGOs inform APs at least a week in advance about the date of training.
- (iv) On the day of training, NGOs transport APs to the venue. If APs are living far away from the venue, NGOs arrange for their stay.

Monitoring of APs

- (i) The broad aspects to be monitored are: comfort level of AP in new activity, interest

shown by the AP, marketability, and income accrued.

- (ii) NGOs monitor each AP initially on a fortnightly basis and later, on a monthly basis.
- (iii) NGOs document observations.
- (iv) In case NGOs observe any negative trends, APs are trained again in the activity. If an AP is not comfortable with the activity, new vocations may be selected in consultation with APs and family members.

Activities carried out by NGOs in case study projects. The NGOs responsible for implementation of resettlement plan and income restoration plans include Development Management Trust (DMT) in WTC, SAFHI, and CRADLE in TNHP. The activities followed by these NGOs are summarized in Table 16.

As Table 16 shows, the approach followed by the three NGOs was fairly similar, though CRADLE was more organized.

In WTC, apart from these two trades, six more trades were identified, i.e., electrical and electronic repairing, coir making, candle making, air conditioner repairing, motor winding, and plumbing. However, training was provided in only two trades.

iv. Group-based income restoration activities

Quite often, group-based activities become more successful than individual income restoration schemes. In TNHP, NGOs formed two groups for dairy farming. Each group had two to eight members. However, for a dairy, groups required Rs100,000 toward security. The NGO approached Parag (a dairy cooperative in Uttar Pradesh), and Parag not only waived the security money, but provided the first tranche of milk and other dairy products on 45 days credit.

v. Economic rehabilitation through interdepartment coordination

How interdepartment coordination can effectively rehabilitate displaced APs was showcased in TNHP. In package V.C, some 54 shops were affected. These shops were on Central Government or Kesari Hind land. Shop owners were paying rent for the shops to the local market governing body. They were given these shops on condition that if the road was widened in the future, they would have to vacate the land. When

Table 16: Income Restoration Activities in Case Study Projects

Activities	TNHP		WTC	Remarks
	SAFHI	CRADLE	DMT	
Identification of target groups	✓	✓	✓	All three NGOs identified target groups. SAFHI and DMT identified target groups through group meetings, where as CRADLE apart from group meetings, also conducted one-on-one meetings.
Identification of IR activities (refer to Table 17)	✓	✓	✓	All three NGOs identified IR activities after discussions with DRDA officials, manager of the lead bank, and general manager of KVIC. CRADLE however also created a database of past occupation of APs before finalization of IR schemes.
Training	✓	✓	✓	All the NGOs provided training. SAFHI provided on-the-job training to APs.
Training need assessment	✓	✓	✓	TNA was carried out by all three NGOs through questionnaires. SAFHI and CRADLE also carried out a mapping exercise for TNA.
Identification of trainers	✓	✓	✓	Master trainers and institutions were identified by all three NGOs.
Training arrangements	✓	✓	✗	CRADLE and SAFHI provided transport to APs. APs were also given travel and "dearness" allowance. DMT conducted decentralized training, hence no allowances were paid.
Post-training monitoring of APs	✗	✓	✗	Only CRADLE conducted post-training monitoring.

AP = affected person, DMT = Development Management Trust, DRDA = District Rural Development Agency, IR = income restoration, KVIC = Khadi Village Industries Commission, NGO = nongovernment organization, SAFHI = South Asian Foundation for Human Initiative, TNA = training needs assessment, TNHP = Third National Highway Project, WTC = Western Transport Corridor.

Source: RETA field survey, 2004–2005.

Table 17: Income Restoration Activities Identified and Implemented by NGOs

Projects	Trades	No. of APs Trained
TNHP	Electrical repairing	88
	Motor mechanic	74
	Tailoring	72
	Computer	2
	Papad and agarbatti making	113
	Security Guard	152
	Animal husbandry	17
	Pump set repairing	140
	Total	658
WTC	Tailoring	34
	Computer education	296
	Total	330

AP = affected person, TNHP = Third National Highway Project, WTC = Western Transport Corridor.

Source: RETA field survey, 2004–2005.

widening commenced these shop owners were asked to leave. There was a serious problem of losing their livelihood. Realizing this, the CRRO approached the local administration with a request to resettle these shop owners on government land just behind NHAI's land. The district administration agreed to provide land free of charge, but the shopkeepers were asked to pay for the construction, which all 54 shopkeepers agreed to. The construction is more or less completed and shops have been allocated to the displaced APs.

vi. Impact of Income Restoration Schemes on Affected Persons: An Empirical Finding

The survey also looked into the economic aspect of APs in the postproject scenario as compared to the preproject scenario in order to understand the success of income restoration measures undertaken by the project authority. The economic characteristics considered included the usual activities of the APs, occupation pattern, average landholding, and average annual household income and expenditure.

Usual activities. Though the survey results show that more than half of the population is in the economically productive age group, the usual activity classification shows that only 27% of them came under the worker category and less than 1% were in the nonworker category.

It should be noted that “worker” as per the census of India means “a person engaged in some kind of economically gainful activity.” If a person is gainfully employed for 183 days or more then that person becomes the main worker, and less than 183 days a marginal worker. Household worker means a person engaged in household chores without any financial gain. Nonworker means unemployed person.

As can be seen from Table 18, nearly one fourth of the APs surveyed are engaged in household activities and over one fifth come under the category of student. The other APs include old and retired people, children below the age of 6 years (i.e., non-school-age), handicapped, and children in the age group of 6–14 years but not attending school. This situation is no different from the preproject scenario.

Occupation. As Table 19 shows, for a majority of APs surveyed, trade and business remain the main occupation as was in the preproject scenario followed by agriculture. The survey shows that there has been a drop in the percentage of APs engaged in agriculture, and trade and business, and a slight increase in agricultural labor activities. That income restoration schemes are not so successful can be judged from the fact that the number of people in the self-employed category did not increase substantially after training. However, not many people are earning from the trade they were trained in, as out of 658 people trained in TNHP, the self-employed are just 77 and out of 334 trained; in WTC, the self-employed were 113. More people took to new vocations in WTC than in TNHP. The limited TNHP success stemmed from the few trades with market demand and backward linkages, as identified by the NGO in package V.C.

Average landholding. Survey results show that average holdings are larger in WTC as compared to TNHP (Table 20). As the table shows, there is a drop in landholdings, primarily due to land acquisition. Number of BPL families have also reduced albeit marginally.

Average annual household income and expenditure. The survey results (Table 20) show that average annual household income marginally increased in TNHP from the preproject scenario. However, there is a slight drop in income in WTC, largely due to income

Table 18: Usual Activities of Affected Persons

Usual Activity	TNHP		WTC	
	Past	Present	Past	Present
Worker	1,750	1,747	1,493	1,489
Nonworker	83	58	69	38
Household worker	1,578	1,516	1,974	1,991
Student	1,476	1,390	668	649
Old and or Retired	331	462	479	531
Non-school-age child	959	1,108	553	567
School-age child not going to school	263	144	139	113
Handicapped	24	23	17	15
Others	16	34	21	43
Total	6,480	6,482	5,413	5,436

TNHP = Third National Highway Project, WTC = Western Transport Corridor.
Source: RETA field survey, 2004-2005.

Table 19: Occupation Pattern of Affected Persons

Occupation	TNHP		WTC	
	Past	Present	Past	Present
Agriculture	314	279	307	293
Agriculture labor	90	108	115	127
Allied agriculture activities	9	130	23	28
Nonagriculture labor	339	390	426	399
Government services	40	42	18	18
Private services	231	240	101	259
Trade and business	707	477	473	141
Professionals	4	4	11	11
Self-employed	16	77	19	113
Total	1,750	1,747	1,493	1,489

TNHP = Third National Highway Project, WTC = Western Transport Corridor.
Source: RETA field survey, 2004-2005.

Table 20: Average Landholding

Average Landholdings	TNHP		WTC	
	Past	Present	Past	Present
Average holding (bigha)	6.30	5.82	2.05	1.93
Average HH income (Rs)	38,320	37,931	37,287	38,161
Average HH expenses (Rs)	37,762	38,223	37,124	38,427
BPL households	19	16	52	49

BPL = below poverty line, HH = household, Rs = Indian rupees, TNHP = Third National Highway Project, WTC = Western Transport Corridor.

Source: RETA field survey, 2004-2005.

restoration measures. Care has been taken to ensure that the amount received as compensation and/or R&R assistance is not added to the income of the household. The average expenditure figure was found to be slightly higher than income in the postproject scenario, because APs generally tend to downplay income and enhance expenditure in order to seek more compensation. Moreover, there are some hidden incomes in rural areas, which cannot be translated into monetary terms.

As Table 21 shows, in TNHP, regarding satisfaction with training, 73% were not satisfied. Nearly 70% reported not having received training in their preferred trades. However, out of those who received training 82% were given tool kits or assets to start the income earning or enhancing pursuits. About 95% of the APs trained as guards in package V.C of TNHP were taken on. In WTC, over 63% of the APs reportedly did not receive training in preferred trades, and 67% of those who received training were not satisfied with the training. Out of 330 APs trained, only 34 received tool kits. This was primarily because a majority of the APs were trained as computer operators. This shows that although training needs assessment was carried out, in most of the cases it lacked relevance, except in package V of TNHP.

Though currently it seems that APs in TNHP have gained because of income restoration schemes, some income restoration schemes as implemented would seem unsustainable. A retrofit study should be carried out at the end of 3 years post implementation to ascertain sustainability and long-term benefits from training provided.

NGOs cannot be blamed for poor implementation of income restoration schemes. On average NGOs are

given 30 to 36 months for implementation of resettlement. Though NGOs provide work plans in the proposal as well as in the inception report, they are rarely followed. Work plans are changed according to the priorities of CRROs, who are also managers for technical aspects of the projects. Almost 70% of the total time allotted to NGOs goes to clearance of stretches and preparation of micro plans and supplementary micro plans. In both case study projects, income restoration plan preparation started in the last year of the contract period and, by the time it was implemented, NGOs were on extended time period. As a result, NGOs and monitoring and evaluation agencies hardly have time for monitoring of APs and follow up action. Discussion with NGOs revealed that they are also involved in certain activities that are not part of their TOR: for example in package V, the NGO was involved almost full-time in preparation of the land acquisition plan for a large part of its contract.

During discussions, NGOs as well as CRROs agreed that there should be two sets of NGOs working, one with primary responsibility for relocation of DPs and CPRs as well as calculation of replacement value; the other should be responsible for income restoration and social responsibilities, such as creating awareness for HIV/AIDS, highway/road safety, child labor, etc.

NGOs further admitted that they do not have adequate staff resources or expertise to carry out all the activities listed in the TOR. Budgetary provisions do not allow them to hire professionals. Hence there is also a need to look at the budgetary provision of NGOs.

vii. Examples from other sectors

As R&R in the highway sector is relatively new, not much experience is available in terms of policy and implementation. One also has to depend on the insights gained from other sectors.

In hydropower, coal, and irrigation projects, the income restoration efforts in resettlement can be grouped under:

- Direct employment;
- Rehabilitation grants; and
- Indirect employment through self-employment opportunities.

In this section, good practices from projects such as the Rengali and Majore Irrigation Project, Orissa; Indira Sagar Irrigation Project, Madhya Pradesh; Majolgaon

Table 21: Training for Income Restoration

Training	WTC	TNHP
Received training in preferred trade?		
No	210	461
Yes	124	197
Satisfied with training provided?		
No	224	480
Yes	110	178
Were given any asset/tool kit after training?		
No	296	125
Yes	34	533
No tool kit required	4	0

TNHP = Third National Highway Project, WTC = Western Transport Corridor.

Source: RETA field survey, 2004–2005.

Irrigation Project, Maharashtra; Khari Irrigation Project, Gujarat; Upper Krishna Irrigation Project, Karnataka; Korba Power Project, of NTPC; Koradi Thermal Power Project, of the Maharashtra State Electricity Board; Kawas Gas Power Project, of NTPC; Raichur Thermal Power Project, Karnataka; Mangalore Refineries Project, of Mangalore Refineries and Petrochemicals Limited, Karnataka; of Narmada Valley Development Authority, Gujarat; and of CIL, have been summarized.

Direct Employment. Where direct employment is available in the project, authorities have provided jobs to deserving APs. They have also provided training to make them eligible for vacant positions. Mangalore Refineries and Petrochemicals Limited gave jobs to half of the displaced population. Similarly, South Eastern Coalfield Ltd. and NTPC gave jobs to eligible APs. Raichur Thermal Power Station provided jobs to 386 APs. The Government of Maharashtra does not have provision for direct jobs in the project, but it has provision for 5% reservation in all government jobs for APs. Koradi Thermal Power Project provided jobs to 80% of the APs directly in the project and has also provided training.

However, the experience of offering jobs to project-affected persons and families has been mixed. During an interaction with some officials of the R&R Unit of NTPC in Delhi, it was found that NTPC's provision of direct employment to one member of a project-affected family invariably resulted in family disputes and even led to the disintegration of the family itself. In a characteristic case, once a job is given to one of the sons on the recommendation of the head of the household, other sons carry a grudge against him and their father, leading to frequent disputes.

Rehabilitation grants. Various state governments and public sector units have provision for rehabilitation grants. Grants in industrial projects (for example, in Mangalore Refineries and Petrochemicals Limited, Karnataka) are given by projects to those who could not be given direct employment and even in lieu of economic rehabilitation. The APs, apart from using the money for construction of a house or purchase of land, can also use these grants as seed capital for promoting self-employment opportunities. As there is no postproject study available, it is difficult to know whether the cash grant was utilized for asset generation or not. However, available experience from other projects shows that the concept of cash grants has serious limitation and risks.

NTPC provides house-building assistance of Rs10,000 to each family in addition to a free developed house plot of 200 m² in the resettlement colony, compensation for the acquired property, and the salvaging of all reusable materials from the house to be demolished. But in NTPC Korba, house-building materials in the form of bricks made out of fly ash at NTPC brick kilns, cement, and mortar were provided to every displaced family instead of a cash grant. In theory, NTPC also provides Rs10,000 as subsistence allowance (called disturbance allowance), Rs15,000 as seed money for income-generating schemes, and another Rs15,000 for the supporting infrastructure of such schemes. However, none of these additional grants was paid by NTPC for its Korba and Kawas plants, though it is provided for in its policy. The main risk from delayed income restoration is food insecurity, impoverishment, and marginalization; subsistence allowance is designed to protect APs from these.

The Department of Water Resources, Government of Orissa, provides a house-building grant of Rs20,000 to each displaced family in addition to a free house plot of 800 m² in the resettlement colony, compensation for the acquired property, and the salvaging of all reusable materials from the house to be demolished. It also provides a house-building grant of Rs4,000, Rs6,000 as maintenance allowance, and Rs40,000 toward purchase of agricultural land. This is in accordance with its 1994 R&R policy, which is due for revision.

Mangalore Refineries and Petrochemicals Limited paid Rs150,000 per displaced family as economic rehabilitation, in addition to compensation for acquired properties. Narmada Valley Development Authority provided soft loans and grants for people who lost land, whereas the Government of Maharashtra has 5% of its vacancies in state government reserved for APs. South Eastern Coalfield Ltd. at its Dipka mines provided a house construction allowance. The allowance paid is in fact the difference between the compensation amount paid for the old structure and the cost of new construction, which of course varies from individual to individual.

The Government of Karnataka, for its irrigation and power projects, provides rehabilitation grants in cases where no alternative land can be provided. The amount of rehabilitation grant is linked to the extent of loss suffered and earning capacity of the family. The grant varies from Rs10,000 to a maximum of Rs35,000 per family. It also provides Rs22,000 as house-building assistance. In Raichur Thermal Power Station (under the

Karnataka Power Corporation Ltd.), resettlement sites have been provided instead of cash. The Government of Gujarat provides Rs750 as rehabilitation grant to each family.

Indirect employment through self-employment opportunities. Since the main risk in any business venture is marketing, it implies that the market for products and services of the displaced persons have to be either provided by the project authorities or tied up with some agency, as in the Upper Krishna Project, where project authorities have linked up with the Karnataka Handloom Corporation and the Local Khadi Organization for marketing goods produced by project-displaced families (PDFs). Similarly, NTPC in one of its plants has given the contract of supplying spices to the APs. But the agencies taking up the responsibility of marketing are under no obligation to provide continued marketing linkages and any failure on their part will adversely affect income restoration activities. Thus, it is always desirable that the market for products and services should be provided by the project authorities for sustaining these activities in the long run. In other words, APs should preferably produce goods or render services that are either needed by the project or whose continued marketing can be assured. In Kawas Gas Power Project, project authorities have formed a society of 17 APs and are arranging a loan to buy commercial vehicles. These vehicles will be hired by NTPC and the income after deducting the loan installment will be distributed among the members.

Every policy, be it state, parastatal, ADB or World Bank, speaks of self-employment opportunities for APs, which includes training for upgrading skills and either loans or small grants from project authorities. Loans to APs are generally made available from local banks and the project authority stands as guarantor. For example, NTPC provides rehabilitation assistance totaling Rs30,000 per family for self-employment. This is an addition to comprehensive vocational training provided to APs who qualify. They also have institutional arrangements by which small contracts awarded to APs and all contractors are bound to employ at least 60% of their personnel from APs, subject to availability.

There are other successful examples of dovetailing with government programs and externally aided projects for creation of employment opportunities for project APs. A good case in point is the World Bank-assisted Composite Irrigation Project-II (see Box 9), which links up with Development of Women and Children in Rural

Box 9: Economic Rehabilitation of Women in Andhra Pradesh—Composite Irrigation Project II

In 1992, at the suggestion of the World Bank, the Government of Andhra Pradesh adopted a program approach in its resettlement and rehabilitation plan. The Development of Women and Children in Rural Areas (DWCRA) program is an integrated rural development program for rural women, who face special obstacles in gaining access to resources and markets and in decision making. DWCRA is operated on the premise that, through training, women in rural areas can build financial resources and develop financial accountability.

From 1991, the DWCRA approach has been used to organize, train, and provide working capital to 183 women's groups for such economic activities as dairy production, cane bamboo-work, brick-making, leaf-plate manufacturing, fish vending, vegetable cultivation, fodder production, and sericulture.

With assistance from two other World Bank projects, the National Sericulture Project and the National Dairy Development Project, rural and landless women developed mulberry cultivation on leased land and reared silkworms.

The DWCRA programs are achieving their objectives of increasing women's productivity and incomes by providing access to credit, training, and markets and developing women's capacity to manage accounts and make more effective decisions.

Source: World Bank. 1996. *Handbook on Resettlement and Rehabilitation*.

Areas, for economic rehabilitation of project-affected women in Andhra Pradesh.

Department of Water Resources, Government of Orissa provides a rehabilitation grant of Rs40,000 per family for buying alternative land. The policy also has provision for training of APs for upgrading skills.

CIL policy has provision for jobs for eligible APs with the contractors on a preferential basis, where feasible. The policy also says that APs opting for nonfarm self-employment will be assisted by the company or its subsidiary (South Eastern Coalfield Ltd. in this case) in developing such options as dairy and poultry production, shops, and petty contracts through formation of self-help groups. It was learned, through consultations with two experts involved in the implementation and evaluation phase of the project, that income-generating activities of the self-help groups formed through project intervention were successful, when the productive potential of the project was utilized. There was a huge demand for a special kind of basket manufactured out of local cane. The cane baskets were supplied by local contractors at high cost. The self-help groups took up production of these cane baskets and output has been totally absorbed by the authority.

Mangalore Refineries and Petrochemicals Limited could not implement its scheme, but had provision for training for self-employment (apart from direct employment in the plant).

Madhya Pradesh Government has provision for self-employment in the Indira Sagar Project. It also provides cash grants, which vary from Rs3,200 to Rs6,400 depending upon the size of landholding.

Karnataka State Government provides *ex gratia* or income-generating grants to all landowners losing land, which varies from Rs20,000 to Rs60,000, depending upon the amount of land lost and the remaining landholding.

Koradi Thermal Power Project, Nagpur provided direct employment to 80% of APs, but no training was provided to the rest.

A successful example of corporate linkage with the local resettled population and creative financial support is Rihand Super Thermal Power Plant of NTPC at Singrauli (see Box 10).

3. Lessons Learned

Good resettlement programs not only require sound policies and adequate resources, but also changes in the mindset toward supporting project-affected persons. Until authorities can spend adequate project funds for rehabilitating APs, there is every possibility of people being made worse off due to project-induced displacement.

Successful implementation of economic rehabilitation depends on proper identification of schemes. It is imperative that implementation agencies spend time with APs to understand the local economy and to relate it to the immediate neighborhood. The example of the Upper Krishna Project is worth mentioning. Three local NGOs were contracted who understood their area of operation. The involvement of the NGOs in livelihood analysis was intensive and as a result they were able to identify schemes with long-term potential and durability. In the Mumbai Urban Transport Project (see Box 10), the successful experience of the Society for Promotion of Area Resource Centre, a local NGO, is worth noting.

Useful lessons have been learned out of this analysis:

- (i) All three approaches—direct employment, rehabilitation grants, and self-employment support—have been adopted in other sectors with varying degrees of success;
- (ii) In the sectors studied, there is recognition

Box 10: Resettlement and Rehabilitation of the Urban Poor—The Mumbai Urban Transport Project

The Mumbai Urban Transport Project (MUTP) has been designed to improve the traffic and transportation system in the city with loan assistance from the World Bank. The project has many partners: the Government of Maharashtra, Indian Railways, Municipal Corporation of Greater Mumbai, and the Brihan Mumbai Electric Supply Undertaking.

Many new lines are to be laid and slum dwellers along the railway tracks are to be resettled. A task force appointed by the state government formulated the resettlement and rehabilitation (R&R) policy. According to the task force recommendations, which were accepted by the state government, each project-affected family was to get a 225 square foot (sq. ft.) tenement free of cost or, where shifting had to be done urgently, transit accommodation of 120 sq. ft. with basic amenities. The R&R policy was to be implemented with the involvement of NGOs and the full participation of affected communities. At the instance of the World Bank, civil society was represented on the task force for the formulation of R&R policy. As a result, the state government appointed the Director of the Society for Promotion of Area Resource Centres (SPARC), a registered NGO, as a member and put the President of the National Slum Dwellers Federation (NSDF) on its land subcommittee.

In 1985, SPARC and NSDF jointly formed an organization called Mahila Milan (MM) or “Women Together”, a network of decentralized savings and credit groups made up of women pavement and slum dwellers. The Railway Slum Dwellers Federation is a constituent unit of the NSDF and is made up of families living along the railway tracks in Mumbai. More than 10,000 families have been resettled, about 40% in permanent accommodation and the rest in transit accommodation, without the use of any municipal or police force. Secure tenure and basic amenities of water, sanitation, and electricity are assured. The World Bank and the Mumbai Metropolitan Regional Development Authority (MMRDA) gave the alliance of SPARC/NSDF/MM a sole source contract to prepare baseline socioeconomic surveys, to draw up resettlement plans, and implement them. In addition, a contract was given to the alliance to construct 2,500 transit tenements. Women’s groups are encouraged. While men are not excluded, the information sharing is encouraged among women, and communities are generally encouraged by the alliance to allow women to take the lead. Later these groups will begin savings and credit groups, start developing skills to access municipal and state government services, get involved in house and settlement design, and hopefully supervise and manage the transition phase of resettlement.

Today, in the six or seven settlements where these families have been resettled, the rehabilitation effort has gone beyond physical relocation. About Rs5 million are in circulation as loans for income-generation through MM to take care of lost opportunities as a result of shifting. Ration shops are being set up to distribute kerosene and other essential commodities. Names in electoral rolls have to be transferred, addresses on ration cards have to be changed and cooking gas connections shifted. All this is in progress. In all these settlements, committees have been set up—with a majority of women—to look after water, sanitation and garbage, and to deal with the municipality, the police, and so on. Each building or group of tenements has a committee and there is a central committee for each settlement.

Source: Burra, Sunder. 2001. R&R of the Urban Poor: The Mumbai Urban Transport Project (MUTP): A Case Study. Society for Promotion of Area Resource Centres (SPARC), Mumbai, India. Paper presented at the Cities Alliance Workshop. This project was suspended by the World Bank due to lack of attention to small commercial businesses. The suspension was lifted on completion of an acceptable action plan.

- of the need to assist APs to reestablish themselves;
- (iii) Further studies are needed to find out how effectively APs utilize their resettlement allowances;
 - (iv) The basis on which the various allowances and other payments were decided is not very clear, and in most instances does not appear to have much relationship to the actual needs;
 - (v) Self-employment initiatives, supported by adequate resources and expertise, have been successful;
 - (vi) Focused efforts to assist affected women have also proved effective;
 - (vii) State government policies to reserve employment for APs is a commendable initiative;
 - (viii) In providing direct employment, it is important to ensure that family integrity is not affected by providing selective employment to one member of the family;
 - (ix) Providing cash grants to APs could have adverse impacts if there is no professional assistance to help them set up viable enterprises; and
 - (x) If the productive potential of the project is used for income generation through group-based activities, the sustainability of the program will be better.

C. Institutional Support

NHAI outsources the execution of most activities including land acquisition and resettlement, and its staff coordinate the activities. It hires experts during all stages of a project cycle. The institutional arrangements at NHAI headquarters and field levels and some of the related issues are discussed below.

1. NHAI Headquarters

At headquarters, the chief general manager is in overall in charge of resettlement plan implementation, in addition to other engineering duties in the context of highway construction. There is a department called the Environment and Social Development Unit (ESDU) headed by a general manager (environment). The general manager is assisted by a deputy general manager (environment) and a manager. However, there is no social scientist in the headquarters structure. ESDU is responsible for contracting NGOs, monitoring and

evaluation consultants, and reviewing resettlement plan documents from preparation to implementation. It is also responsible for overall policy support in social and environment aspects arising out of project planning and implementation.

NHAI contracts the services of social scientists as required. During project preparation, DPR consultant teams include social experts, public consultation experts, and gender experts supported by surveyors. Once the resettlement plan is prepared, independent review consultants are appointed and their team again consists of experts on R&R, public consultation, and gender. During resettlement itself, NGO teams also consist of key professionals for R&R, gender, public consultation, income restoration, and HIV/AIDS. NGOs appoint support staff such as surveyors (for both quantitative as well as qualitative surveys) and civil engineers. The monitoring and evaluation team consists of a similar strength as NGOs. With regard to land acquisition, NHAI appoints a retired Tehasildar in every project implementation unit who coordinates with the competent authority.

However, the problem of outsourcing is that most of the DPR consultants who prepare resettlement plans do not have the necessary knowledge and skills. They subcontract the social part of the DPR either to an agency or individual professionals having the requisite experience and skills. Consequently, it would be advisable to clearly specify the need for a specialized social sector agency at the bidding stage itself. The original advertisement inviting bids for hiring DPR consultants must specify that the agencies should tie up with a suitable group having the necessary knowledge and skills for preparing resettlement plans, if they cannot do it on their own. A definite set of evaluation criteria for assessing the capability of organizations to prepare resettlement plans needs to be developed and applied for selecting and short-listing agencies at the Expression of Interest (EOI) stage itself.

NHAI now conducts orientation workshops for NGOs and field staff soon after hiring them for resettlement plan implementation. This helps in sensitizing NHAI field staff and introduces the NGOs to the project. A neglect of social issues could lead to delayed implementation, cost overrun, time overrun, and a negative impact on human capital formation in the context of income restoration of project-affected people at the local level. Training provides valuable inputs toward better socioeconomic data generation, preparation of implementable income restoration plans, leveling, indexing, and segmenting vulnerability.

Having a computerized management information system and a system of field-based periodic review would ensure both quantitative and qualitative monitoring leading to strategic learning, timely action, and corrective measures.

2. Field Level

At the field/implementation level, the project director is responsible for implementation of resettlement plans in an overall sense and is assisted by a group of managers who deal primarily with technical issues of highway construction. These managers, called “manager, technical” also have the additional duties of R&R (the nomenclature of this level of officer varies from stretch to stretch. In TNHP, they are called CRRO, and in WTC, they are called DRO. The operational jurisdiction of the CRRO/DRO is decided by NHAI, according to administrative and project considerations. For example, in the GTRIP and TNHP, the responsibilities of the CRRO have been assigned by package, which essentially means specific segments of the total project stretch. In WTC, the responsibilities of the DRO have been assigned by district. Both systems have their advantages and disadvantages, as far as implementation of the resettlement plan and income restoration are concerned. The packages have been evolved primarily to facilitate the smooth civil construction of the highway. The effects of such packing in the context of resettlement plan implementation have definite impacts for smooth resettlement implementation.

The CRRO’s work involves dealing with various agencies and functionaries, at times in more than one district, as in certain cases a single package is spread over two or more districts. As far as project delivery is concerned, the CRROs are responsible for facilitating land acquisition through the competent authority. NHAI requests the concerned state government to provide support by providing an officer from the relevant department (land revenue) of the district(s) to be the competent authority for the project stretch that passes through that area. Sometimes the packages go across districts or even states. Being a liaison officer, the CRRO has to deal with complex and difficult bureaucratic systems and procedures at various levels and the project directors become the prisoner of their own power. As a result, projects are often inordinately delayed. In this regard, the model of TNHP and WTC (package V.C) is worth mentioning. Within NHAI’s jurisdiction, a separate full-time office was established where a full-time competent authority with the rank of manager,

technical was appointed. The role of DROs was limited in this regard. The role of the competent authority was only to coordinate with the project director and DROs in terms of providing land for civil construction as per the construction schedule. However, in TNHP package V.C, the competent authority is also the CRRO, and as a result of dual responsibility, implementation of R&R activities was greatly hampered.

The packaging system has one more disadvantage in the context of resettlement plan implementation in general and income restoration in particular. One of the important responsibilities of NHAI is the formation of district committees and GRCs. The resettlement plan reports profess that the committee should be headed by the district magistrate or his nominee in the district and the district land acquisition officer should be one of the members, in addition to a representative from the APs, and a representative from the implementing NGOs. In addition, the GRC and Panchayat committee has almost the same level of participation. The idea of having committees in the context of R&R implementation is to ensure transparency, accountability, and participation, etc. However, experience shows that multiple levels of organization create operational bottlenecks, leading to delay and distress in implementation.

One of the important responsibilities of the district committee is to vet the micro plan, before it is sent to NHAI headquarters, finalized, and used for implementation. Often this process creates delays in implementation, particularly income restoration. In this connection the decision in the GTRIP and TNHP project is worth mentioning. After the February 2002 appraisal mission, the World Bank suggested that NHAI need not send micro plan documents to the district committee for approval. NHAI is authorized to take decisions in this regard. Since then, monitoring and evaluation consultants verify every micro plan before the NGO formally submits it to NHAI headquarters. This decision has helped NHAI field officers, NGOs, and other stakeholders in smooth implementation of the project.

The DROs/CRROs have overall responsibility for supervision of highway construction, processing of payments, etc., and also have to handle R&R issues, including income restoration. The resettlement plan of the Porbandar–Deesa Corridor of East–West Public Private Partnership Project (January 2003) has listed 11 functions to be performed by a DRO:

- (i) Coordinate with district administration and NGOs for land acquisition and R&R;
- (ii) Translate R&R policy into local language;

- (iii) Prepare pamphlets of the policy;
- (iv) Print the policy and identity cards for the APs;
- (v) Ensure the development of resettlement sites, wherever required;
- (vi) Participate in the allotment of residential, commercial, and agricultural plots;
- (vii) Liaise with district administration for dovetailing government's income-generating with development programs for the APs;
- (viii) Ensure the inclusion of APs who may not have been covered during the census survey, facilitate the opening of joint accounts in local banks to transfer assistance for R&R for APs, and organize disbursement of checks for assistance in the affected area in public;
- (ix) Monitor physical and financial progress on land acquisition and R&R activities;
- (x) Participate in regular meetings; and
- (xi) Organize bi-monthly meetings with NGOs to review the progress on R&R.

Since DROs/CRROs do not have appropriate qualifications and experience to perform the above functions, they are extensively supported by NGOs.

3. Capacity Building

In order to build the capacity of field staff, NHAI has made several efforts, but much remains to be done. During the last 3 years, ESDU of NHAI has organized training and orientation workshops on various themes including field management in resettlement, income restoration strategies, social development, and involuntary resettlement for transport managers.

One such module was organized in August 2002 in Gaya, Bihar. The proceedings of the training workshop, while recognizing the importance of the subject, stated: "Providing integrated assistance for self-employment opportunities is a very difficult business and is, more often than not, unsuccessful, if the project authorities do not assure the market linkages. Technical training should be provided to APs to utilize various contractual opportunities" (Proceedings of Training Workshop on Income Restoration Plan Preparation, August 2002). The same report also mentions the action taken by the NGOs in the context of income restoration during that period in TNHP and GTRIP projects, as shown in Table 22. The NGOs have been instrumental in

working out and presenting a range of income restoration options for APs, involving various trades and vocations.

ESDU needs to evolve a policy to address the training needs of various categories of project functionaries including the implementing NGOs in a systematic manner. This should have provision for fresh training needs assessment at the beginning of work in any highway project. The training programs should be designed and conducted for all the identified target segments. The levels at which training need to be imparted are:

- (i) NHAI and project implementation units,
- (ii) NGOs responsible for resettlement plan implementation, and
- (iii) APs.

The training needs are likely to be different at different stages of project planning, preparation, and implementation. For example, at the DPR/resettlement plan preparation stage, NHAI staff may need to be trained in procurement procedures and applying the criteria for selecting a suitable agency or consortium. A series of workshops would need to be organized for assessing the training needs of various levels of project functionaries leading to the design and implementation of appropriate training programs, for which competent consulting agencies could be hired.

The World Bank organizes some training workshops, from time to time, for sharing experience during different stages of resettlement plan implementation for their packages. But these efforts are not enough and they need to be supplemented by a more proactive role on the part of NHAI in terms of designing and organizing training and orientation workshops.

4. Nongovernment Organizations: Types and Functions

Involvement of NGOs in resettlement plan implementation is based on the assumption that they have a good understanding of community issues because of their closer interaction with and access to communities at the grassroots level. However, a number of factors have a bearing on the quality of such implementation. These include selection of appropriate NGOs, capacity building, and monitoring of resettlement plan work carried out on the ground.

Table 22: Income Restoration Options in the Third National Highway Project and Grand Trunk Road Improvement Program

Sl. No.	Package	Trade Identified by NGOs
1	I.C	For land-based APs of Auraiya: - Support and suggestion from UPDASP For non-land-based APs - Self-help groups will be formed under DUDA Scheme - Training in shoe making (for families already in this trade) - Purchase of bullock cart (the area has lot of sugarcane cultivation and therefore sugar mills. To ferry sugarcane to the mills, bullock carts will be used)
2	II.A	No IG schemes have been identified so far, but NGO plans to identify schemes based on past occupation. NGO also plans counseling as part of training. Formation of self-help groups for the following: - Stitching/sewing - Dairy farming - Training for skill enhancement
3	III.A	The following trades have been identified for non-land-based income restoration - Blacksmith - Grocery and other petty shops - Dairy - Vendor market has been suggested as per the policy The following training needs have been suggested: - Computers, typing, toy making, driving, watch repair, tire repair, welding
4	IV. A, B, C, D	Only two trades so far have been identified i.e., tailoring and motor spare-parts shop. Tailoring has been suggested only for women. APs and numbers have been selected to ensure that there are not more than 2 women tailors in a group of three or four villages. On-the-job training as an electrician has been a huge success
5	V.A, C	NGO has separate trades identified for titleholders and for encroachers. Titleholders (land-based): - Threshers - Technical skills for changing cropping pattern - Providing diesel pumps - Lilly and lotus pond development (huge success considering the package has Buddha temples where lotus is offered) - Water-harvesting structures Titleholders (non-land-based): - Milk trade - Masons - Security guards through training in Scouts and Guides (given the unemployment rate and growing demand for security guards in urban areas, almost 95% of APs were absorbed as security guards) Encroachers: - Skills enhancement in trades they are already carrying out - Renovation of existing facilities - Piggeries - Incense sticks (NGO buys back the sticks and Gaya has a major market for these sticks) - Vendor market at Bagodar has demonstrated how good coordination between the project authority and the district administration can produce desired results.

AP = affected person, DUDA = District Urban Development Authority, IG = income generation; NGO = nongovernment organization, SI No. = Serial number, UPDASP = Uttar Pradesh Diversified Agriculture Support Project.
Source: RETA field survey, 2004–2005.

In the particular context of India, NGOs may be classified into four broad types, as follows.

- (i) *Program-Oriented.* The focus of such agencies is on implementing a variety of sector programs, giving varying degrees of importance to people's participation. The programs being implemented seek to improve the livelihoods, or more generally, the quality of life of an identified constituency of disadvantaged people by enhancing their access to various goods and services.
- (ii) *Social Action-Oriented.* Many organizations believe in enhancing the access of the disadvantaged to existing services and programs of various public service organizations as the key to social justice. In their perception, providing goods and services is the responsibility of the various public agencies created for this purpose. They see their role as enablers, educators, and organizers so that the disadvantaged can successfully make demands on public agencies. Social services and economic development may be taken as opportunities for education, training, and organization, but should not be regarded as ends in themselves.
- (iii) *Structural Transformation through Grassroots Action.* Such agencies are relatively small, often linked informally, with a focus on mass mobilization for wider social transformation. Their concerns are how to mobilize the people through local issues and confront vested interests, how to spread grassroots action into a mass movement, and how to change state policy through advocacy.
- (iv) *Resource Centers.* Such agencies see themselves as resource centers for other voluntary agencies. They further fall into two categories: those that have graduated to this role through successful programs on the ground and have acquired a certain expertise and size, and those who see this as their chosen role right from the outset. The concerns of such agencies are how to train field staff of voluntary agencies in various areas, and how to build up closer relationships with recipient agencies and potential resource institutions.

Though program-oriented organizations would be best suited for resettlement plan implementation, it

might be useful to choose the right mix in selecting an NGO. To make this selection truly responsive to the needs inherent in implementing resettlement plans, it may be advisable to develop an objective and transparent set of criteria and use them for actual selection. However, mere selection is not enough. R&R activities in the highway sector being of relatively recent origin, most of the NGOs do not have prior experience in carrying out resettlement plans in the highway sector in general and related income restoration activities in particular. This obviously calls for designing and implementing appropriate capacity-building activities, including training and technical assistance, as per identified learning needs of the implementing NGOs.

D. Sustainability: Way Forward

Experience of the R&R practice across sectors indicates that all the projects generally have an impact on the incomes and sociocultural systems of DPs and their families. The basic postulate of all development has to be that no one is worse off than he or she was before the project; therefore, restoration of preproject levels of income is an important part of economic rehabilitation.

Effective income restoration interventions can be designed on the basis of a reliable database and proper analysis with a focus on social equity and justice. The planning exercise has to be carried out in the light of primary data generated on the existing income of project-affected people in terms of the nature, type, and volume of income including the source(s), assets, and resource bases supporting that income. This obviously has to be followed by timely and effective implementation of the planned activities.

1. Resettlement Plan Preparation

The entitlement matrix provides the basis for economic rehabilitation grants to vulnerable non-titleholder APs. To make income restoration successful, well-designed financial planning, with targeted intervention areas, needs to be carried out in resettlement plan preparation itself. NHAI needs to assume greater responsibility in this regard. The resettlement plan report should not be considered as subservient to the main technical report of the project.

Preparation of income restoration programs at the resettlement plan preparation stage itself needs to be taken with utmost sincerity, sensitivity, and seriousness. This would obviously require more serious efforts

in generation of socioeconomic data and the related inventorization at resettlement plan preparation by the DPR/resettlement plan consultants.

At present during resettlement plan preparation, data are collected through questionnaire surveys and are presented in two distinct categories: titleholders and non- titleholders. The titleholders' data are again categorized into two parts: land losers and structure losers. The non-titleholders' data are broken into three distinct categories: squatters, kiosks, and tenants. As the current R&R approach is driven by a compensation and assistance distribution strategy, mainly in the form of cash, the data are also collected and collated accordingly. Data generation is not geared toward collecting information required for long-term income restoration planning.

The data regarding occupational structure of APs are generally inadequate for formulating income restoration plans. The data that need to be gathered from APs include available skills, skills in use, skills not in use, current trade or vocation, etc. The current level and quality of data neither provide any vital input for formulation of skills upgrading programs nor provide any input for future human capital formation. The vulnerability data are being collected and analyzed according to the classification in the policy framework that includes scheduled castes and tribes, income below poverty line, women-headed household, etc., which is used primarily for providing some extra monetary incentives by way of assistance.

There is no practice of carrying out any risk and vulnerability analysis that could form the basis of sound income restoration planning and intervention. This could be taken care of by including the inputs from a livelihood expert, who is actively involved in resettlement plan preparation, particularly the field investigations and public consultations, as a part of the resettlement plan preparation team. A separate detailed chapter on livelihood restoration, based on livelihood analysis, vulnerability analysis, perception mapping, risk mapping, etc., should be in the resettlement plan report with a detailed budget, so that the implementing NGOs do not feel constrained in the implementation of economic rehabilitation at any stage. Otherwise, economic rehabilitation in the name of income restoration will be limited to distribution of compensation and assistance only.

2. Resettlement Plan Implementation

Economic rehabilitation in highway sector projects has been limited to the following aspects:

- (i) Distribution of compensation,
- (ii) Distribution of assistance,
- (iii) Rehabilitation grants, and
- (iv) Indirect employment through self-employment opportunities to a limited extent.

Currently in NHAI projects, implementing NGOs have neither the time and inclination nor the necessary knowledge and skills to carry out income restoration activities. Within the limited resources and time, most of the contract period is consumed in clearing the stretch for highway construction.

Though there is a customary chapter on income restoration in all resettlement plans, there are no corresponding activities (other than the conventional cash compensation and some assistance by way of training) or budget to indicate that income restoration is a real resettlement concern. Moreover, the NGOs place more emphasis on completing the tasks that are regularly monitored and most of the time these are activities relate to clearing the project stretch. Hence, income restoration activities are neither monitored nor efficiently implemented.

3. Economic Rehabilitation

Any economic rehabilitation plan needs to be based on sound methodology including systematic livelihood analysis, its backward and forward linkages, etc. The current methodology is invariably limited to providing some training to APs on the basis of the available training options according to the NGOs' convenience. This is probably to fulfill the contractual liability. The post-training follow-up, supply-chain management, credit, and marketing links are totally absent.

4. Effective Intervention

The Indian highways are the hub of economic activity at local and regional levels. Over the years, the rights of way served as growth centers serving a cluster of villages or towns. Road-based activities have spillover effects on the main highway through weekly or daily marketing activity of the villagers and local denizens. This situation, however, creates traffic congestion and lowers the speed of through traffic.

Now the new highways are state-of-the-art roads with access control and minimum speed limits. Roadside activities such as motels, dhabas (way-side eating places), and auto repair shops, etc., are bound to be removed or/and undergo changes. Any enforcement

measures that are based on a top-down approach will dilute the objective of corridor management in the long run, as is evident in the case of Indian Railways. Since the concept of corridor management by NHAI is still in an evolutionary stage, the following points could be of help in working out a more inclusive income restoration strategy for R&R:

- (i) As mentioned earlier, economic rehabilitation is, to some extent, restricted to an option of creating vendor markets for commercial APs. The fate of the vendor market option in the entitlement matrix is guided by the availability of government land with the same level of locational advantage. Only project-affected people are entitled to this option. Vulnerable APs are entitled to a free site. Linking the subproject of corridor management (including creation of way-side amenities) with the option of vendor markets could be a viable option for creating sustainable livelihood opportunities for some APs. To translate this into reality, concerted intra- and interdepartment cooperation within NHAI would be needed.
- (ii) Management of plantation activities in the medians and/or the safety zone could be another subproject, where opportunities for income generation could be created for some APs according to their interest. Local civil society organizations/CBOs/NGOs may successfully take part in this activity through local contracts. The implementing NGOs may play the role of a mother NGO to facilitate and manage the activities under this subproject.
- (iii) The lessons learned from resettlement in the Naphtha Jhakri Power Corporation is worth mentioning here. The corporation has created a 200-bed hospital in the remote Himalayan region in the project area. Importing the human resources from outside for such a specialized trade/vocation specific area was a cumbersome process. On the other hand, a sizable number of APs who had lost their occupation and livelihood due to the project needed to be reoriented to explore future livelihood possibilities. As a mitigation measure, in the context of operationalizing the economic rehabilitation plan, the project

authority enabled APs to be trained in different trades of hospital management, like nurses, semi-nurses, and ward assistants.

- (iv) As a part of the highway development program, the environmental management plan emphasizes the restoration of CPRs such as water bodies and lakes, etc. There has been a substantial amount of budgetary support from NHAI for beautification and enhancement of such resources. A recent experiment in the project planning stage of Lucknow Muzaffarpur National Highways Project, a World Bank-funded project in the East-West Corridor, offers a way of thinking in the context of evolving community-based tank/pond management systems, where APs could be interested in taking up the management of such CPRs through local government institutions, or local NGOs/civil society organizations, etc. APs may like to take up the management of such improved infrastructure and run them on a commercial scale. This isolated experiment could evolve into a proper mechanism, as part of economic rehabilitation for APs.
- (v) The state-of-the-art highway would have a significant impact on slow-moving vehicles in rural areas. The technical design consideration may require reduction in interaction of the local, slow-moving traffic with high-speed highway traffic. Effective highway/road safety management requires enforcement, engineering, and education. The enforcement and engineering solutions are often worked out and applied in a top-down manner without involving APs; but the education component provides ample opportunity to involve educated APs, as this requires a large number of trained personnel to impart education to people in rural areas.

Even the enforcement component can be explored, as this also requires human resources at the local level. These components may be outsourced to competent and experienced NGOs. These organizations in turn could be sensitized and persuaded to train local people, particularly APs, whose income needs to be restored. Despite the possibility of occupational shifts in the labor market, this could strengthen the economic rehabilitation component of the R&R plan.