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Risks Assessment and Management in Involuntary Resettlement

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I. Introduction

This paper describes an operational tool for preparing and monitoring projects involving resettlement: the "Impoverishment Risks and Reconstruction (IRR)" model. As the Asian Development Bank moves towards a broader understanding of poverty reduction and of the relationship of resettlement risks to poverty, the standard concepts and methods are no longer sufficient and need to be refined. The IRR tool for analysis and planning described below enables staff working on resettlement operations to focus from the outset on the poverty issues that are at the heart of involuntary resettlement. It does not add new tasks on top of the existing ones in resettlement. Instead, it saves efforts and increases effectiveness by (i) moving risk discovery upstream in project preparation, and (ii) focusing early on upon risk reduction and mitigation actions.

The IRR model has been widely discussed and supported in the recent development literature as an effective approach to social risk management. It is increasingly applied in the practice of development projects.¹ Focus on impoverishment risk was explicitly recommended in ADB's Handbook on Resettlement: A Guide to Good Practice (1998).² The present description operationalizes the IRR's content, explains in detail how to use it, and clarifies its place vis-à-vis current ADB policies. The "impoverishment risks and reconstruction model" is fully consistent with other current approaches to poverty reduction and resettlement used in ADB's analytical and planning work.

The key attribute of this tool's effectiveness is its focus on "prevention first." It identifies socio-economic risks before they become reality. Thus it guides towards pre-empting or mitigating these risks and helps safeguard the interests of risk-exposed people by matching counteractions to identified risks.

A. Background

Resettlement Needs and Trends. Involuntary population displacement results from the imperative need to build modern industrial and transportation infrastructure, expand power generation and irrigation, implement urban renewal, and enhance social services – schools,

1. See, for example, Michael M. Cernea, "The Risks and Reconstruction Model for Resettling Displaced Populations," *World Development*, 25 (10) 1997; L. K. Mahapatra, *Resettlement, Impoverishment and Reconstruction in India*, New Delhi, Vikas, 1999; in particular, see the volume *Risks and Reconstruction. Experiences of Resettlers and Refugees*, edited by Michael M. Cernea and Christopher McDowell. The World Bank: Washington DC, 2000.

2. ADB, *Handbook on Resettlement: A Guide to Good Practice*, Manila, 1998, p. 61.

hospitals, and water supplies. Increases in population density, land scarcities, and growing socio-economic needs make resettlement a continuous, albeit undesirable, companion of development.

De-capitalization of Resettlers. Forced resettlement carries severe risks of impoverishing the uprooted people, many of whom are very poor even before displacement. Social research and project outcomes demonstrate that involuntary resettlement operations tend to cause the de-capitalization of resettlers, who lose capital in all its forms: natural capital, man-made capital, human capital, and social capital. Therefore, the main socio-economic concerns in resettlement operations revolve around reducing the impoverishment risks and restoring resettlers' livelihoods.

Poverty Reduction Policies. All ADB policies converge towards the fundamental objective of reducing poverty and promoting growth and development. Three of the Bank's most important policies guide the efforts to minimize resettlement occurrence and, when resettlement is unavoidable, to carry out impoverishment-free re-establishment. These policies are: the policy on involuntary resettlement³, the recently adopted Strategy for Fighting Poverty (November 1999)⁴, and the social protection policy⁵. Very important among these, ADB's strategy for fighting poverty calls for "using new tools to make antipoverty operations more effective."⁶ The use of the IRR framework in resettlement is part of this "retooling for poverty reduction."

Fighting poverty has two sides: reducing the poverty that already exists, and preventing the onset of new causes of impoverishment. Development projects themselves are not free from risks and adverse impacts. Risks of impoverishment regularly surface in development projects that require some involuntary resettlement. If project preparation and implementation fail to (i) identify these risks in a timely manner and (ii) prevent them from becoming reality, severe problems in resettlement operations do occur. This correlation is why the objectives of poverty reduction and social protection strategies must be translated into project provisions that are geared against the emerging, adverse impacts and risks of impoverishment.

3. ADB, *Involuntary Resettlement*, 1995.

4. ADB, *Fighting Poverty in Asia and the Pacific. The Poverty Reduction Strategy of the Asian Development Bank*, 1999, Manila.

5. ADB, *The Social Protection Policy* (official title needed here). ADB defines social protection as follows: "Social protection is the set of policies and programs designed to promote efficient and effective labor markets to protect individuals from the risks inherent in earning a living either from small-scale agriculture or the labor market, and to provide a floor of support to individuals when market-based approaches for supporting themselves fail." (From I. Ortiz, "Framework for Operations on Social Protection". ADB, June 1999, processed.)

6. ADB, *Fighting Poverty in Asia and the Pacific. The Poverty Reduction Strategy of the Asian Development Bank*, 1999, Manila

Improving Resettlement Plans through Risk Assessments. Two reviews⁷ carried out in 2000 about ADB experiences in implementing its resettlement policy and procedures found the policy sound and impactful. Performance in resettlement operations is gradually improving. However, many difficulties still exist in targeting risk-mitigation activities precisely and in safeguarding the risk-exposed population segments against adverse impacts. The use of the IRR methodology is apt to improve the content and the targeting of Resettlement Plans. Practical experiences show that land acquisition needs, relocation requirements, and the duration of relocations (temporary versus permanent) are non-uniform for various affected groups. Analytical and planning tools must be sharp and flexible to lead to differentiated responses to non-uniform risks. Regular risk analysis upstream in the project cycle, starting at ISA, is therefore indispensable. It should result in (i) better tailoring the content of RPs and (ii) the direct commitment of borrowing agencies to the formulation of specific risk reduction measures before ADB's fact-finding missions take place. Adequate times for carrying out such analysis during the project cycle will be indicated further, within the scope of ADB's General Guidelines on Operational Procedures (GP)⁸ and Initial Social Assessment (ISA).⁹

Methods for Analyzing Impoverishment Risks during Project Preparation. As a framework for risk management, the impoverishment risks and reconstruction (IRR) model has a dual emphasis: (i) on risks to be prevented or mitigated and (ii) on reconstruction measures to be implemented. In studies for project feasibility and preparation, the IRR framework performs two basic functions:

- (i) A diagnostic and predictive function to anticipate risks in resettlement, and to assess their nature and their expected intensity; and
- (ii) A problem resolution and planning function to guide the incorporation of measures matching each main risk, either for prevention or mitigation.

The IRR framework synthesizes results from the knowledge of past processes, which saves considerable time and efforts in feasibility work by not demanding general risk analysis to start anew in each project from "square one," but rather by ex ante offering a well-tested starting point: the matrix of eight basic risks is, in light of historical experience, predictable in most resettlement

7. ADB, Social Development Division (SOCDD), Involuntary Resettlement Policy Review, Working Paper, January 2000, Manila; see also: Report and Recommendations for Improving Environmental Protection and Supervision of Resettlement Operations, by John Head and Michael M. Cernea, OESD, Manila, May 2000.

8. ADB, Guidelines on Operational Procedures (GP). Processing of Loan Proposals, 13 January 1997, Manila.

9. ADB, Operational Manual, Initial Social Assessment (OP Section 50/OP), January 1997, Manila.

situations. Applying this IRR matrix to the circumstances of each project has several cognitive advantages:

- (i) Ensuring – most importantly – that no single major risk to resettlers is overlooked in feasibility analysis, only to surface later during implementation and cause “surprises”;
- (ii) Organizing data collection and structures the thinking- process for project design along pre-identified variables; and
- (iii) Helping to distinguish the different intensity of each risk (high risk from low risk, in the given project context) rather than treating all risks uniformly.

Advance consideration of risks facilitates the mobilization of proportionate resources for the highest risk or for the risks affecting larger numbers of people, while allocating less to risks with lower incidence or intensity in each context. In practice, this differential approach may vastly increase project effectiveness and rationalize resource allocation.¹⁰ Such upstream risk analysis may also conclude that in some projects one or another of the risks highlighted by the IRR framework is not likely to occur in a given project or it can reveal some locally specific risks that are not part of the basic matrix but need to be addressed.

The IRR as an analytical tool embodies the central idea of ADB’s definition of poverty, which reflects the condition of involuntary resettlers: “Poverty is a deprivation of essential assets and opportunities to which every human is entitled.”¹¹ In this sense, the IRR tool identifies impoverishment not only in terms of income, but also in terms of employment opportunities, health care, nutrition, food security, common assets, education, shelter, or social capital.

Indeed, the eight most widespread risks of impoverishment captured in the IRR model (also signaled in the ADB Handbook on Resettlement)¹² are:

- (iv) Landlessness
- (i) Joblessness,

10. One example highlights the advantage of recognizing differential risk-intensities instead of applying mechanically the same standards to all affected subgroups. In a project in the People’s Republic of China, the staff felt that a rigid interpretation of resettlement plans and uniform treatment of all groups would demand unnecessary levels of detail across the board, take excessive time, and add little value to the project. In that project, about 12 households required house and land relocation; 750 households lost land permanently, but not their houses; and some 1,600 households temporarily lost access to only part of their land. Rather than uniformly collecting the same amount of data for all these different subgroups, an approach that recognized the differences in risk intensity and in households’ risk-exposure proved apt to save time and resources, yet still addressed everybody’s needs.

11. ADB, *Fighting Poverty in Asia and the Pacific. The Poverty Reduction Strategy of the Asian Development Bank*, November 1999.

12. ADB, *Handbook on Resettlement. A Guide to Good Practice*, OESD, Manila, 1998, p 61

- (ii) Homelessness,
- (iii) Marginalization,
- (iv) increased morbidity and mortality,
- (v) food insecurity,
- (vi) loss of access to common property, and
- (vii) social (community) disarticulation.

Each of these risks is briefly presented below. Further, the paper will show how the IRR framework turns the risks matrix on its head and derives counter-risk strategies that match each of these basic risks with targeted project provisions.

- (i) *Landlessness*. Expropriation of land removes the main foundation on which many people build productive systems, commercial activities and livelihoods. Often land is lost forever, sometimes it is partially replaced, and seldom is it fully replaced or fully compensated. This is the main form of de-capitalization and pauperization of the people who are displaced. Both natural and man-made capital is lost;
- (ii) *Joblessness*. Loss of wage employment occurs both in rural and urban displacement. People losing jobs may be landless agricultural laborers, service workers, or artisans. The unemployment or underemployment among resettlers may linger long after physical relocation. Creating new jobs for them is difficult: it requires substantial investment, new creative approaches, and more reliance upon sharing project benefits with the resettlers;
- (iii) *Homelessness*. Loss of housing and shelter may be only temporary for many people, but for some it remains a chronic condition and is felt as loss of identity, and cultural impoverishment. Loss of dwelling may have consequences on family cohesion and mutual help patterns, if neighboring households belonging to of the same kinship group get scattered. Group relocation of related people and neighbors is therefore preferable over dispersed relocation;
- (iv) *Marginalization*. Marginalization occurs when relocated families lose economic power and slide down towards lesser socio-economic positions: middle income farm-households become small landholders; small shopkeepers and craftspeople lose business and fall below poverty thresholds, and so on;

- (v) *Increased morbidity and mortality.* Vulnerability of the poorest people to illness is increased by forced relocation, because relocation tends to be associated with increased stress, psychological traumas, and the outbreak of parasitic and vector-borne diseases. Serious decreases in health levels result from unsafe water supply and sewage systems that proliferate epidemic infections, diarrhea, dysentery, etc.;
- (vi) *Food insecurity.* Forced uprooting diminishes self-sufficiency, dismantles local arrangements for food supply, and thus increases the risk that people will fall into chronic food insecurity. This is defined as calorie-protein intake levels below the minimum necessary for normal growth and work;
- (vii) *Loss of access to common property.* Poor farmers, particularly those without assets, suffer a loss of access to the common property goods belonging to communities that are relocated (e.g., loss of access to forests, water bodies, grazing lands, etc.). This represents a form of income loss and livelihood deterioration that is typically overlooked by planners and therefore uncompensated; and
- (viii) *Social disarticulation.* The dismantling of community structures, social organizations, local associations, etc., is a massive loss of social capital. Many informal and formal networks get dispersed. Such dis-articulation undermines livelihoods in ways usually not recognized and not measured by planners, and causes impoverishment through disempowerment.

The risks discussed above affect various categories of people differently: rural and urban communities, tribal and non-tribal groups, children and the elderly, or (in river-based projects) upstream and downstream populations. Research finds that women suffer the impacts of displacement more severely than men. Host populations are also subjected to additional risks, resulting from increased population densities at relocation sites and a higher competition for resources.

The extent and intensity of each of these risks in a contemplated project area must be assessed at the start of project preparation, however preliminary this assessment is. The first responsibility for carrying it out rests with the borrowing agency and its consultants. Then IRR model provides the organizing “scaffolding” or matrix for such assessment. As preparation advances, the initial assessments are refined, verified, made more complete. At the time of the “Initial Social

Assessment” (see OP Section 50/OP) a documented image of the expected resettlement component should emerge, together with the initial assessment of institutional capacity and financing arrangements for carrying out time implementation. But most important is to start developing, from this initial stage, the risk reduction responses and the positive project provisions for reconstructing resettlers livelihoods.

Similar to the Asian Development Bank, other major development agencies also promote risk management to the forefront of their conceptual apparatus and operations. The World Bank’s World Development Report 2000/2001 devotes a special section to methods for addressing risks¹³. It emphasizes three concepts : “risk prevention”, which involves measures to be implemented before potential risks become reality; “risk mitigation”, which involves measures to reduce risks that can not fully be prevented and aim to diminish their adverse impacts; and “risk coping”, which involves measures to overcome the adverse effects of risks after these effects appear. In the case of resettlement, all these three aspects are covered by the IRR model through the way it guides risk reversal and post-relocation reconstruction.

Risk Reversals and Reconstruction. In resettlement, risk management measures can and must be taken at different moments, both before and after the risk occurs. Operationally, this means taking measures before project start (ex ante), during project implementation, and most often even after project completion. Before displacement actually begins, the social and economic risks of impoverishment are only impending risks. But if preventative counteractions are not initiated, these potential hazards convert into actual, dire impoverishment processes. Counteractions to those risks that can be only reduced but not eliminated should continue through mitigation during and after project execution as well.

The internal logic of the IRR as analytical and planning tool prescribes that overcoming impoverishment requires attacking the risks early on. Similar to how its risk analysis de-constructs the multifaceted displacement processes into distinct risks, the IRR also deconstructs risks-reversal and reconstruction into sets of activities tailored to match the risks identified in the model. The IRR approach calls for constructive, pro poor support activities able to lead:

- (i) from landlessness to land-based resettlement,
- (ii) from joblessness to reemployment,

13. World Bank, Attacking Poverty, World Development Report 2000/2001, Washington DC, 2000

- (iii) from homelessness to house reconstruction,
- (iv) from marginalization to social inclusion,
- (v) from increased morbidity to improved health care,
- (vi) from food insecurity to adequate nutrition,
- (vii) from loss of access to restoration of community assets and services, and
- (viii) from social disarticulation to rebuilding of networks and communities.

These strategic orientations for reconstruction indicate that the IRR model is more than a predictor of inescapable pauperization: it maps the way for restoring the livelihoods of the displaced. As with other models, planners can “manipulate” the components of the IRR model: being warned, they can act to modify the outcomes of these inherent risks through a project design that is informed of, and responsive to, the risks highlighted by the model. Understanding the linkages among the co-related risks of resettlement enables project designers to capture synergies and adopt measures that address more than one risk at a time.

Risk-Reduction through Policy Measures. Beyond measures at the project level, however, there are also policy ways to reduce resettlement risks. For instance, economic policies that keep the costs of energy too low tend to encourage overconsumption and tolerate waste, thus leading to more dams or thermal plants, with displacements risks. This suggests that the risks of resettlement can be diminished also through better demand-management policies. Ultimately, the interlocked risks inherent in displacement can be controlled most effectively when governments adopt broad national policies for risk reversals and safety nets. Single means – for instance, just cash compensation – cannot respond to all risks. Asset compensation alone is not a substitute for the absence of multidimensional risk-reduction strategies.

Risk Reduction at Project Level. The effective way of planning for risk reduction at the project level is to include the IRR model in the Resettlement Plan. The structure of a project’s Resettlement Plan (RP) becomes systematic and comprehensive when it explicitly includes the set of reconstruction components listed above (paragraph 19). Of course, the RP needs to contain other elements as well, such as: institutional arrangements for organizing the resettlement process; the timetable for implementing it; cost calculations; financial allocations; monitoring provisions; etc. But the core content of the RP are the actions to counter the risks and rebuild the income generating activities of the resettlers. Several such specific types of activities are considered below.

Risk Avoidance. Ex ante “risk management” and maximum safeguarding are achieved when displacements are avoided altogether. Avoidance must be the first response to these risks, whenever possible. Recognizing risks upfront and their financial implications is often a powerful stimulus to search for an alternative that will eliminate the need for displacement completely or cut down its size. This is technically possible, for instance, by changing the site of a projected dam, or by re-routing a highway around (rather than through) a dense human resettlement. Many other technical options can be found through creative search.

Specific Steps for Risk Management. How to start applying the IRR analysis? The use of the IRR tool should begin with carrying out a preliminary assessment at the project site on how the eight general risks would vary in the given local context. The specific configurations of displacement risks can be determined for each important population group. The necessary information for this results from the population census and asset-census for the areas to be condemned or to be only partially affected. Differences in risk incidence among different segments of the population will stand out immediately.

Further, during full-scale project preparation, socio-economic surveys at the household level and consultations with affected people will reveal how the affected people themselves perceive these risks. Such consultations will possibly identify other risks as well. Promoting participatory methods in risk identification and assessment could be very useful in developing workable options for risk management and could stimulate constructive risk-coping activities among resettlers. The design of the project must not only incorporate the counter-risk activities but also must make sure that the financing of these activities in the project budget is adequate. And during project implementation, the IRR model could structure and focus the monitoring work upon risk reduction (see further, paragraphs 32-37).

Previous experience in projects assisted by ADB and other agencies, as well as impact evaluation research, offers an inventory of risk-reduction measures that can be matched to, and targeted against, each of the common risks in resettlement. Several examples are given below, as illustrations, because the “arsenal” of such measures is much richer.

B. Land-based Resettlement to Prevent Landlessness

- (i) Create land reserves through pooling lands available on land-markets; this is achieved best when land pooling starts before displacement begins;
- (ii) Bring new lands into cultivation (e.g., terracing steep hilly lands, as is done often under projects in the People's Republic of China); and
- (iii) Introduce land ceilings and reallocation in newly irrigated areas.

C. House Reconstruction to prevent Homelessness

- (i) Allocate homestead plots on newly created village platforms or in urban residential areas, rather than only hand-out house cash-compensation;
- (ii) Facilitate resettlers' access to house/construction materials;
- (iii) Avoid "temporary colonies" for resettlers; help them move directly to new permanent housing; and
- (iv) Package compensation for lost dwellings with housing grants and long term credit facilities for home-improvement.

Re-employment to Mitigate Joblessness. The loss of jobs is one of the highest risks, hard to prevent and mitigate given the high investment cost of new job creation. Setting employment promotion provisions as part of the RP can considerably help increase employment options.

- (i) Exploit maximally the employment openings created through the construction of the new project. Introduce in tender documents the requirement that contractors of project works recruit a high proportion of their labor force locally from among project affected families and adjacent project areas, rather than bringing all their labor from far away areas.¹⁴;
- (ii) In cash-scarce areas, help re-capitalize the dispossessed through employment in private sector service activities that tend to grow rapidly in "boom-towns" and areas surrounding the project;

14. Currently, this valuable opportunity for increasing the incomes of those displaced is under-used in many projects. The ADB-financed Kali Gandaki hydroenergy project in Nepal is a positive example to the contrary: it has maximized employment opportunities for affected families by concluding explicit agreements with the main project contractors for hiring and training of the SPAFs (seriously project-affected families). This has increased (with priority) the incomes of those affected, lifting their incomes above the pre-project levels and enabling affected people to save and invest in reconstruction activities.

- (iii) Stimulate self-employment by providing incentives to resettlers to rebuild their houses with space allowance for income-generating activities such as: food-stalls, rental rooms, small workshops, etc.; and
- (iv) Offer structured training in new-skills to resettlers, combined with on-the-job training and preferential post-training hire within the project.

Rebuilding Communities and Social Networks. Options to protect social networks and reduce resettlers' risks of losing social capital are multiple and can be activated through sensitive social planning, starting from the initial stages of project preparation.

- (i) Provide information to prospective resettlers early on about resettlement alternatives, possible sites, timetables, etc. Find, with their participation, the most adequate options available;
- (ii) Encourage self-organization among resettlers to effect the physical relocation with mutual help and reduced disruptions;
- (iii) Plan for group-based relocation as much as possible, to allow the recreation at the arrival sites of group structures similar to those existent in the departure areas; such groups can be kin-units, extended families, neighborhoods, ethnic groups, etc.;
- (iv) Provide incentives towards group activities and collective action for rebuilding community services (and even individual dwellings) at the arrival site; and
- (v) Diminish the powerlessness of resettlers, empower associational structures among resettlers primarily for taking over self-administration responsibilities at the new sites.

Comparable activities to address specific risks, additional to the above illustrations, can be included in the RP for the other elements in the IRR framework. The challenge in preventing/reducing impoverishment risks is to develop a vast spectrum of local solutions that make best use of opportunities in a given project area.

Financial Resources for Risk Reduction: Success in risk mitigation and reversal depends also on the amount of financing resources allocated for counter-risk activities. The IRR tool enables project designers and implementers to evaluate costs more realistically, activity by activity. Resource allocation for the RP must count not only on the project's financial inputs as outlays for reducing risks, but also facilitate planning for using project generated outputs as an additional resource for

restoring resettlers' livelihoods. When the implementation of reconstruction strategies continues after the project's completion, resettlers should share in the benefits generated by the project for which they were displaced. These additional resources must complement the upfront allocations for resettlement and they must be earmarked from project outset towards this purpose.

Among the most effective measures for enabling resettlers to share in the project's benefits are

- (i) Promote aquaculture development in projects that create reservoirs and legally grant priority access to those resettled around the reservoir for benefiting from aquaculture opportunities. Similar options are available for duck-raising schemes along reservoir shores;
- (ii) Promote additional income generating activities related to productive resources created by the project, enabling resettlers to share in them; and
- (iii) Support, through policy decision, the allocation of a small percentage of benefits resulting from the new projects for the continuous sustainable development of the resettlers' new areas (e.g., a percentage – even less than 0.01% - of the proceeds from power generation and selling).

The potential to re-channel project benefits to resettlers remains unused in many projects. This is both inequitable and unjustified. Often, such potential is overlooked because of trivial, not structural, reasons: lack of commitment and concern of project decisionmakers, poor methodologies of economic and financial analysis at the project planning level, poorly designed resettlement components, and a lack of creativity and inventiveness in using resources available to the project. Such aspects can be addressed at the project design stage.

However, such apparently trivial reasons sometimes also have deeper roots: the absence of national policies and of legally compelling regulations that would make it mandatory to deliberately open the access for those displaced to the project's stream of benefits. National policies for making benefit sharing a standard would always reach further and deeper than only discrete, project-specific initiatives to promote such approaches. Such aspects of risk-reduction need to be addressed also through policy dialogues and sectoral strategies.

Monitoring Risk Management. Risk reduction during resettlement implementation must be monitored continuously. The purpose of systematic risk monitoring is threefold:

- (i) To ascertain whether mitigatory measures included in projects are implemented on the ground;
- (ii) To measure the actual impact of mitigation actions, conclude if they accomplish the desired effects, and inform project managers in a prompt, ongoing manner; and
- (iii) To identify if any local unanticipated risks or adverse effects appear during project implementation and recommend containment.

The absence of a monitoring capacity diminishes the positive outcomes that projects can achieve and allows negative impacts to accumulate. This is why institutionalized monitoring capacity is crucial, and must always be created in development projects that cause displacement risks. In large scale projects, it is desirable to have a special monitoring unit inside the project and an independent international panel as an outside body. (For example, such panels are included currently in projects in the People's Republic of China, the Lao People's Democratic Republic, Nepal, etc.).¹⁵

The IRR model can help structure the monitoring work along the same key risks variables considered when the IRR was used in project design. Monitoring units in projects with resettlement can simplify their research by de-constructing the risk-pattern and carrying out the monitoring and evaluation studies on a risk-by-risk basis. Rather than devoting one wholesale monitoring study to all risks at once, analysis is sharper when it zeroes in on each distinct impoverishment risk individually, for instance: a monitoring study on mitigating land-loss, a monitoring study on health risk mitigation effectiveness, and a study of re-employment measures and further employment opportunities. This kind of analysis equips managers and supervision teams with updated and timely findings on how one or another dimension of post-displacement reconstruction is evolving.

If monitoring ascertains that risk-reversal results are not as expected, project managers can and must expeditiously intervene with additional corrective measures. At project start, it is desirable

15. In the Kali Gandaki hydropower project in Nepal, although the resettlement component is relatively limited, such an internal monitoring unit was created as part of the project's set-up and was enabled to carry out several risk-focused studies. The International Panel of Experts for this project, among other things, has guided the work of the project's monitoring unit.

to articulate a monitoring research strategy for the monitoring unit so as to make sure that over the project's duration all key risks are covered in sequence. Repeat studies and surveys must be scheduled when needed. Such monitoring would produce focused findings, immediately helpful for targeting better implementation and reconstruction efforts.

One important responsibility of monitoring units is to assess the coping strategies developed by affected people themselves to overcome risks. Positive experiences can thus be revealed and disseminated, and additional support can be channeled where resettlers' own coping strategies are found to need such support.

Social and economic risks are an inevitable fact of life. But the mitigation of risks that are created by development projects, such as the risks of impoverishing the displaced people, is incumbent primarily on the governments and agencies that initiate the project and must be addressed with all available means. This responsibility makes risk management a project-improvement tool and a constant characteristic of social development. Using the IRR tool systematically, along with the other analytical tools, increases the effectiveness of risk management.