

7.0 Social Assessment

Evaluation of the social implications of a project is tightly linked to the scrutiny of that project's social and economic objectives. Social assessments must go well beyond determining a project's adverse impacts. As a methodology, social assessment refers to a broad range of processes and procedures for incorporating social dimensions into development projects. In some jurisdictions and agencies, the social assessment is conducted in conjunction with the environmental impact assessment (EIA); in others, it is conducted separately. In both cases, the social assessment influences project design and the overall approval of the project.

Many of the methods and techniques discussed in this chapter have evolved in the context of international development assistance provided by bilateral agencies and the multilateral development banks. As such, they focus on people as beneficiaries. They also consider people as vulnerable groups that may be adversely affected by the project. Important distinctions are made between those who will benefit and those who may be harmed. The social assessment aims to determine the social costs of the project and the degree to which the benefits of a project will be distributed in an equitable manner. Social assessments are necessary to help ensure the project will accomplish its development goals (for example, poverty reduction; enhancement of the role of women in development; human resources development, including population planning; and avoiding or mitigating negative effects on vulnerable groups, and protecting these groups).

By addressing the specific development goals in the assessment of development projects, developers, lenders and governments can help ensure that project benefits are realized and negative social impacts are minimized. Various methods and approaches have been developed to consider social dimensions, including:

- social analysis;
- gender analysis;
- indigenous peoples plans;
- involuntary resettlement plans;
- cooperation with non-governmental organizations;
- use of participatory development processes; and
- benefits monitoring and evaluation.

7.1 Social Assessment and the Project Cycle

Chapter 1 illustrated the EIA inputs into the project cycle. As with environmental considerations, the need to analyze the social factors which influence (and are influenced by) a project continues throughout the entire life of a project. The major activities involved in incorporating social dimensions into the project are summarized in Table 7-1. The project preparation stage, in particular the preparation of the feasibility study, is the focus of many social assessment activities. It is thus imperative that those tasked with preparation of the feasibility study are given clear, focused terms of reference and specific guidance on how to carry out the necessary analyses to ensure social dimensions are adequately addressed.

Table 7-1: Social dimensions activities undertaken during the project cycle.

Project Stage	Activities Undertaken
Project Concept & Pre-feasibility	<ul style="list-style-type: none"> • identification of social dimensions and associated processes that may be important in the project • selection of key elements of social analysis • identification of initial potential social issues and impacts • initial Social Assessment
Feasibility Study	<ul style="list-style-type: none"> • social analysis • involuntary resettlement planning • indigenous peoples planning • gender analysis • poverty impact analysis • benefit monitoring and evaluation planning
Project Implementation	<ul style="list-style-type: none"> • arrangements for resettlement • information dissemination on role of beneficiaries • ongoing stakeholder consultation • strengthen beneficiary organizations • improving absorptive capacity of target groups • mitigating adverse effects on vulnerable groups
Monitoring	<ul style="list-style-type: none"> • monitoring of social indicators developed during the project design • review missions to assess social dimensions and associated processes • progress reporting by the executing agency (for example, beneficiary participation by number, gender, income group; participation by adversely affected groups; formation of beneficiary groups (numbers by gender and income class))

7.2 Conducting a Social Assessment

The basic steps for incorporating social dimensions into a project are (Asian Development Bank, 1994):

1. Social Analysis
 - a) identifying the client population
 - b) assessing needs
 - c) assessing demand
 - d) assessing absorptive capacity
 - e) conducting gender analysis
 - f) assessing adverse impacts on vulnerable groups
 - poverty impact assessment
 - indigenous peoples
 - involuntary resettlement;
2. Targeting;
3. Designing Participatory Development Processes;
4. Formulating Delivery Mechanisms; and
5. Benefit Monitoring and Evaluation.

7.2.1 Basic Steps

Social analyses are becoming a requirement of most assessments undertaken in developing countries. These analyses involve three principal steps: initial issue identification; preliminary assessment of all issues; and detailed social analysis of the potential for the major impacts. Initial issue identification may be carried out in an ad hoc or informal way, by seeking expert opinion, and by public involvement. The key to success is to incorporate a range of perspectives in the process. Since the widest range of social, economic, cultural, resource use and infrastructure effects occur at the local level, local people generally identify most potential effects and are key to the identification of issues. The success of a social analysis can be enhanced by taking the following measures:

- involve a qualified social impact specialist with a solid background in social sciences;
- incorporate some form of participatory development process;
- hire local experts;
- use local knowledge as well as scientific data; and
- use realistic assumptions for development practices such as construction practices rather than ideal or worst case.

Identifying Client Groups

Client groups are those groups that will either benefit or be adversely affected by the project. The first step in any social analysis is to gather baseline information on client groups. As not all project beneficiaries will have the same needs and demands, the population may have to be divided into sub-groups. A basic profile for each sub-group should be developed. This profile should include:

- the number in each sub-group,
- differentiation by gender,
- number of single-headed households,
- household size,
- occupations,
- income and asset levels,
- levels of education and access to education,
- health problems and access to health services,
- social organization and group formation, and
- ethnic or cultural distinctions.

This information should describe the socioeconomic traditions of the client group which affect life-styles, beliefs and patterns of use of facilities to be affected by the project. It is not always necessary to conduct detailed socioeconomic surveys to gather this information. In fact, current practice is usually to conduct participatory rural appraisals as part of the participatory development activities associated with the project (see section 7.2.3).

Client Needs

Once the baseline information on the client group has been identified, the social assessment team should assess the expressed need of client groups in relation to the benefits to be provided by the project. In assessing client needs, the social analysis team should:

- describe the quantity and quality of related facilities available to each of the sub-groups, including any problems of access, cost, quality, etc. and the level of service to be provided to each subgroup under the project;

- assess the priority given by the expected clients to acquiring the facilities to be established by the project in relation to their willingness to allocate their resources (for example, time, capital, effort) for the acquisition of such facilities — if the facilities are a priority, determine the clients' preference with respect to type, quality, and cost of project; and
- determine the potential to maximize the project's benefits through the addition of project components designed specifically to ensure benefits flow to affected people.

Client Demands

Once the client's needs have been identified, the social assessment team should:

- assess the client group's demand for the project, for example, by assessing present expenditures and efforts by clients to access such facilities through formal, informal, or traditional means;
- for each client group, assess the client's ability and willingness to pay for access to the project; and
- assess the project's potential to change the demand for the project (for example, through better client-provider relations).

The Nong Khai-Udon Thani Water Supply and Sanitation Project's (Thailand) assessment of clients needs and demands (Box 7-1) identified four client groups, and found that each one had different needs and demands for water.

Box 7-1: Assessing clients' needs and demands - Nong Khai-Udon Thani Water Supply and Sanitation Project (*source:* Pro-en Consultant and Management Co. Ltd., 1996).

During the course of the social assessment, the social assessment team identified four client groups: 1) piped water users, 2) non-piped water users owning their own land, 3) non-piped water users not owning their own land; 4) industries (factories and services industries). The groups were further sub-divided to those living in Nong Khai, Udon Thani and the Highway corridor. The social assessment was undertaken to examine the attributes of the potential beneficiaries. Each group was assessed as to its ability to access the project, their willingness to pay, and the positive and negative social impacts of the project.

The assessment determined that the ability of domestic users to benefit from the project would depend on whether they could connect to a piped water supply and whether they could afford to pay monthly water supply charges. Based on sample results, 90% of piped water users in Udon Thani, 70% of users in Highway corridor, and 50% of the users in Nong Khai were willing to pay for an improved system. Of those currently without piped water, 80% of Udon Thani potential users and 75% of Highway Corridor users would be willing to pay for a piped water supply. Sample data for Nong Khai was insufficient for analysis, but it is likely the percentage of users willing to pay is similar to that of the Highway Corridor.

Absorptive Capacity

Absorptive capacity is the capacity of the client group to reap the benefits from the project and/or adapt to the adverse impacts associated with the project.

The social analysis should:

- examine the variations in existing knowledge, attitudes, and practice which may influence the extent and manner in which the project may be used;
- describe the behavioral changes which may be required for clients to use and sustain the benefits which may be provided through the project; and
- assess their ability and willingness to make these changes in terms of their motivation to change, including aspirations, level of knowledge, skills and experience, social cohesion of the client groups, and constraints.

Many projects concerned with forestry enhancement and watershed rehabilitation have to be concerned with increasing the absorptive capacity of target beneficiaries (for example, see Box 7-2). Potential beneficiaries are often poor with low cash income, little education, and are in poor health. They are likely dependent on a natural resource base which has been degraded through unsustainable practices.

Box 7-2: Assessing absorptive capacity - forestry sector and watershed rehabilitation projects in Viet Nam.

Viet Nam is conducting a number of forestry sector and watershed rehabilitation projects, with the aid of foreign donor assistance. These projects are part of Viet Nam's strategy to address the problem of deforestation. Decline in forest cover has reduced the value of remaining timber stands, resulted in soil loss and loss of soil fertility, reduced biodiversity, and impaired the watershed hydrological functions, thereby threatening downstream water supplies and increasing risks associated with flooding. Past forestry practices and timber harvesting by state forest enterprises have been a major source of forest decline. In addition, deforestation and environmental degradation is continuing through practices of shifting cultivation and illegal logging. Increasing population pressures are such that lowland agricultural systems are unable to provide for all. This has forced movement and resettlement (aided by Government policy) of ethnic minorities and lowland immigrants into the upland watersheds. Unfortunately, the movement of people has not been accompanied with the introduction of economically viable agroforestry systems and appropriate land use practices. Most villagers are aware of the risks of natural resource degradation. Their unsustainable use of the forest stems from their poverty, scarcity of land and low agricultural productivity. Minority peoples clearly see the need for forest protection and they traditionally use the forest as a natural reservoir of resource in times of scarcity.

The immediate beneficiaries of the projects (people in the villages) wish to increase their standard of living through production of income generating crops. There are a number of critical factors needed to ensure that the benefits will flow to the people in the project areas. The first is the creation of security of land tenure. The projects will hasten the process of land allocation and the creation of rights for individual households to use forest land. In some communes, this process of allocation of forest land is well advanced. The second important factor is the availability of credit to allow for improvements to the land. This will allow the individual farmers to invest in new crops and other improvements to land. The third factor is the knowledge of cropping systems and farm economics to make effective use of the land and funds for investment. *Unfortunately, the knowledge of the project beneficiaries is very low. In fact, the education level is also very low - restricting the capacity of the beneficiaries to absorb new knowledge and take advantage of the project benefits. It is very important to transfer knowledge to farmers as early as possible in the project through improved extension services including training of extension workers, model farms, television, and other education and awareness programs.*

Gender Issues

The social analysis must include an examination of gender issues, including:

- an assessment of differences in values, roles, and needs of men and women in terms of the impact of these factors on decisions to use the project; and
- an assessment of the access of men and women to the project, and to related training and employment opportunities — including identification of constraints (for example, time, finances, transportation, literacy, health, social, cultural, legal or religious constraints) faced by women or men in gaining access to the project.

Gender analysis is discussed in more detail in section 7.3.3

Potential Adverse Impacts

The assessment of potential adverse impacts should include:

- identification of those groups which may be adversely affected by the project, including groups who may be required to relocate, or groups adversely affected by loss of income, loss of traditional lands and cultural property and possible exposure to health hazards (for example, noise or air pollution, traffic hazards, etc.);
- determination of the possibility of conflict over rights to key resources such as water;
- determination of how pricing policies would affect the distribution of and access to project benefits by poor clients, including an assessment of the ability of client groups who are defined as too poor to afford a basic level of service to access the project, and identification of financing measures which are affordable for the poor groups on a sustainable basis;
- determination of any significant changes in affected groups' life-styles;
- identify and assess options for avoiding, mitigating, or compensating groups which may be adversely affected; and
- consult with affected groups to obtain feedback through such means as community dialogues, public hearings, referendum, formation of multipartite negotiating, or monitoring teams concerning the proposed solution.

7.2.2 Targeting

To ensure benefits flow to the intended members of the client group, the following should be considered in the project design and implementation:

- determine whether there are groups of people who are not in the targeted client group but may wish to co-opt the project (for example, at Nam Pong in Thailand, the new reservoir attracted Vietnamese who moved in and became “middlemen” — Thai fishermen caught fish in the reservoir, but middlemen took the main profits);
- identify the possible methods, opportunities, or extent to which people in this group might co-opt these services;
- if the preceding analysis shows there is a likelihood that people who are not in the target group would be motivated and able to co-opt the project, then new targeting and monitoring mechanisms should ensure that the services are provided to the persons outside of the target group.

- if the project has potential for maximizing the access of poor people to a project (as a result of the goal of enhancing income-generating or income-enhancing opportunities), identify measures or processes which specify poverty reduction objectives; and
- if the project has potential for poor people to access the project, identify measures which would ensure that the poor will have maximum access.

7.2.3 Participatory Development Processes

"Through participation we lost control of the project and in doing so gained ownership and sustainability, precious things in our business" — World Bank Task Manager

Participation is a process through which stakeholders influence and share control over development initiatives and the decisions and resources that affect them (Asian Development Bank, 1996). Participatory development processes (World Bank, 1996):

- identify strengths and weaknesses of existing policies and service and support systems; that is, the stakeholders conduct the analysis and diagnosis collaboratively;
- decide and articulate what is needed; that is, the stakeholders jointly set objectives;
- decide in pragmatic terms, directions, priorities, and institutional responsibilities; that is the stakeholders jointly create a strategy; and
- develop and oversee development of project policies, specifications, blueprints, budgets, and technologies needed to move from the present to the future; that is, the stakeholders jointly formulate project tactics.

Participatory development processes may be used throughout the project cycle; they usually facilitate or complement the social and related analysis that must be done. There is no single approach or methodology that is to be followed. The World Bank Participation Sourcebook (World Bank, 1996) provides a number of case studies, provides an overview of the basic methodologies, outlines the basic practices, and provides guidance on how to conduct a participatory development process. Box 7-3 summarizes a case study of participatory development in India based on Forest Protection Committees composed of villagers who band together to care for the forest.

Box 7-3: Andhra Pradesh Forestry Project (World Bank, 1996).

Forest Protection Committees (FPC) are groups of local people who form themselves into one village-wide organization to negotiate with one voice with the Forest Department. Members of a FPC take on the duties of keeping the forest free from poachers and take on some forest husbandry responsibilities in exchange for legitimate access to harvesting timber and non-timber forest products. The Forest Protection Committee approach originated and has been successfully applied in West Bengal. Through this approach government foresters shift from a policing role to a social role that provides income to forest dwellers and regenerates the forest.

Introduction of the FPC approach into Andhra Pradesh began in 1991. As a part of the project preparation, a participatory planning workshop was held to bring various government stakeholders together to collaboratively identify institutional changes needed to support participatory forestry. During the workshop a stakeholder analysis was conducted. This identified up to sixty different groups, including villagers from adjoining forests, rural women, cattle owners, tribes, and the Forestry Department. A problem tree and corresponding objectives tree were collaboratively developed (see Figures 7-1 and 7-2). The objectives were converted into a corresponding set of actions (Table 7-2). A separate NGO workshop was held with the Forestry Department and broad range of NGOs.

The introduction of the FPCs met some resistance in the Forestry Department, but eventually it was accepted and became a core element in the Andhra Pradesh Forestry Project.

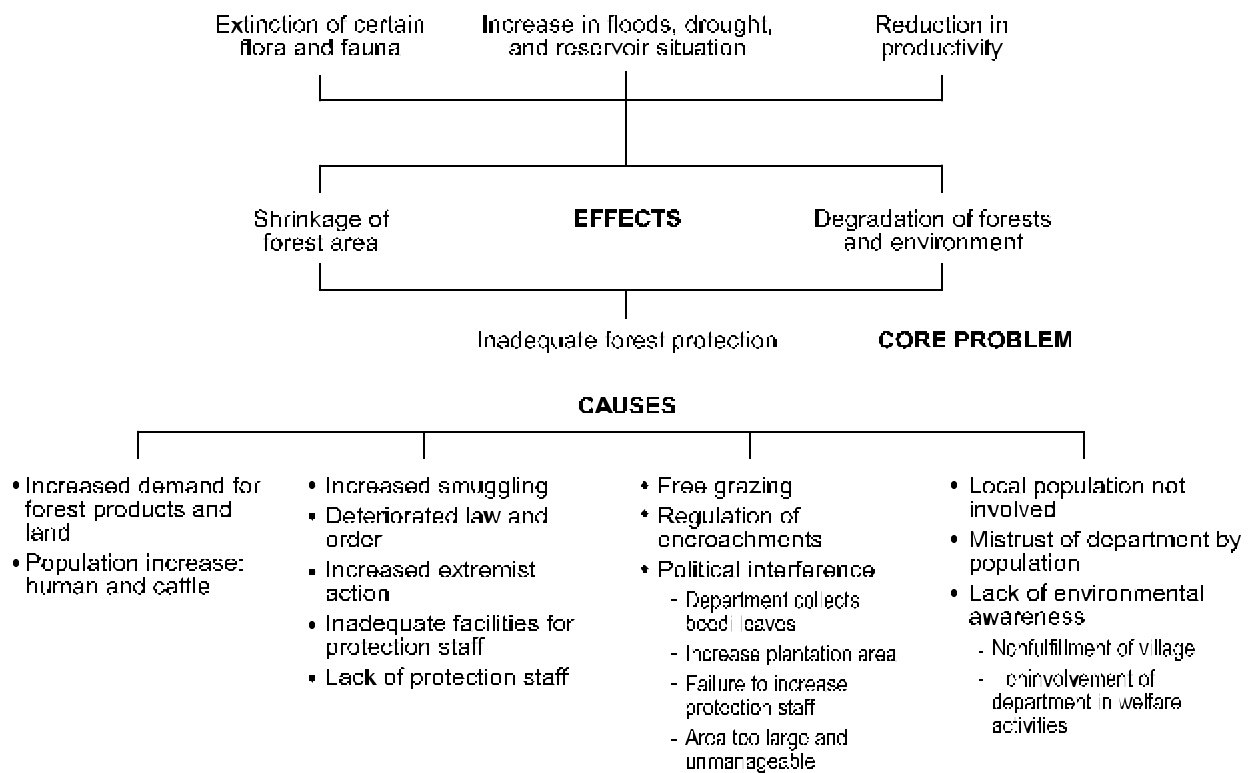


Figure 7-1: Problem tree for forest protection, Andhra Pradesh Forestry Project in India (source: World Bank, 1996).

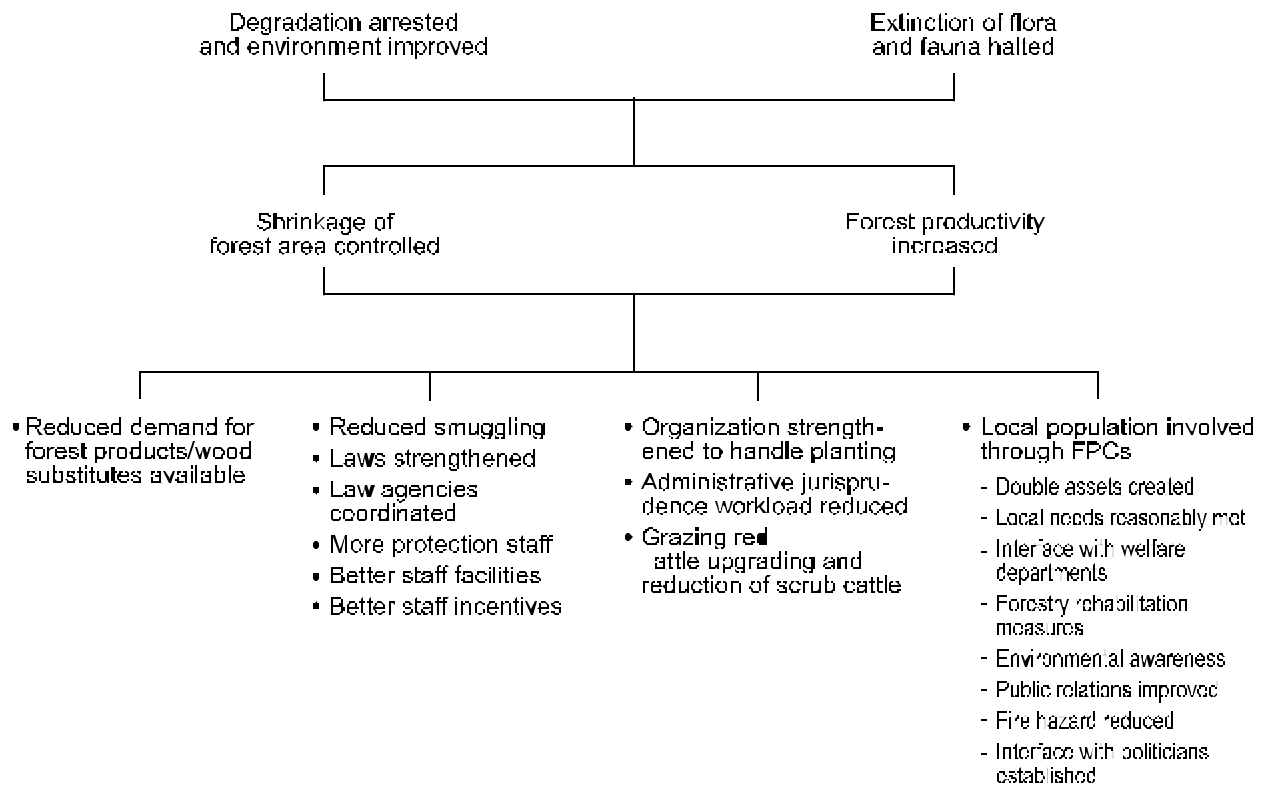


Figure 7-2: Objectives tree for forest protection, Andhra Pradesh Forestry Project in India (*source:* World Bank, 1996).

Table 7-2: Forest protection options arising from a participatory planning workshop, Andhra Pradesh Forestry Project in India (*source:* World Bank, 1996).

Involvement of the Local Population in Forest Protection	<ul style="list-style-type: none"> • rehabilitation of headloaders (firewood poachers) in plantation activities • participatory management by the villagers • reforestation of encroached areas under the concept of FPC by actively involving the encroachers themselves • training of villagers and farmers in the development of protected forests
Meeting Local Needs Reasonably	<ul style="list-style-type: none"> • opening up local fuelwood depots, bamboo depots, and small timber depots • supply of bamboo to local artisan at subsidized rates • raising fodder plots in the forest adjoining the villages
Interface with Welfare Departments in Welfare Activities	<ul style="list-style-type: none"> • participation in the implementation of welfare in tribal areas

Cooperation with Non-Governmental Organizations

Non-governmental organizations (NGOs) possess knowledge and expertise they have developed from direct involvement, especially operational NGOs and NGOs working at the community level. Effective NGOs can help identify, understand and articulate the problems and needs of the beneficiary community. NGO input is especially important in addressing social concerns such as involuntary resettlement, indigenous peoples and women in development. NGO participation in projects can help strengthen accountability and transparency in project activities.

7.2.4 Delivery Mechanisms

An evaluation of the capacity of the executing agency to deliver the project should be made. This should include an assessment of:

- the ability of the executing agency to provide the project to the prospective clients in ways which are commensurate with the client's ability to use it — consider the agency's mandate and commitment of leaders, resources, management systems, procedures, experience of the agency with similar projects, and its attitudes towards participatory approaches;
- the approaches used by the organization for attaining the social goals of the project;
- training needs in social dimensions for those involved in project implementation;
- the major channels for spreading information for both literate and illiterate people, and through different local languages;
- any political constraints or tensions which may interrupt access to the project;
- the acceptability of project outreach staff to each client subgroup; and
- the need for NGOs to assist as intermediaries within the client subgroups, including definition of the roles which the NGOs may perform, and identification of criteria for selecting NGOs or other intermediaries who may be involved.

7.2.5 Benefit Monitoring and Evaluation

Benefits monitoring should be incorporated in the environmental monitoring plan. The benefits monitoring plan should:

- identify a few indicators of the achievement of the project output(s), purpose(s), and goal(s) for each component;
- assess existing management information systems in terms of their adequacy in guiding the operation of the project for maximum effect;
- specify indicators to monitor and evaluate the delivery and distribution of benefits to the client groups identified, and to identify adjustments required during implementation to meet the needs of client groups more effectively; and
- specify indicators to monitor and evaluate project operation and maintenance.

7.3 Vulnerable Groups

7.3.1 Involuntary Resettlement Planning

In developing countries, the scale of development-related population displacement has grown rapidly in the past few decades due to the accelerated provision of infrastructure and growing population densities. The displacement toll of the 300 large dams that, on average, enter into construction every year is estimated to be above four million people. The urban development and transportation programs being started each year in developing countries are estimated to displace some additional six million people. Over the past decade, it is estimated that about 80-90 million people have been resettled as a result of infrastructure programs for dam construction, urban development and transportation development (World Bank, 1994).

The costs of inadequate resettlement can be very high, resulting in increased poverty for large numbers of people. This is especially serious since many of those affected are already very poor. They tend to live in disadvantaged areas where infrastructure is lacking and social services are very limited. The remote locations of many dam sites are often inhabited by indigenous people, ethnic minorities or pastoral groups. This heightens the need for sound policies and effective implementation.

Impacts

Involuntary resettlement consists of two closely related yet distinct processes: displacing people and rebuilding their livelihood. These processes are among the most difficult in development work. The complexity of involuntary resettlement and the enormous diversity of project situations make achieving good resettlement a formidable task. Recognizing the intrinsic difficulty of resettlement is the prime step for addressing this task seriously.

When people are displaced, production systems may be dismantled, kinship groups are scattered, and long-established residential settlements are disorganized. People's lives are affected in very painful ways. Many jobs and assets are lost. Health care tends to deteriorate. Links between producers and their customers are often severed, and local labor markets are disrupted. Informal social networks that are part of daily sustenance systems — providing mutual help in child care, food security, revenue transfers, short-term credit, labor exchanges, and other basic sources of socio-economic support — are dissolved. Local organizations and formal and informal associations disappear because of the dispersion of their members. Traditional community and authority systems can lose their leaders. Symbolic markers, such as ancestral shrines and graves, are abandoned, breaking links with the past and with peoples' cultural identities.

The cumulative effects can tear apart the social fabric and local economy, and is profoundly disruptive to large numbers of people. The main risk is impoverishment — through landlessness, joblessness, food insecurity, deteriorating health, or the loss of access to community assets. This is why carrying out resettlement adequately is an impoverishment prevention and poverty reduction task. Mitigation measures must be adopted to ensure that project-induced displacement and resettlement do not make people worse off.

Moving people involuntarily also raises legal issues. The potential for violating people's individual and group rights makes compulsory relocation unlike any other project activity. The fact that projects frequently are delayed by courts, and that compensation levels are often raised significantly on appeal, reflects the recognition in legal systems that people cannot be arbitrarily displaced without just compensation, regardless of national need. When resettlement processes are carried out in a lawful manner that fully respects people's rights, opposition to projects by adversely affected people is reduced (although not eliminated) and overall project implementation is likely to unfold more effectively. Resettlement that reflects the needs and rights of affected persons is not just compliance with the law, but also constitutes sound development practice.

A Framework for a Resettlement Action Plan

A plan of action, or a resettlement action plan (RAP), is necessary to re-establish the social and economic productivity of the displaced communities. The basic framework for RAPs is well described in Asian Development Bank (1997). A well crafted plan (see Table 7-3) will have:

- a statement of objectives and an overview of the national and donor policy context;
- a description of the project design and scope of resettlement which includes a description of efforts to minimize resettlement;
- a special analysis of how the project will affect vulnerable groups;
- basic information on the impact of land acquisition and losses to potentially affected persons (PAPs) and a clear definition of eligibility and entitlement considerations;
- a description of resettlement site development and income restoration programs;
- the institutional framework for resettlement implementation, including the mandate and staffing for a resettlement agency, needs for capacity building and training, and roles of NGOs and PAPs in resettlement activities;
- a description of the participatory development approach to consultation and community involvement;
- a budget, including land acquisition and resettlement costs, allocation and timing, and funding sources and approvals; and
- the monitoring and evaluation system, including monitoring indicators, reporting system, monitoring program participants and impact evaluation.

Resettlement action plans are often focused on the issues associated with land ownership and identification of who is entitled to compensation as a result of the project. The Kali Gandaki “A” Hydroelectric Detailed Design Study - Acquisition, Compensation and Rehabilitation Program provides a good example of the compensation for land acquisition. This project also has a good rehabilitation and resettlement plan that will strengthen capacity and offer special assistance to women and other vulnerable groups. It provides for:

- rehabilitation grants for housing rental allowance, travel to district headquarters, land registration fees, and compensation for fruit trees and standing crop;
- creation of a micro-enterprise revolving fund (\$50,000 US);
- creation of preferential hiring;
- training opportunities for women and other disadvantaged groups; and
- other measures including tree planting, regional forester and watershed stabilization specialist, assistance in improving agricultural production, construction and operation of a fish hatchery, rural electrification, and community forests.

Table 7-3: Resettlement Action Plan Outline (*source: Asian Development Bank, 1997*).

I. Objectives of Resettlement and Policy Framework

- describe the purpose and objectives of resettlement
- national and local land and compensation laws that apply to the project
- description of donor policies and how these will be achieved under the project
- statement of principles and legal/policy commitments from the borrower/executing agency

II. Project Design and Scope of Resettlement

- detailed description, including maps, of the scope of resettlement and how resettlement relates to the main investment project
- describe alternative options, if any, considered to minimize resettlement
- details of special consideration given to how the project will impact indigenous people and other vulnerable groups, including women
- responsibility for resettlement planning and implementation

III. Socio-economic Information and Entitlements

- impact of land acquisition on potential affected peoples
- identify all losses to resettlers and host communities
- details of common property resources
- cut-off dates of eligibility
- new eligibility of policy and Entitlement Matrix

IV. Resettlement Site Development and Income Restoration

- location, quality of site, and development needs
- layout, design and social infrastructure
- safeguarding income and livelihoods
- income restoration programs
- gender issues and other vulnerable groups
- integration with host communities

V. Institutional Framework for Resettlement Implementation

- mandate of resettlement agency
- establishing a resettlement unit and staffing
- technical assistance for capacity building
- role of NGOs and PAPs organizations in resettlement
- grievance redress committees

VI. Consultation and Community Participation

- identification of project stakeholders
- mechanisms for participation
- participatory resettlement management
- institutions in participation
- NGOs as a vehicle for participation

VII. Resettlement Budget and Financing

- land acquisition and resettlement costs
- budgetary allocation and timing
- sources of funding and approval process

VIII. Monitoring and Evaluation

- establishing a monitoring and evaluation system
 - monitoring and reporting
 - NGO/PAPs participation in monitoring and evaluation
 - resettlement impact evaluation
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Box 7-4: Kali Gandaki "A" Hydroelectric Detailed Design Study - Acquisition, Compensation and Rehabilitation Program.

The project includes a dam and reservoir site, a power plant site and the transmission line alignments and access road. Two separate acquisition, compensation, and rehabilitation programs (ACRP) were developed; one for the access road and one for the facilities. The Access Road ACRP implemented compensation for PAPs: a total of 333 people were compensated, of which 84 were considered to be seriously affected (SPAP). The Facilities ACRP identified 284 PAPs, of which 65 are deemed SPAPs.

Land Take and Affected Persons for the Facilities ACRP

Site	Temporary & Permanent Land Take (ha)	SPAPs	PAPs	Total PAPs
Dam & Reservoir	89.62	14	133	147
Power Plant	36.95	9	86	95
Transmission Line	1.75	42		42
TOTAL	128.32	65	219	284

The Facilities ACRP has an estimated total cost of 12,156,400 Nepalese Rupees (NRs) for land acquisition and NRs 7,908,850 for other compensated impacts (that is, structures, infrastructure and relocation) to compensate people for project related losses.

Visits to the project areas by non-project personnel in September, 1995 and comments from residents at the Public Consultation meeting held in February, 1996 suggest that residents of local communities who received compensation through the Access Road ACRP were generally satisfied with the process and the compensation. Residents are in support of the Project. Their primary concerns, which the implementation of the Facilities ACRP should be careful to address, are compensation of Guthi (trust) land, fair and equitable compensation rates, job training for local residents, support programs for PAPs and SPAPs, and methods for encouraging local participation.

Phases of the ACRP

- Study Phase**
 - analysis of cadastral survey that required identification of land parcels, establishment of land ownership and types of land
 - check of PAPs names for the records of the District
- Survey**
 - survey of conducted of PAP households
 - survey of fodder and fruit trees, affected houses and cowsheds
 - assessment of the number of PAPs and SPAPs
 - valuation of land and other assets
 - proposal prepared for compensation rate, its structure and a payment schedule
- Implementation Phase**
 - preparation of a primary investigation report to be submitted to Government
 - publishing of PAPs' names in the National Newspaper with the parcel number and areas to be acquired
 - preparation of the compensation recommendations
 - meetings held with the Compensation Fixation Committee
 - make offers of compensation
 - make decision regarding the ACRP implementation including the complaints of PAPs

This project has a "good practice" rehabilitation and resettlement plan providing for: rehabilitation grants for housing rental allowance, travel to district headquarters, land registration fees, compensation for fruit trees and standing crop; creation of a micro-enterprise revolving fund (US\$ 50,000); creation of preferential hiring; training opportunities for women and other disadvantaged groups; other measures including tree planting, regional forester and watershed stabilization specialist, help in improving agricultural production, construction and operation of a fish hatchery, rural electrification, community forests.

7.3.2 Indigenous Peoples Planning

Indigenous peoples are amongst the most vulnerable of all groups. They are often disadvantaged in many ways, including through poverty, low levels of education, poor access to medical care, and isolation from the mainstream economy. Indigenous peoples may have distinct languages, cultural behaviors and mistrust of outsiders. They need to be treated differently than other target groups — in many cases, a separate indigenous peoples plan should be prepared.

The key elements in the preparation of an indigenous peoples plan are:

- consideration during project design of the needs and wishes of indigenous peoples, local patterns of social organization, cultural belief, ancestral domain, and traditional land and resource use;
- studies to identify potential adverse effects on indigenous peoples and identification of measures to mitigate these effects;
- measures to strengthen the capacity of social, legal, and technical skills of staff in those government institutions mandated to care for indigenous peoples;
- involvement of existing institutions (local organizations and NGOs) with experience in working with indigenous peoples;
- support for agricultural and agri-forestry systems that are well adapted to needs, environments, and capability of indigenous peoples; and
- promotion of self-reliance and avoidance to increasing the dependency of indigenous peoples on the project.

The Cordillera Highland Agricultural Resource Management Project (Asian Development Bank, 1995) prepared an indigenous cultural communities development strategy to ensure that five ethno-linguistic groups in the project area will receive culturally compatible social and economic benefits (see Box 7-5).

Box 7-5: Indigenous Peoples Plan for the Philippines Cordillera Highland Agricultural Resource Management Project (Asian Development Bank, 1995).

The activities included in the plan are:

Community Mobilization

Socioeconomic profiles of the *barangays* will be undertaken to assist targeting project beneficiaries. Beneficiaries will be trained in participatory planning. Barangay needs and priorities will be assessed. A natural resource management plan will be prepared, and the community will assist in project implementation and monitoring.

Natural Resource Management Including Reforestation

Environmental awareness training will be provided and will form the basis for implementation of community based reforestation, forest management, forest protection, and land-use planning. The project aims to generate employment for the poor, who will be responsible for planting and maintaining reforested areas. Traditional methods of preventing erosion and sustainable land management will be encouraged.

Strengthening of the Institutions Responsible for the Issuance of Land Tenure Security

The ancestral and land tenure programs of the Department of Natural Resources (DENR) and Department of Agrarian Reform (DAR) will be made more accessible to indigenous people. DENR, DAR, and local government units (LGUs) will be trained. They will work closely with indigenous communities to implement an information dissemination campaign on ancestral domain and land claim options. In addition to the capacity building in DENR and DAR it is estimated that Certificates of Ancestral Domain Claim will be issued for approximately 150,000 ha with subsequent specific tenurial instruments such as Certificates of Ancestral Land Claim being granted for 480 ha and Certificates for Land Ownership Award being granted for 26,450 ha.

Rural Infrastructure Development

This component consists of rehabilitation of farm-to-market roads, domestic water supply, and community irrigation systems. These are priority needs that the communities identified and must be addressed to enhance the socioeconomic well being of the communities.

Provision of Support Services for Agricultural Development

These services, consisting of agribusiness, extension, adaptive research, and rural financial services, are aimed at assisting farmers to develop new market outlets, adopt improved technologies, and seek new investment options. Savings groups will be formed among the poorer segment of communities to enable them to access formal credit sources to finance priority needs and begin income generating activities.

Gender Specific Activities

Women's roles in the communities will be enhanced to further develop their potential by ensuring equitable access to and control over project resources. Specific activities directed at women include training and organization of women by the community mobilization officer, value added processing by women, and access to financing for small scale livelihood activities. The project will also incorporate gender sensitive reporting, gender sensitive training for staff, and inclusion of women's issues and concerns in the Barangay natural resource management plans.

7.3.3 Gender Analysis

The term "gender" refers to the social facets of culture, religion, and class which condition the way in which masculine and feminine roles and status are constructed and defined in each society. Gender relations are dynamic and changing over time in response to varying socioeconomic conditions and ideological circumstances. As gender (the social differentiation between women and men) is socially and culturally constructed, gender roles can be transformed by social changes (Moser, 1993)

Failure to recognize the importance of gender in international assistance to developing countries has often resulted in men being the major beneficiaries of the development projects. Women often gained very little benefit and, in some cases, conditions for them worsened. In almost all developing countries, women are in a much lower position than men, especially in power relations — this can usually be attributed to culture (especially religion) and traditions. Although women must fulfil many duties, both at home and in the community, they rarely have the right to decide or to take part in decision making processes or contribute to solving problems that directly affect them. This not only disadvantages women, it also reduces development efficiency because it does not fully utilize the knowledge and capacity of women. The elimination of inequality between men and women through the process of *gender and development* aims at integrating women more fully into the development process as participants as well as beneficiaries (Hoa, 1996).

The basic rationale for gender analysis in project planning is:

- women and men have different economic capacities and some work done by women (for example, housework) is not easily quantified, although this work will be costly to replace;
- women tend to have less control than men over resources;
- women play a multitude of social and economic roles and may have limited time available to participate in the project or partake of the project benefits; and
- acceptable social behavior in some cultures may limit women's ability to participate effectively and take part in decision-making.

Gender responsiveness in project planning is tightly linked to participatory development processes and targeting women and men as separate groups. Gender considerations can be incorporated into project planning and design by ensuring that (Connor, 1996):

- gender dis-aggregated data is collected and analyzed;
- consultations include women and, depending on the cultural context, these consultations may have women facilitators consulting with women, separate from men;
- participatory development processes are directed at creating socially acceptable ways for women to become an integral part of decision making;
- strategies of participation in the projects, and management of project impacts is targeted on both men and women; and
- monitoring and evaluation programs should include specific indicators relating to women and include women in the collection and interpretation of monitoring data.

Box 7-6: Promoting participation of women in the Bangladesh Forestry Sector Project (Asian Development Bank, 1996)

In Bangladesh, the continued pressure on forest land for conversion into agricultural lands, for timber and fuelwood, and non timber forest produce has led to drastic reductions of forest areas in the country. The Bangladesh Forestry Sector Master Plan (FSMP) states that "women and poor people who do not have land based sources of livelihood will be employed on priority basis in nurseries, plantation, forest management, harvesting, and industrial work." Women's participation in public programs has traditionally remained limited by social norms and religious practices.

Key Issues for Women's Participation in Forestry

- species preference and requirements of non-timber forest produce need to be fully taken into account in forestry planning;
- poor women are important stakeholders in the protection and maintenance of common property forest resources because they depend on them for subsistence;
- women's work schedules and availability must be taken into account when planning forestry activities to ensure that they can be easily involved;
- access to land and land rights is crucial for women. Women need to be given opportunities to access khas lands for afforestation;
- rural poor women have proven more creditworthy than their male counterparts. Ensuing access to institutional credit for planting and land improvement may bring high returns and increases household incomes;
- training programs for women are needed to increase their skills and knowledge of silvicultural practices; and
- women need access to high quality seed and seedlings.

Project Activities for Women

The Bangladesh Forestry Sector Project will provide equal opportunities for women to participate in a culturally compatible manner, with access to project outputs through:

- the provision of single or joint rights to use forest land and other land being brought under Project activities;
- specific rights-to-use for women of matrilineal ethnic minorities participating in Project activities;
- specific targeting of female-headed households and other disadvantaged women;
- expanded opportunities of women to participate in community decision making, planning, and management of Project activities through their membership of local community organizations; and
- training of women in group formation and in improved nursery and plantation techniques.

This project also includes an Ethnic Minorities Development Plan which uses participatory processes to facilitate full and equitable participation of ethnic minorities with respect for dignity, human rights, and cultural uniqueness. The objectives of the Plan are to ensure that ethnic minorities receive culturally compatible benefits and to avoid adverse effects.

7.3.4 Human Health Impacts Analysis

Health impact assessment procedures have evolved independently in several development sectors, including irrigated agriculture, multipurpose reservoirs, water supply and chemical manufacture. The methods and procedures used and the problems encountered share many similarities. Examples of potential health impacts associated with irrigation, industry, fisheries and aquaculture, watershed development, forestry, land clearing and rehabilitation, dams and reservoirs, coastal zone development, thermal power, mining and mineral processing, electricity oil and gas distribution lines, airports, highways and roads, ports and harbors, and urban development are provided in Appendix I. (Asian Development Bank, 1992).

In the water supply and sanitation sector, the World Health Organization (WHO) has published procedures for analyzing non-functioning or under-utilized systems and for evaluating the positive health impacts of fully functioning systems (WHO, 1983a,b). In this sector, health impacts generally refer to the intended health improvements which are assumed to derive from safe water supply and sanitation. Sanitary engineers are quite well versed on health hazards of all types.

Vector Borne Diseases

One important group of health risks, vector-borne diseases, has received considerable attention in development sectors associated with water resources, such as irrigation and reservoirs. There have been many reviews (Oomen et al., 1988, Service, 1989). Such developments change the distribution and flow of surface waters, creating a favorable habitat for vector breeding. Human exposure to biting insects or contaminated waters provides the conditions necessary for an increased health risk. Expensive mitigation measures take the form of vector control through chemical application of environmental modification.

An important component of environmental management occurs at the design stage. Decisions about infrastructure, location and resettlement could help reduce vector populations or prevent exposure. This, in turn, requires a health impact assessment procedure. One such procedure was published as *Guidelines for Forecasting the Vector-borne Disease Implications of Water Resources Development* (Birley, 1991). It covers the sub-sectors of irrigated agriculture and multipurpose reservoirs, and assists the user to identify:

- the specific vector-borne disease hazards which occur regionally and in different habitats;
- the vulnerable communities; and
- the capabilities of the health service to monitor, safeguard, and mitigate.

These three components of the assessment were then combined into a statement of health risk.

A recent report advocated rapid assessment for identifying environmental and health hazards in irrigation schemes. A set of vector-borne disease hazards were identified and a simple questionnaire was devised to determine whether the adverse effects (health risks) appeared sufficiently serious to warrant the project manager seeking specialist advice (Bolton et al., 1990). Although the distinction between health hazard and health risk is well established in the chemical sector, it has not been in common use elsewhere.

Box 7-7: An example of vector borne disease hazards (*source*: Macdonald, 1991 in Asian Development Bank, 1992)

The linkage between housing and health is widely recognized but hard to evaluate. The City Corporation of Yangon (Rangoon) built low-cost satellite towns on reclaimed swampy land to accommodate large numbers of squatters. Although protected from flooding by bunds and sluice gates, the ground became waterlogged during the rains. The surface drains were inadequate, mosquitoes bred heavily, and *bancroftian filariasis* transmission was soon established. Multi-storied blocks of flats were also constructed with good internal plumbing but not connected to the city sewage system. Pools of polluted waste water were formed and mosquitoes proliferated.

In the chemical industry sector there are procedures for determining modes of failure and the associated health hazards. There are two main issues: poisoning by routine or accidental exposure to toxic chemicals; and traumatic injury from fire, explosion, radiation, or corrosive action.

Over 60,000 chemicals are in common use and adequate information about toxicity and reactivity is not available for all of them. A meeting in 1986 established principles and objectives for health and safety assessments (WHO, 1987). Health impact assessment was viewed as a component of EIA. The three main tasks of health impact assessment were listed as: identification of hazard, interpretation of health risk, and risk management.

7.4 References and Further Reading

Asian Development Bank. 1997. Handbook on Resettlement - A Guide to Good Practice. Second Draft. Office of Environment and Social Development, Asian Development Bank. Manila, Philippines. 84 pp.

Asian Development Bank. 1996. Mainstreaming Participatory Development Processes. Office of Environment and Social Development, Asian Development Bank. Manila, Philippines. 19 pp.

Asian Development Bank. 1995. Report and Recommendation of the President to the Board of Directors on a Proposed Loan to the Republic of Philippines for the Cordillera Highland Agricultural Resource Management Project.

Asian Development Bank. 1994. Handbook for Incorporation of Social Dimensions in Projects. Social Dimensions Unit, Asian Development Bank. Manila, Philippines. 105 pp.

Asian Development Bank. 1993. Guidelines for Social Analysis of Development Projects. Asian Development Bank, Manila, Philippines.

Asian Development Bank. 1992. Guidelines for Health Impact Assessment of Development Projects. Office of the Environment, Asian Development Bank. Manila, Philippines.

Asian Development Bank. 1991a. Guidelines for Incorporation of Social Dimensions in Bank Operations. Draft. Asian Development Bank, Manila, Philippines.

Asian Development Bank. 1991b. Guidelines for Social Analysis of Development Projects. Asian Development Bank, Manila, Philippines.

Asian Development Bank. 1991c. Environmental Planning and Management and the Project Cycle. Environment Paper No. 1. Asian Development Bank. Manila, Philippines.

Asian Development Bank. 1986. Economic Analysis of the Environmental Impacts of Development Projects. Asian Development Bank, Manila, Philippines.

Birley, M.H. 1991. Guidelines for Forecasting the Vector-Borne Disease Implications of Water Resources Development (2nd edition). World Health Organisation, Geneva, Switzerland

- Bolton, D., A.M.A. Imevbore, and P. Fraval. 1990.** A Rapid Assessment Procedure for Identifying Environmental and Health Hazards in Irrigation Schemes. (OD 120). Hydraulics Research, Wallingford.
- Branch, K., D. Hooper, J. Thompson, and J. Creighton. 1984.** Guide to Social Assessment: A Framework for Assessing Social Change. Westview Press, Boulder, CO.
- Briones, N. and W. Lagunilla. 1992.** Socioeconomic Analysis of the Environmental Impacts of the Antamok Gold Project's Open-Pit Mining in Benguet, Philippines. Environmental and Resource Management Project. Philippines.
- Burdge, R.J. 1994.** A Community Guide to Social Impact Assessment. Social Ecology Press, Middleton, WI.
- Burdge, R.J. and R.A. Robertson. 1990.** Social impact assessment and the public involvement process. *Environ. Impact Assess. Rev.* 10: 81-90.
- Canter, L.W. 1977.** Environmental Impact Assessment. McGraw-Hill, New York, NY.
- Canter, L.W. 1995.** Environmental Impact Assessment. McGraw-Hill, New York, NY.
- Carley, M.J. and E.S. Bustelo. 1984.** Social Impact Assessment and Monitoring: A Guide to the Literature. Westview Press, Boulder, CO.
- Cernea, M.M. 1988.** Involuntary Resettlement in Development Projects. Policy Guidelines in World Bank-Financed Projects. World Bank Tech. Pap. No. 80. World Bank, Washington, DC.
- Connor, Kerry M. Connor. 1996.** Public Participation in the EIA Process: Theory and Process (Draft). Annex 5 in Interim Report submitted to Asia Development Bank on T.A. 2351-THA Strengthening the Environmental Impact Assessment Process in Thailand by Seatec International, Bangkok Thailand, September 1996.
- Craig, D. 1990.** Social impact assessment: politically oriented approaches and applications. *Environ. Impact Assess. Rev.* 10: 37-54.
- D'More, L.J. 1978.** An overview of SIA. In: F.S. Tester and W. Mykes (eds.). *Social Impact Assessment: Theory, Method and Practice*. Detselig, Calgary, AB. pp. 366-373.
- Derman, W. and S. Whiteford (eds.). 1985.** Social Impact Analysis and Development Planning in the Third World. Westview Press. Boulder, CO.
- Dietz, T. and C.M. Dunning. 1983.** Demographic change assessment. In: K. Finsterbusch, L.G. Llewellyn and C.P. Wolf (eds.). *Social Impact Assessment Methods*. Sage Publications, Beverly Hills, CA. pp. 127-150.
- Finsterbusch, K. 1976.** Methodology for Social Impact Assessment of Highway Locations. Maryland State Highway Administration, Brookland, MD. pp. 10-13.
- Finsterbusch, K. and C.P. Wolf. 1977.** Methodology of Social Impact Assessment. Community Development Series, Vol. 32. Dowden, Hutchinson and Ross, Stroudsburg, PA.
- Finsterbusch, K., L.G. Llewellyn, and C.P. Wolf (eds.). 1983.** *Social Impact Assessment Methods*. Sage Publications, Beverly Hills, CA.
- Freudenberg, W.R. 1986.** Social impact assessment. *Annu. Rev. Sociol.* 12: 451-478.
- Gagnon, C., P. Hirsch, and R. Howitt. 1993.** Can SIA empower communities? *Environ. Impact Assess. Rev.* 13: 229-253.
- Grossman, W.D. 1994.** Socio-economic ecological models: criteria for evaluation of state-of-the-art models shown on four case studies. *Ecol. Model.* 75/76: 21-36.
- Halstead, J.M., R.A. Chase, S.H. Murdock, and F.L. Leistritz. 1984.** Socioeconomic Impact Management: Design and Implementation. Westview Press, Boulder, Colorado.
- Hindmarsh, R.A., T.J. Hundloe, G.T. McDonald, and R.E. Rickson (eds). 1988.** Papers on Assessing the Social Impacts of Development. Institute of Applied Environmental Research, Griffith University, Brisbane.
- Hoa, Pham Thi Mong. 1996.** Gender and Development. Invited paper at Environmental Management Seminar - Viet Nam Canada Environmental Project. Hanoi, Viet Nam.

- Interorganizational Committee on Guidelines and Principles for Social Impact Assessment.** 1995. Guidelines and principles for social impact assessment. *Environ. Impact Assess. Rev.* 15: 11-43.
- Jalal, K.F.** 1993. Sustainable Development, Environment and Poverty Nexus. Occas. Pap. No. y. Economics and Development Resource Centre, Asian Development Bank, Manila, Philippines. 24 pp.
- Kim, S.H. and J.A. Dixon.** 1986. Economic valuation of environmental quality aspects of upland agricultural projects in Korea. In: J.A. Dixon and M.M. Hufschmidt (eds.). *Economic Valuation Techniques for the Environment: A Case Study Workbook.* Johns Hopkins University Press, Baltimore, MD.
- Krawetz, N.M.** 1991. *Social Impact Assessment: An Introductory Handbook.* Dalhousie University, Halifax, NS.
- Leistriz, F.L. and S.H. Murdock.** 1981. *Socioeconomic Impact of Resource Development: Methods for Assessment.* Westview Press, Boulder, CO.
- Liestritz, F.L., B.L. Ekstrom, R.A. Chase, R. Bisset, and J.M. Halstead.** 1986. *Social Impact Assessment and Management: An Annotated Bibliography.* Garland Publishing, New York, NY.
- Liestritz, F.L., R.C. Coon, and R.R. Hamm.** 1994. A microcomputer model for assessing socioeconomic impacts of development projects. *Impact Assess.* 12(4) 373-384.
- McDonald, G.T.** 1990. Regional economic and social impact assessment. *Environ. Impact Assess. Rev.* 10: 25-36.
- Macdonald.** 1991.
- Moser, Caroline O.N..** 1993. *Gender Planning and Development: Theory, Practice and Training.* London: Routledge.
- Murdock, S.H. and F.L. Leistriz.** 1980. Selecting socioeconomic assessment models: a discussion of criteria and selected models. *J. Environ. Manage.* 10: 241-252.
- Murdock, S.H. and F.L. Leistriz.** 1983. Computerized socio-economic assessment models. In: K. Finsterbusch, L.G. Llewellyn and C.P. Wolf (eds.). *Social Impact Assessment Methods.* Sage Publications, Beverly Hills, CA.
- Oomen et al.** 1988.
- Pro-en Consultant and Management Co. Ltd. and Team Consulting Engineers Co. Ltd.** 1996. Nong Khai - Udon Thani Supply and Sanitation Project - T.A. No. 2292 -THA Feasibility Study. Produced for Asian Development Bank. Manila, Philippines.
- Ross, H.** 1990. Community social impact assessment: a framework for indigenous peoples. *Environ. Impact Assess. Rev.* 10: 185-193.
- Service.** 1989.
- Westman, W.E.** 1985. *Ecology, Impact Assessment and Environmental Planning.* John Wiley & Sons, Toronto, ON.
- WHO.** 1983a. Maximising Benefits to Health: An Appraisal Methodology for Water Supply and Sanitation Projects (ETS/83.7). World Health Organisation.
- WHO.** 1983b. Minimum Evaluation Procedure (MEP) for Water Supply and Sanitation Projects (ETS/83.1, CDD/OPR/83.1) World Health Organisation.
- WHO.** 1987. Health and Safety Component of Environmental Impact Assessment (15). World Health Organisation.
- Wildman, P.H. and G.B. Baker.** 1985. *The Social Impact Assessment Handbook: How to Assess and Evaluate the Social Impact of Resource Development of Local Communities.* Australian Social Impact Publications, Sydney.
- World Bank.** 1994. *Resettlement and Development: The Bankwide Review of Projects Involving Resettlement 1986-1993.* Environment Department. Washington, DC.
- World Bank.** 1996. *World Bank Participation Sourcebook.* Environment Department. Washington, DC.