german cooperation
DEUTSCHE ZUSAMMENARBEIT

Published by:
giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Training Manual

# Dealing with Social Aspects in Hydropower Development

Network for Sustainable Hydropower Development in the Mekong Countries (NSHD-M)

Training Manual

# Dealing with Social Aspects in Hydropower Development

# PREFACE

Intergovernmental co-operation between countries that share the Mekong River and its tributaries commenced in 1957 when the United Nations founded the Mekong River Committee. The Mekong was then one of the world's largest unregulated rivers, and the Committee was to capitalise on the river's economic potential. In 1995 a new Mekong Agreement established the Mekong River Commission (MRC), with a more holistic mandate: 'to promote and co-ordinate sustainable management and development of water and related resources for the countries' mutual benefit and the people's well-being by implementing strategic programmes and activities and providing scientific information and policy advice'. The 1995 Mekong Agreement also placed the MRC under the direct responsibility of its four member states: Thailand, Laos, Cambodia and Vietnam. The MRC also engages with two important upstream partners,, China and Myanmar, on its shared water courses.

The development of the Mekong's water resources have included the establishment of a number of large dams, on both the river's main stem and tributaries, in all four member countries. These dams were constructed for a variety of purposes, including flood protection, irrigation and hydropower. These dams have been controversial, due to their negative effects on natural and social environments—to the extent that some member countries, such as Thailand, have ceased building dams altogether.

In 2000, the World Commission on Dams (WCD) published *Dams and Development: A New Framework for Decision-Making*. In the report WCD proposed an approach based on the recognition of rights and the assessment of risks, particularly taking into account the core values of equity, efficiency, participatory decision-making, sustainability and accountability, when building dams. In addition, the report identified seven strategic priorities, associated principles, and twenty-six guidelines for the way forward.

On completion of its mandate, the WCD was disbanded. To maintain the WCD's momentum, the United Nations Environment Programme (UNEP), as a neutral entity to disseminate the WCD report and facilitate inclusive, multi-stakeholder dialogues at national and local levels, reviewing the WCD's recommendations, agreed to host a follow-up initiative: the Dams and Development Project (DDP). One of the outputs of the DDP process was *A Compendium of Relevant Practices for Improved Decision-Making on Dams and their Alternatives*.

Against the backdrop of previous water resource development projects, with their many negative legacies, the German Development Cooperation, through GIZ, agreed to promote the sustainable development of the Mekong's water resources, by facilitating learning among member countries, to minimize adverse effects and optimise the benefits of new projects. GIZ recognised developmental challenges, faced by emerging economies worldwide; in particular, an ever-increasing need for sustainable, renewable energy (in particular, hydropower in the Mekong region). This led to the establishment of the Network for Sustainable Hydropower Development in the Mekong Countries (NSHD-M), including academics and researchers from MRC member states and China. Key functions of the NSHD-M are human resource development and advanced training, as well as dialogue and regional networking to share information and good practices.

These objectives will be achieved through the sharing of information on six key topics:

- Dealing with Social Aspects
- Sustaining River Basin Ecosystems

- Comprehensive Options Assessment
- Hydropower and Economic Development
- Hydropower Development on Transboundary Rivers
- Hydropower and Climate Change

It is intended that these topics will be addressed in six respective training manuals, supported by country-specific case studies, developed by academics and researchers from MRC member states and China. This training manual covers ‘Dealing with Social Aspects’.

Each of the training manuals is being developed in three phases: the development of generic manuals of sufficient scope and depth, the adaptation of these generic manuals to align with Mekong basin states' country-specific legal and institutional frameworks and socio-economic conditions, and further adaptations as may be required, including the translation of the training manuals into local languages.

GIZ promotes and supports participatory learning and adopts a ‘Participatory Adult Learning Approach’ (PALA). Participatory adult education is founded on the belief that people have a right to influence the decisions that affect their lives and that adult learners come with particular goals and ideas about education. Thus, participatory education programs involve learners in making decisions about their own learning, particularly through activities chosen or created by the learners theselves. This, in turn, validates learners’ knowledge and needs, enhances academic achievement, and shapes the extent to which participants can exercise control in the classroom, their lives, and communities. According to adult education scholars, the purposes of participatory education are to enhance learners’ autonomy, critical thinking, leadership, and active citizenship.

It is important that what is taught is applicable to real life situations. A workshop will, therefore, provide an opportunity for adult learners to apply what has been learned to real-life situations and job requirements. Learners will be encouraged to share their experiences and possible solutions, turning workshops into learning cooperatives.

Adults have different experiences throughout life which lead to the accumulation of knowledge. Some experiences are based on past learning, others on everyday community life and work. All of these are significant resources from which to draw on during the learning process and to share with others. It is important to establish what learners’ existing knowledge is and to encourage them to share what they’ve accumulated with others.

Participants learn more by listening and actively participating than by taking detailed notes. Learners must actively participate in order to satisfy their learning needs. In participatory learning, learners actively participate to determine what and how they learn. This may include the objectives, knowledge, skills and attitudes or actual teaching methods. Traditionally, a teacher delivers information; however, in participatory learning, a student learns by doing.

While a participatory approach is encouraged, at times information must still be presented . Examples include: giving instructions, giving advice or suggestions, summarizing, giving explanations or demonstrations. The challenge is to provide necessary information without learners becoming bored.

Other ways in which participatory learning can be implemented include: group work, group discussions, brainstorming, role play, field work, and questions and answers.

From this manual, the trainings are intended to be participatory in nature, optimising the benefits of the 'Participatory Adult Learning Approach'.

Applying modern adult learning methods at the Trainer-of-Trainers Workshop in Vientiane, December 2012

# TABLE OF CONTENTS

**Abbreviations and Acronyms**

| | |
|---|---|
| ACRP | Acquisition, Compensation and Rehabilitation Plan (Nepal) |
| ADB | Asian Development Bank |
| BP | Bank Procedure (World Bank) |
| CCAI | Climate Change and Adaptation Initiative |
| COPEL | Companhia Paranaese de Energia (Brazil) |
| CSR | Corporate Social Responsibility |
| DAC | Development Assistance Committee |
| DAD | Decide Announce Defend |
| DDP | Dams and Development Project |
| ECSHD | Environmental Considerations for Sustainable Hydropower Development |
| EGAT | Electrical Generating Authority Thailand |
| EHS | Environment Health and Safety |
| EIA | Environmental Impact Assessment |
| EIAR | Environmental Impact Assessment Report |
| EP | Equator Principles |
| EPFI | Equator Principles Financial Institutions |
| ERC | Ekuvinjelweni Resettlement Committee (Swaziland) |
| ESMF | Environmental and Social Management Framework |
| FAO | Food and Agriculture Organisation |
| FPEPB | Fuijan Provincial Electric Power Bureau (China) |
| GIZ | Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (Germany) |
| GLRB | Glomma and Laagen River Basin (Norway) |
| GLRM | Glomma and Laagen's Water Management Association (Norway) |
| IAP2 | International Association of Public Participation |
| IEM | Integrated Environmental Management |
| IFC | International Finance Corporation |
| IHA | International Hydropower Association |
| ISH | Initiative on Sustainable Hydropower |

| | |
|---|---|
| IPDP | Indigenous Peoples' Development Plan |
| ISH | Initiative on Sustainable Hydropower |
| IUCN | International Union for Conservation of Nature |
| IWRD | Integrated Water Resources Development |
| JBEC | James Bay Energy Company (Canada) |
| JBNQA | James Bay and Northern Quebec Agreement (Canada) |
| KOBWA | Komati Basin Water Authority (South Africa and Swaziland) |
| LMB | Lower Mekong Basin |
| LSSF | Later Stage Support Fund |
| MDG | Millennium Development Goals |
| MRC | Mekong River Commission |
| MSP | Multi Stakeholder Platform |
| NAPA | National Adaptation Programme of Action to Climate Change (Cambodia, Laos) |
| NEMA | National Environmental Management Act, 1998 (South Africa) |
| NEPA | National Environmental Policy Act (USA) |
| NET | National Expert Teams (Thailand, Cambodia, Laos and Vietnam) |
| NGO | Non Governmental Organisation |
| NHPC | National Hydroelectric Power Corporation (India) |
| NTP | National Target Plan (Vietnam) |
| NSHD-M | Network for Sustainable Hydropower Development in the Mekong Countries |
| OECD | Organisation for Economic Co-operation and Development |
| OP | Operational Procedure (World Bank) |
| PALA | Participatory Adult Learning Approach |
| PEI | Poverty and Environmental Initiative (UN) |
| RAP | Resettlement Action Plan |
| RSAT | Rapid Basin-Wide Hydropower Sustainability Assessment Tool |
| RSR | Regional Synthesis Report |
| SDG | Sustainable Development Goals |
| SE4ALL | Sustainable Energy for All |
| SEA | Strategic Environmental And Social Assessment |

| | |
|---|---|
| SIA | Social Impact Assessment |
| UN | United Nations |
| UNCED | United Nations Conference on Environment and Development |
| UNCHR | United Nations Commission on Human Rights |
| UNCHS | United Nations Centre of Human Settlements |
| UNDP | United Nations Development Programme |
| UNEP | United Nations Environmental Programme |
| UNFCCC | United Nationals Framework Convention on Climate Change |
| USA | United States of America |
| WCD | World Commission on Dams |
| WCED | World Commission on Environment and Development |
| WSSD | World Summit on Sustainable Development |

# 1 STRUCTURE OF THE TRAINING MANUAL AND MAIN SOURCE DOCUMENTS

## 1.1 Structure

This training manual comprises eight sections:

- Section 1: Background and Context.
- Section 2: Structure of the Training Manual.
- Section 3: Module 1 – Introduction to the debate on large dams and hydropower facilities.
- Section 4: Module 2 – Social Impact Assessment.
- Section 5: Module 3 – Involuntary Resettlement.
- Section 6: Module 4 – Compensation Policy and Benefit-Sharing.
- Section 7: Module 5 – Addressing Outstanding Social Issues.
- Section 8: Module 6 – Stakeholder Participation.

Within each module, the learning material has been divided into sessions for training on different topics. Where possible, concepts are elaborated upon by drawing on lessons learned from case studies around the world.

It is important for readers and users of this training manual to note that the five modules dealing with social aspects are inter-related, with a significant amount of material common to more than one module. Indeed, a subject such as Stakeholder (Public) Participation is cross-cutting through the other four subjects. Therefore, although it may appear as though material is redundant, this is deliberate so that each module is a stand-alone training course.

## 1.2 Primary source material

The following reports are the main sources of information for the material presented in this training manual:

Égré, D. (2006). United Nations Environment Programme – Dams and Development Project. Compendium of Relevant Practices. Benefit Sharing Issue.

Heinsohn, R-D. (2007). United Nations Environment Programme – Dams and Development Project. Compendium of Relevant Practices. Social Impact of Affected People.

International Association of Public Participation. (2007). United Nations Environment Programme – Dams and Development Project. Stakeholder Participation Mechanisms (Eds. V. Twyford and C. Bladwin).

IFC (2002). Handbook for Preparing a Resettlement Action Plan. IFC: Environment and Social Development Department. The World Bank Group, Washington, USA.

IFC Performance Standards on Environmental and Social Sustainability (January 2012): Performance Standard 5: Land Acquisition and Involuntary Resettlement (www.ifc.org).

Roquet, V. (2006). United Nations Environment Programme – Dams and Development Project. Compendium of Relevant Practices. Compensation Policy Issue.

Schmidt-Soltau, K. (2006). United Nations Environment Programme – Dams and Development Project. Compendium of Relevant Practices. Addressing Outstanding Social Issues.

Tapela, B.N., Matete, M.E. and Heinsohn R-D. A Training Manual on Selected Economic and Social Aspects of Large Water Infrastructure, for the Sustainable Major Water Infrastructure Development Programme in Eastern and Southern Africa. SADC, EAC, UNEP, InWEnt. (2009).

The World Bank. (2004). Involuntary Resettlement Sourcebook. Planning and Implementation in Development Projects. The World Bank, Washington, USA.

UNEP. (2007). Dams and Development. Relevant Practices for Improved Decision-Making. A Compendium of Relevant Practices for Improved Decision-Making on Dams and their Alternatives. www.unep.org/dams

# 2 BACKGROUND AND CONTEXT

## 2.1 Earth Summits and Global Development Goals

### 2.1.1 Rio Earth Summit

In 1992, Rio de Janeiro, Brazil hosted the United Nations Conference on Environment and Development (UNCED). Discussions focused on possible solutions to issues of global importance such as poverty, war and the ever-increasing divide between developed and developing countries. A key message was the need for sustainable development, stressing the dependence of lasting social and economic growth on conserved natural resources, along with effective methods to avoid environmental degradation. The Rio Earth Summit of 1992 resulted in the emergence of the Rio Declaration, a set of 27 principles aimed at binding the governments of participating countries to environmental protection and responsible development. Agenda 21 was also developed at the Earth Summit and has since formed the cornerstone for sustainable development strategies.

### 2.1.2 Rio +10

In 2002, the Johannesburg Summit took place, with the intent of evaluating progress toward the Rio Summit objectives, as well as to point out new challenges, which had developed since 1992. One aspect that was not addressed in Johannesburg was that of growing populations and the inability of the earth to sustain such growth.

The population of the lower Mekong countries (Cambodia, Laos, Thailand and Vietnam) was estimated to be 177 million in 2010 and is projected to increase to 206 million by 2040 (UN 2010, WDI 2013). The population of the LMB alone is estimated to be around 65 million (2010), with 80% of residents living in rural areas and relying predominantly on agriculture and other forms of natural resource use. Populations in LMB countries have grown in the last decade at rate of 1.1%. By 2050, the LMB population is expected to increase to approximately 76 million (WDI 2013).

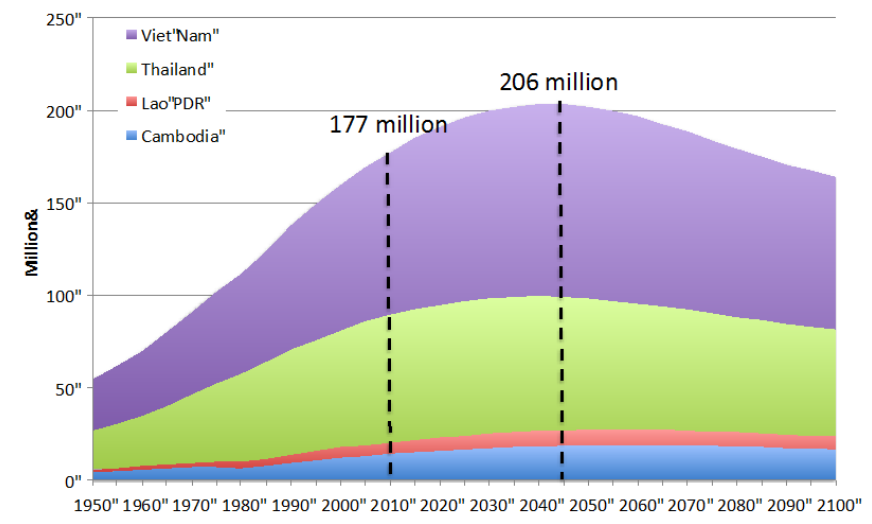



**Figure 1.1: Historical and projected population (median variant) in LMB countries 1950 – 2100.** Source: WDI 2013, UN 2010 as cited by Sawdon et al. (2013)

### 2.1.3 Rio +20

In 2012, Rio de Janeiro again hosted an Earth Summit, which the concept of sustainability. Through discussions, three pillars emerged as the basis for sustainable development: strengthening, reforming and integrating. The issue of energy provision was addressed, with participating member countries proposing to build on the Sustainable Energy for All initiative, started by the UN Secretary General. This initiative incorporates a number of objectives, including worldwide access to basic, modern energy services for consumption and production by 2030, and promoting the development and use of renewable energy sources and technologies in every country.

During the International Year of Sustainable Energy for All (SE4ALL) in 2012, the Secretary General of the United Nations established the initiative (SE4ALL) and reported:

- Without access to modern energy services, it is not possible to achieve the Millennium Development Goals.
- The availability of adequate, affordable and reliable energy services is essential for alleviating poverty, improving human welfare, raising living standards and, ultimately, achieving sustainable development. Adequate sustainable energy services are critical inputs in providing for human health, education, transport, telecommunications and water availability and sanitation.
- Achieving sustainable energy for all involves the development of systems that support the optimal use of energy resources in an equitable and socially inclusive manner while minimizing environmental impacts. Integrated national and regional infrastructures for energy supply, efficient transmission and distribution systems, and demand programmes that emphasize energy efficiency are necessary for sustainable energy systems.

### 2.1.4 Global Development Goals

In 2000, leaders from around the world gathered at the UN, New York, with the intent of adopting the United Nations Millennium Declaration. Countries committed to a new global partnership, aimed at decreasing severe levels of poverty worldwide and introducing a timeline to 2015 for the meeting of predetermined targets, now known as the Millennium Development Goals (MDGs). Eight MDGs were listed, with the 7$^{th}$ being that of ensuring environmental sustainability. Under this goal is the integration of the principles of sustainable development into countries' policies and procedures and reversing of the loss of natural resources.

MDG 7: Sustainable Development means the integration of social, economic, and environmental factors into planning, implementation and decision-making so as to ensure that development serves present and future generations.

Sustainable Development aims for equity within and between generations, and adopts an approach where the economic, social and environmental aspects of development are considered in a holistic fashion. Its values are based on principles of fairness, justices, peace, safety and security for the common good and benefits for all living beings on this planet.

## 2.2 Hydropower in the Lower Mekong River Basin

The Lower Mekong Basin (LMB) covers an area of approximately 606,000 km$^2$ within the countries of Cambodia, Laos, Thailand, and Vietnam. Hydropower is gaining importance in the LMB as riparian countries attempt to meet the increasing demand for energy and provide an alternative to fossil fuels (an important aspect of sustainable development). Cambodia, Laos, Thailand and Vietnam, member countries of the Mekong River Commission (MRC), aim to utilise hydropower to encourage socio-economic development and welfare in the region. A number of hydropower projects exist or have been proposed for the LMB mainstream (Figure 1.1), while additional hydropower developments for the LMB tributaries are anticipated in the future.

It has been noted that transboundary cooperation in hydropower development and management can increase project benefits for all riparian countries, while simultaneously decreasing the possibility of negative transboundary impacts. Indeed, case studies have shown that various approaches can be utilised to mitigate environmental and social impacts, and the sharing of costs and benefits. A comparative analysis of mechanisms and tools applied in five case studies—the Manantali Dam (Senegal, Mali, and Mauritania), the Itaipu Dam (Paraguay/Brazil), the Columbia River Project (USA/Canada), the Kariba Dam (Zambia/Zimbabwe), and the Kosi Dam (Nepal/India)—provides various points, which the MRC can consider in relation to LMB hydropower developments.

- Basin-wide institutions can provide an essential framework for coordinated hydropower development and management.
- Designating or creating a specified agency for dam operational management can facilitate day-to-day cooperation.
- Cost-benefit sharing mechanisms need to be fair and flexible.
- Social and environmental mitigation measures, as well as their financing, need to be considered from the planning stage.
- Cooperation on a regional and local level is necessary to effectively design and implement social and environmental mitigation measures.

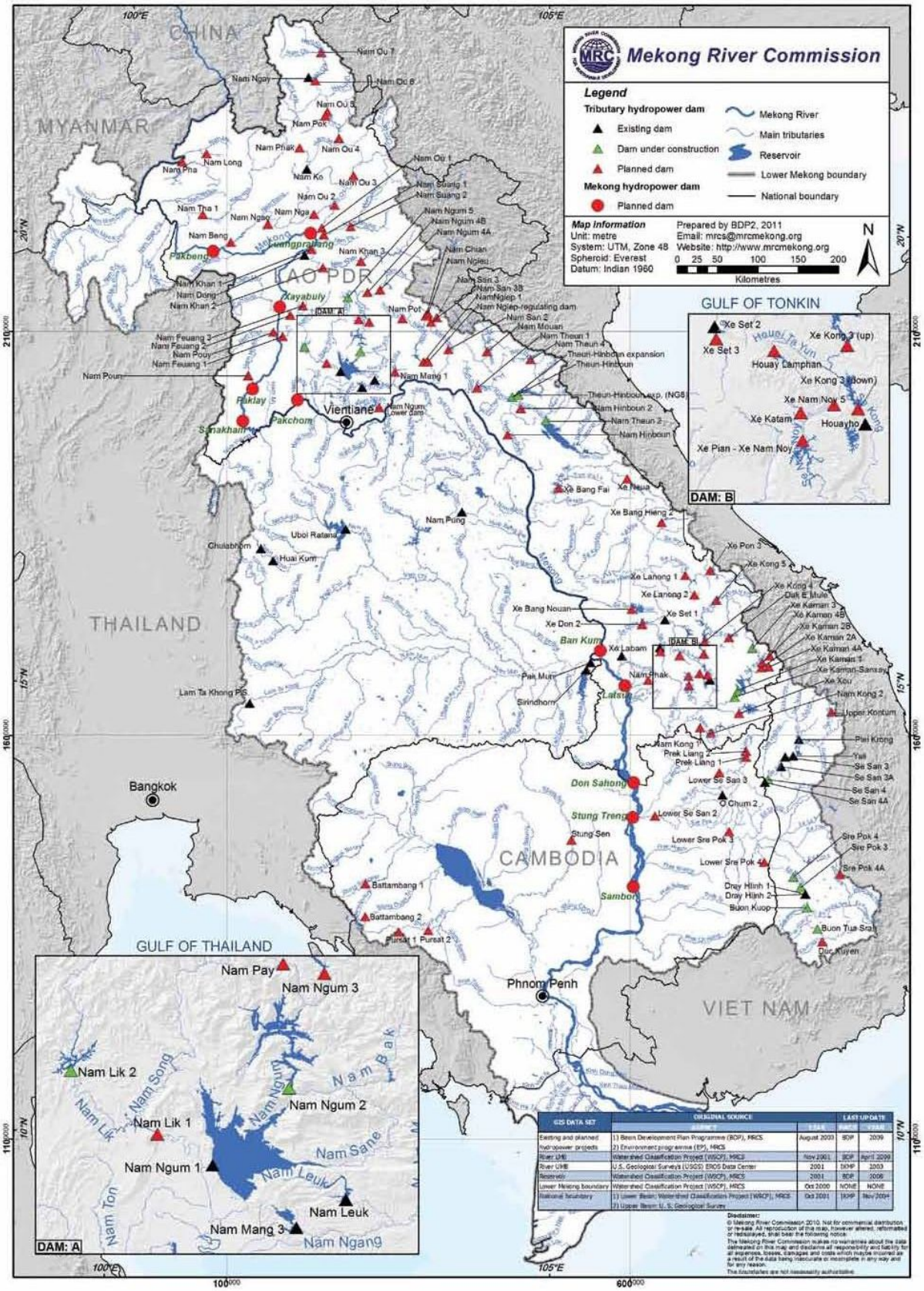



Figure 1.2 Existing and planned hydropower facilities in the Lower Mekong Basin (MRC 2010)

### 2.2.1 Initiative on Sustainable Hydropower

Hydropower development in the Mekong region is gaining momentum, with the rapidity of these developments being focused upon in connection with the MRC's implementation of the 1995 Mekong Agreement, as a part of regional efforts to prepare for the MRC Strategic Plan (2011 – 2015).

The Initiative on Sustainable Hydropower (ISH) noted that challenges related to hydropower development in the LMB require an integrated approach to achieve sustainability.

The four main outcomes of the ISH are direct responses to the objectives of the MRC Strategic Plan (2011 – 2015):

- Outcome 1: Combining the tools of awareness raising and multi-stakeholder dialogue
- Outcome 2: Knowledge management and capacity building.
- Outcome 3: Embedding sustainable hydropower considerations in regional planning and regulatory systems.
- Outcome 4: Sustainability assessment and adoption of good practice.

It is evident that a key objective of the ISH from 2011 - 2015 is to assist the MRC in aiding member countries as they include decisions about hydropower into basin-wide integrated water resource management (IWRM). This is done through recognition of MRC mechanisms and national planning systems. Not only are these in line with the 1995 Mekong Agreement, but they have led to the NSHD-M, which aims to support each of the four outcomes listed above.

## 2.3 Integrated Water Resources Development-Based Basin Development Strategy for the LMB

The Integrated Water Resources Development (IWRD)-based Basin Development Strategy provides initial directions for cooperative and sustainable Lower Mekong Basin development and management. The strategy is:

- The Mekong River Commission's main tool for achieving the objective of the 1995 Agreement for the Cooperation for the Sustainable Development of the Mekong River Basin Agreement as stated in Article 1: 'to cooperate in all fields of sustainable development, utilization, management and conservation of the water and related resources of the Mekong River Basin'.
- The MRC's primary response to Article 2, which calls for 'the formulation of a basin development plan…to identify, categorize and prioritize the projects and programs…'.

The strategy defines an agreed 'rolling' basin development planning process, which connects regional LMB plans, made possible through transboundary cooperation, with national LMB plans. The strategy is subject to review and updating by the MRC every five years.

The LMB and the Mekong River are undergoing significant change. Economic growth and poverty reduction in the LMB require developing water resources for multiple purposes, including power, agriculture, fisheries production and navigation. These also require the management of the river and its life- and livelihood-giving ecosystems, for long-term sustainability, throughout demographic, economic and climate change. Developments in the Lancang-Upper Mekong Basin in China, as well as the LMB, are now changing the Mekong's flow regime. To meet growing demand for goods and services, the private sector is actively seek-

ing investment opportunities, which the river can provide. This strategy is an essential, deliberate, and comprehensive response to these rapid investments.

There are many LMB development opportunities, which could bring significant benefits at national and, through cooperation, regional levels. Many opportunities also have significant risks and costs, which must be managed and mitigated, both at the national level, and where relevant, through cooperation at the transboundary level. The strategy identifies the following opportunities and risks:

- Considerable potential for further hydropower development in the tributaries of the Mekong River, particularly in Laos and Cambodia, requiring sound social and environmental standards to ensure sustainability.
- Major potential to expand and intensify irrigated agricultural production and to combat delta saline intrusion, subject to cooperation with China in the operation of the Lancang - Upper Mekong hydropower dams, to ensure increased, regulated and reliable dry season flows.
- Potential opportunity for main stem hydropower development, provided that the many uncertainties and risks are fully addressed and transboundary approval processes followed. While potential benefits are high, so are potential costs, including transboundary impacts.
- The need to define other priority water-related opportunities (for example, fisheries, navigation, flood management, tourism, and environment and ecosystem management), as well as those that go beyond the water sector (for example, other power generation options).

### 2.3.1 The Strategy on Basin Development

The strategy defines a process to move from opportunities to implementation and sustainable development, including the definition of *Strategic Priorities for basin development*:

- Essential knowledge acquired to address uncertainty and minimize risks of identified development opportunities, including knowledge on migration and adaptation of fish; trapping and transport of sediments and nutrients; loss of biodiversity; and social and livelihoods impacts.
- Opportunities and risks of current developments (to 2015), including: cooperation with China to ensure increased low flows; LMB mainstream baseline low-flow agreements, and the management of risks arising from projects already committed.
- Options identified for sharing development benefits and risks.
- The expansion and intensification of irrigated agriculture for food security and poverty alleviation.
- Environmental and social sustainability of hydropower development greatly enhanced.
- Climate change adaptation options identified and implementation initiated.
- Basin planning considerations integrated into national planning and regulatory systems.

### 2.3.2 The Strategy on Basin Management

The Strategy defines Strategic Priorities for basin management, an essential companion to basin development to ensure sustainability, as follows:

- Rigorous basin-wide 'environmental and social objectives' and 'baseline indicators' need to be defined.
- Clearly defined basin objectives and management strategies for water-related sectors, including fisheries and navigation, must be set.
- National-level basic water resources management processes must be strengthened, including water resources monitoring, water use licensing, and data and information management.
- Basin-level water resources and related management processes must be strengthened, including the implementation of MRC procedures, state-of-basin monitoring and reporting, project cycle monitoring, and enhancing stakeholder participation.
- Water resources management capacity building program must be implemented, linked to MRC's overall and complementary initiatives to national capacity building activities.

### 1.3.3 Implementation of the Strategy

The strategy defines a clear road map—setting out priority actions, timeframes and outcomes. An early action in the road map is the preparation of LMB Regional and National Action Plans that define activities, responsibilities, deliverables and costs. The MRC will lead the preparation of the Regional Action Plan; implemented will come through the MRC Strategic Plan 2011-2015. The National Action Plans will be integrated, to the extent possible, within national long- and short-term economic and sectoral plans, and implemented as a core priority. A comprehensive monitoring programme of strategy activities and outcomes will be developed during the first three months of implementation.

### 2.3.4 Status of the Strategy

The strategy is a product of the MRC Member Countries of Cambodia, Laos, Thailand and Vietnam, and will be implemented by them, facilitated by the MRC and with financial support of its key development partners. Active and transparent involvement of all Mekong stakeholders is required to achieve the ambitious goals for of cooperative and sustainable LMB management and development, for the shared benefit of all those living in the LMB, particularly the poor and vulnerable.

## 2.5 Adaptation to Climate Change in the LMB Countries

The LMB covers an area of approximately 606,000 $km^2$ in Cambodia, Laos, Thailand, and Vietnam. Based on recent national and regional studies, there is growing concern about the potential effects of climate change on the socio-economic characteristics and natural resources of the LMB region. A need exists for a more informed understanding of the potential impacts of climate change.

In response, the Mekong River Commission has launched the regional Climate Change and Adaptation Initiative (CCAI). The CCAI is a collaborative regional initiative, designed to address the shared climate change adaptation challenges of LMB countries. A Regional Synthesis Report (RSR) has been prepared, as part of the CCAI's initial phase, to provide a

snapshot of current knowledge and activities related to climate change in the LMB countries. The specific objectives of the RSR are:

- To inform a wide audience of the current state of knowledge of climate change issues in LMB countries and across the region.
- To provide up-to-date information on regional and national adaptation activities and policy, as well as institutional responses to climate change.
- To present the results of a climate change 'gap analysis,'—identifying deficiencies in information and shortcomings in planned activities, policies, and institutional responses.
- To present a series of recommendations for future climate change-related actions in the LMB.

### 2.5.1 Existing knowledge of the regional climate change situation

Climate change is expected to result in changed weather patterns; in particular, shifts in temperature, rainfall and wind intensity in the LMB, as well as in the duration and frequency of extreme events. Seasonal water shortages, droughts and floods may become more common and more severe, as may saltwater intrusion. Such changes are expected to affect natural ecosystems, agriculture and food production, as well as exacerbate existing problems of supplying food for growing populations. The impacts of such changes are likely to be particularly severe, given the strong reliance of the LMB communities on natural resources for their livelihoods.

Several studies have attempted to accurately identify a potential future climate situation in the region as a result of global warming. However, most of these studies were unable to fully quantify the uncertainty around future climate projections. A recent study undertaken for CSIRO (Eastham *et al*., 2008) attempted to redress some of the limitations of earlier studies and, based on the IPCC's Scenario A1B, made the following predictions for the region by 2030:

- A basin wide temperature increase of 0.79˚C, with greater increases for colder catchments in the North of the basin.
- An annual precipitation increase of 0.2 m (equivalent to 15.3%), predominantly from increased wet season precipitation.
- An increase in dry season precipitation in northern catchments and a decrease in dry season precipitation in southern catchments, including most of the LMB.
- An increase in total annual runoff by 21%, which will maintain or improve annual water availability in all catchments. However, some areas will still endure high levels of water stress during the dry season, such as north-eastern Thailand and Tonle Sap (Cambodia).
- An increase in flooding in all parts of the basin, with the greatest impact in downstream catchments on the main stem of the Mekong River.
- Changes to the productivity of capture fisheries (which require further investigationn—although it is predicted that the storage volumes and levels of Tonle Sap, a major source of capture fisheries, will increase).
- A possible 3.6% increase in agricultural productivity but overall increases in food scarcity as food production in excess of demand reduces with population growth. Further investigations are required to account for the effects of flooding and crop damage.

### 2.5.2 Existing knowledge of national climate change situations

Accurate information on the climate change situation for each LMB country is limited. Available information is often drawn from global- or regional-level models, with varying degrees of relevance at the national level. Quantitative information is lacking, and most of the data are presented in terms of broad potential trends.

In Cambodia, it is predicted that there will be an increase in mean annual temperature of between 1.4 and 4.3°C by 2100. Mean annual rainfall is also predicted to increase, with the most significant increase experienced in the wet season. As with the other countries in the LMB, flooding and droughts are expected to increase in terms of frequency, severity and duration. The potential impacts of climate change include changes to rice productivity, with increases in wet season crops in some areas and decreases in others; acceleration of forest degradation, including the loss of wet and dry forest ecosystems; inundation of the coastal zone; and higher prevalence of infectious diseases.

In Laos, an increase in mean annual temperature is predicted, together with an increase in the severity, duration and frequency of floods; most likely in floodplain areas adjacent to the Mekong River. The impacts of climate change are predicted to include agricultural and infrastructural losses, due to increased storm intensity and frequency; land degradation and soil erosion from increased precipitation; and a higher prevalence of infectious diseases.

In Thailand, an increase in mean annual temperature is predicted, together with an increase in the length of the hot season, with a higher number of days with a temperature greater than 33°C, and a corresponding decrease in the length of the cold season. Higher rainfall intensity is expected in the cold season. Some river basins are expected to face water shortages and an increase in flood and drought frequency is predicted. The impacts of climate change are expected to include changes in rice productivity, with increases in the wet season crop in some areas and decreases in others, damage to wetland sites from a reduction in water availability, and damage to the coastal zone from changes to coastal erosion and accretion patterns.

In Vietnam, an increase in annual average temperature of 2.5°C by 2070 is predicted, with more significant increases probable in highland regions. The average annual maximum and minimum temperatures are also expected to increase. An increased incidence in floods and droughts is predicted, together with changes to seasonal rainfall patterns and an increased incidence and severity of typhoons. A possible sea level rise of 1.0 m by 2100 has been predicted. It is estimated that there would be direct effects on 10% of the population from a 1.0 m sea level rise and losses equivalent to 10% of GDP, due to the inundation of 40,000 $km^2$ of coastal areas. Salinity intrusion in the Mekong Delta is expected to increase, resulting in changes to cropping patterns and productivity, as well as negative effects on aquatic and terrestrial ecosystems. A higher prevalence of infectious diseases is also forecast.

### 2.5.3 National responses to climate change

National responses to climate change include political and institutional responses, as well as particular adaptation responses. All LMB countries have ratified the UN Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol. Each country has a primary policy document, which outlines its strategy and responses to climate change. In Cambodia and Laos, this takes the form of a National Adaptation Program of Action to Climate Change (NAPA). Thailand has prepared the ‘Action Plan on National Climate Change as the Five Year Strategy on Climate Change 2008 to 2012’ and Vietnam has prepared the ‘National

Target Plan to Respond to Climate Change'. In general, climate change issues are not well integrated into the broader policy frameworks of national governments.

Each of the LMB countries has nominated a national focal point for climate change issues. In Cambodia, the Ministry of Environment plays this role; in Laos, the Water Resources and Environment Administration; and in Thailand and Vietnam, the respective Ministries of Natural Resources and Environment. All countries have established a high level governmental body with responsibility for the development of climate change policy and strategies. Cambodia has established the National Climate Change Committee; Laos has a National Steering Committee on Climate Change; Thailand has established the National Board on Climate Change Policy and Vietnam has a National Climate Change Committee.

All LMB countries have a history of implementing adaptation activities, although most activities-to-date have focused on natural disaster response management rather than climate change. The NAPAs of Cambodia and Laos contain information on proposed adaptation projects, including 39 activities planned for Cambodia and 45 for Laos. Thailand's 'Action Plan on National Climate Change as the Five Year Strategy on Climate Change 2008 to 2012' contains directions to develop detailed action plans for future adaptation activities. The Vietnamese 'National Target Plan (NTP) to Respond to Climate Change' establishes directions for the development of sectoral and geographic adaptation action plans. (To date, an action plan has been completed for the agricultural and rural development sectors.)

A large number of international organizations are working on climate change issues in partnerships with national governments. Across the LMB, more than 300 projects are being implemented or are planned, including:

- The MRC has recently launched the CCAI and has been involved in other related climate change activities as part of its various sector programmes since 2000.
- The UN Development Program (UNDP) is mainstreaming climate change activities into development programmes through the Poverty and Environment Initiative (PEI).
- The Asian Development Bank (ADB) has a range of climate change activities in the preparatory phase as part of its Greater Mekong Sub-region Core Environment Program.
- The 'Study on Climate Change Impact Adaptation and Mitigation in Asian Coastal Mega Cities' is being carried out with support from the ADB, World Bank and the Japan Bank for International Cooperation, and is investigating climate change issues in Bangkok and Ho Chi Minh City.

### 2.5.4 Gap analysis and recommendations

A gap analysis, prepared by the National Expert Teams (NETs) and the Regional Synthesis Report study team, identified a large degree of commonality in perceived shortcomings in climate change knowledge, activities and responses at both the national and regional levels. A summary of the gap analysis is presented below and is categorised into national issues for each of the LMB countries and regional issues for the LMB as a whole.

The gap analysis reflects key concerns and priorities as expressed by national and regional experts.

The NETs and the RSR study team have developed a large number of recommendations for future actions in climate change activities. These are presented below, divided into recom-

mendations for each of the LMB countries, followed by a series of regional level recommendations.

**COUNTRY RECOMMENDATIONS**

- Cambodia.
    - C1 - Support for implementation of NAPA priority activities.
    - C2 - Development and implementation of climate change awareness raising campaigns.
    - C3 - Mainstreaming of climate change adaptation into development programmes.
    - C4 - Institutionalisation of an inter-organisational climate change coordination mechanism.
    - C5 - Integration of climate change adaptation into the national budgetary process.
    - C6 - Formulation of climate change adaptation and climate change proofing legislation/policies.
    - C7 - Strengthening of climate change research.

- Laos.
    - L1 - Development and implementation of capacity building programmes.
    - L2 - Development and dissemination of modelling and assessment tools.
    - L3 - Support to policy frameworks and improved regulatory and institutional frameworks.
    - L4 - Pilot study of climate change impacts in selected provinces.
    - L5 - Development and implementation of a national monitoring and reporting system.
    - L6 - Investigations into the appropriate use of forest resources as sink sources for carbon dioxide.
    - L7 - Research to strengthen health systems and services to better anticipate and address potential health challenges.
    - L8 - Development of a strategy for the multipurpose use of the water for national development activities.

- Thailand.
    - T1 - Improved development and assessment of adaptation strategies.
    - T2 - Development and implementation of capacity building programmes.
    - T3 - Development and implementation of awareness raising programmes.
    - T4 - Mainstreaming adaptation to climate change in national policy development processes.
    - T5 - Mechanisms to increase funds for adaptation to climate change.
    - T6 - Investigations into linkages between poverty and climate change.
    - T7 - Development and dissemination of improved modelling tools.
    - T8 - Increased scientific research.

- Vietnam.

- V1 - Identification of funding sources for NTP activities and adaptation measures.
- V2 - Further research on climate change impacts.
- V3 - Improved information sharing networks and mechanisms.
- V4 - Institutional coordination at a national level.
- V5 - Guidance on adaptation planning for national agencies.
- V6 - Communication of scientific results through translation of key findings.

**REGIONAL RECOMMENDATIONS**

- R1 - Development of regional institutional structures to address climate change issues.
- R2 - Climate change predictions and integrated basin wide assessment of climate change impacts.
- R3 - Provisions for sustainability of climate change policy planning.
- R4 - Development and implementation of stakeholder awareness raising campaigns.
- R5 - Riparian country cooperation to address transboundary issues related to adaptation activities.
- R6 - Development of regional information sharing networks and mechanisms.

## 2.6 Summary

It is within the aforementioned context that further development of the water resources of the Mekong River and its tributaries will be undertaken. Ultimately, many challenges must be better understood and overcome in order to achieve sustainability of all types of facilities,, including hydropower facilities.

# 3 INTRODUCTION TO THE DEBATE ON LARGE DAMS AND HYDROPOWER FACILITIES

## 3.1 Background

| | |
|---|---|
| Purpose | The purpose of this session is to introduce the debate that has developed in the international community about large dams and, specifically, hydropower facilities. |
| Objectives | • To understand the origin and the extent of the debate |
| | • To know of the many institutions that have been involved in the debate |
| | • To understand the core issues in the debate |
| | • To appreciate the volume of the body of knowledge that is available |
| Preparatory reading | World Commission on Dams (2000). Dams and Development: A New Framework for Decision Making. Earthscan Publishers: London (UK).The Chairman's and Commissioner's Forewords |
| | UNEP (2007). Dams and Development. Relevant Practices for Improved Decision-Making. A Compendium of Relevant Practices for Improved Decision-Making on Dams and their Alternatives. Executive Summary. www.unep.org/dams |

### 3.1.1 The environmental thread

In the post-World War II industrial boom, consciousness of the negative impacts of unfettered technological development first occurred in the United States of America (USA). In 1969, the USA promulgated the National Environmental Policy Act (NEPA). This was the first national legislation that mandated environmental assessment and required the results to be published in a detailed environmental statement. It prompted extensive research into the methods needed to comply with NEPA and environmental assessment.

The USA approach provided the catalyst for broader international initiatives. In 1972 at the United Nations Conference on the Human Environment, UNEP was launched. In 1987, the World Commission on Environment and Development (WCED, commonly called the Brundtland Commission) published its report, 'Our Common Future'. It called for development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs, and prompted the use of the term 'sustainable development'. By the start of the 1990s, three major instruments of international environmental law existed: the International Framework Convention on Climate Change, the International Convention on Biodiversity and the Montreal Protocol on Ozone.

In 1992, the UN Conference on Environment and Development (UNCED) was held in Rio de Janeiro. It discussed a wide range of environmental issues. The output was 'Agenda 21 - the environmental agenda for the 21st century'. Chapter 18 of the Agenda deals with water resources; Paragraph 40 of Chapter 18 calls for the development of national and international

legal instruments that may be required to protect the quality of water resources, including environmental impact assessment. The Conference's Rio Declaration, Principle 17 states:

> *Environmental impact assessment, as a national instrument, shall be undertaken for proposed activities that are likely to have a significant adverse impact on the environment and are subject to a decision of a competent national authority.*

In 2000, the Report of the Secretary General of the United Nations (The Millennium Report) stated:

> *The ecological crises we confront have many causes. They include poverty, negligence and greed - and above all, failures of governance. These crises do not admit of easy or uniform solutions.*

Apart from proposing the Millennium Development Goals (MDG), the report called for the 'building of a new ethic of global stewardship'. It held that effective environmental policy must be based on sound scientific information and called for governments to create and enforce environmental regulations.

In 2002, the World Summit on Sustainable Development (WSSD) reaffirmed the international community's commitment to Agenda 21. Paragraph 19 of the Johannesburg Plan of Implementation called on all states to:

> *'encourage relevant authorities at all levels to take sustainable development considerations into account in decision-making, including on national and local development planning, investment in infrastructure, business development and public procurement. This would include actions at all levels to:*
>
> *(a) …….*
>
> *(e) Use environmental impact assessment procedures'.*

In 2012 at the United Nations Conference on Sustainable Development (Rio +20), the international community again reaffirmed the principles, which had been developed during the above-mentioned conferences.

The Heads of State expressed their determination to:

> *'re-invigorate political will and to raise the level of commitment by the international community to move the sustainable development agenda forward'* and *'to eradicate poverty and promote empowerment of the poor and people in vulnerable situations'.*

And

> *'We acknowledge that climate change is a cross-cutting and persistent crisis, and express our concern that the scale and gravity of the negative impacts of climate change affect all countries and undermine the ability of all countries, in particular, developing countries, to achieve sustainable development and the Millennium Development Goals, and threaten the viability and survival of nations'* and *'We underscore that broad public participation and access to information and judicial and administrative proceedings are essential to the promotion of sustainable development'.*

The declaration also introduced the 'green economy' and a set of guidelines to the debate. Moreover there was agreement to launch a process to develop a set of sustainable development goals (SDGs).

Over the last few years, the concept of green economy has emerged in key discussions at the international level, particularly during the Rio+20. By definition, a 'green economy' results in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities (UNEP 2012). In its simplest expression, a green economy can be thought of as one, which is low carbon, resource efficient and socially inclusive. Practically, a green economy is one whose growth in income and employment is driven by public and private investments that reduce carbon emissions and pollution, enhance energy and resource efficiency, and prevent the loss of biodiversity and ecosystem services. This development path should maintain, enhance and, where necessary, rebuild natural capital as a critical economic asset and source of public benefits, especially for poor people whose livelihoods and security depend strongly on nature.

This definition is similar to what the WCD (2000) and Hydropower Sustainability Assessment Protocol (HSAF) from the International Hydropower Association (IHA) gives priority to: economic, social and environmental equity. More specifically, this means focusing on developing local capacity and jobs, balancing the flows of capital and resources from rural to urban areas, and protecting the local environments and resources, on which people directly depend.

### 3.1.2 Sustainability concept

The World Commission on Environment and Development crystallized the sustainability concept in 1987. Sustainable development is now defined as that, which meets 'the needs of the present generation without compromising the ability of future generations to meet their own needs'. The Rio Declaration on Environment and Development elaborated on this defintion to include 18 principles of sustainability. It is now generally accepted that the sustainability concept integrates economic, social and environmental dimensions and that it requires rights-based, equitable and inclusive processes at global, regional, national and local levels.

2012 was the International Year of Sustainable Energy for All. The Secretary General of the United Nations established the initiative (SE4ALL) and reported:

> *'5. Without access to modern energy services, it is not possible to achieve the Millennium Development Goals.*

*6. The availability of adequate, affordable and reliable energy services is essential for alleviating poverty, improving human welfare, raising living standards and, ultimately, achieving sustainable development. Adequate sustainable energy services are critical inputs in providing for human health, education, transport, telecommunications and water availability and sanitation.*

*7. Achieving sustainable energy for all involves the development of systems that support the optimal use of energy resources in an equitable and socially inclusive manner while minimizing environmental impacts. Integrated national and regional infrastructures for energy supply, efficient transmission and distribution systems and demand programmes that emphasize energy efficiency are necessary for sustainable energy systems'.*

### 3.1.3 The World Commission on Dams

For years, governments, civil society organisations, development officials, industry associations and private sector proponents have debated the costs and benefits of large dams. In recent years, the building of any dam has drawn environmental, social or political controversy. The 1990s saw an escalation of these conflicts. Proponents pointed to the social and economic development benefits that dams make possible, such as providing electric power, irrigation and water supply. Critics argued that project funding, whether public and/or private, systematically downplays the adverse environmental, social and economic impacts of dams and exaggerates the benefits. By the mid-1990s, an estimated 800,000 dams existed worldwide, with some 40-80 million people displaced and impoverished by them, and raging international controversy over the merits of further large water infrastructure projects.

In April 1997, IUCN and the World Bank sponsored a small but significant workshop in Gland, Switzerland. Representatives of diverse interests came together to discuss the highly controversial issues associated with large dams. To the surprise of participants, deep-seated differences on the development benefits of large dams did not prevent a consensus emerging that a new way forward was needed, which led to the formation of a multi-stakeholder World Commission on Dams (WCD).

The WCD was established in February 1998 and began its work under the chair of Professor Kader Asmal. Its 12 members were chosen through a global search process to reflect regional diversity, expertise and varying stakeholder perspectives. The Commission was independent, with members serving in individual capacities, and not as representatives of an institution or a country.

The Commission began by consolidating worldwide knowledge and experience with large dams. To give its analysis and conclusions a solid foundation, the WCD commissioned, organised or accepted:

- In-depth case studies of large dams on five continents, together with two country papers.
- A cross-check survey targeted at 150 large dams in 56 countries.
- 17 thematic reviews, grouped into five dimensions of the debate.
- Four regional consultations.
- Inputs submitted by interested individuals, groups and institutions.

Analysis of the knowledge base confirmed that while some dams have been successful, many large dam projects have fallen short of their physical and economic targets, have led to irreversible damage to river ecosystems, and have had serious negative effects within their communities.

In November 2000, the WCD Report, 'Dams and Development: A New Framework for Decision-Making', was published. The WCD Report has a number of elements: a summary report, a main report, and the knowledge base, all of which are available online (http://www.dams.org/) and on CD. Together, they present more than 4,000 pages of collective wisdom on dams.

The Commission proposed a way forward, characterised by:

- An approach based on the recognition of rights and the assessment of risks.
- Five core values:
    - Equity.
    - Efficiency.
    - Participatory decision-making.
    - Sustainability.
    - Accountability.
- Seven strategic priorities:
    - Gaining public acceptance.
    - Comprehensive options assessment.
    - Addressing existing dams.
    - Sustaining rivers and livelihoods.
    - Recognising entitlements and sharing benefits.
    - Ensuring compliance.
    - Sharing rivers for peace, development and security.
- Twenty-six guidelines for implementing the strategic priorities.

Following the fulfilling of its mandate, the Commission dissolved with the words:

'We have told our story. What happens next is up to you'.

### 3.1.4 The DDP and the Compendium

To maintain the momentum created by the WCD, and as a neutral entity to disseminate and facilitate a review of the WCD Report, through national and local multi-stakeholder dialogues, UNEP agreed to host a follow-up initiative called the Dams and Development Project (DDP). The DDP had four key elements:

- Promoting national, regional and global multi-stakeholder dialogues.
- Detailing non-prescriptive practical tools.
- Networking and communication.
- Disseminating information.

The objectives of the DDP's second and final phase (2005-2007) were to:

- Support multi-stakeholder dialogues at country, regional and global levels for improving decision-making on dams and their alternatives, with the aim of engaging all stakeholders, particularly governments.

- Produce non-prescriptive tools to help decision-makers, by drawing on all relevant existing criteria and guidelines for the planning and management of dams and their alternatives.

The outcome of the second objective was the publication 'A Compendium of Relevant Practices for Improved Decision-Making on Dams and their Alternatives'. The Compendium is an tool to assist policy makers, decision makers, professionals and other stakeholders in the planning and management of dams and their alternatives. It deals with a set of key environmental and social topics (Text Box 3.1), which were prioritised by the DDP process, and gives examples of relevant practices, which have actually been implemented.

**Text Box 3.1 Key Issues Dealt with by the Compendium**

- Identification of options (Chapter 2).
- Stakeholder participation (mechanisms) (Chapter 3).
- Social impact assessment and addressing outstanding social issues (Chapter 4).
- Compensation policy and benefit-sharing mechanisms (Chapter 5).
- Environmental management plans (Chapter 6).
- Compliance (Chapter 7).
- International policy on shared rivers (Chapter 8).

### 3.1.5 The hydropower thread

As the DDP process unfolded, the International Hydropower Association (IHA) launched its own initiative. The Association's accepted the WCD Report's core values but not all of its strategic priorities or guidelines. The 2004 IHA Sustainability Guidelines and the 2006 IHA Sustainability Assessment Protocol were published. These first attempts were dismissed by several international organisations as a biased view of the hydropower industry, and the documents failed to gain much credibility.

To its credit, the IHA, in 2008, launched a new initiative on the Protocol, which, like the WCD and DDP, worked through an international forum of stakeholders, as part of its governance system. The forum comprised representatives of organisations from diverse sectors, with varying views and policies on sustainability issues related to hydropower development and operation. The 14 Forum members included representatives of governments of developed and developing countries, commercial and development banks, social and environmental Non Governmental Organisations (NGOs), and the hydropower sector. After two-and-a-half years of work, the revised Protocol was published in 2011. The principles incorporated into the Protocol are provided in Text Box 3.2.

The Protocol is governed by the Hydropower Sustainability Assessment Council. A Charter, which sets out rules concerning the formation and decision-making of the Council, and Terms and Conditions for Use of the Protocol, was adopted in June 2011. These key documents are available on www.hydrosustainability.org.

**Text Box 3.2 Hydropower Sustainability Assessment Protocol Principles**

The Hydropower Sustainability Assessment Protocol is a sustainability assessment framework for hydropower development and operation. The principles incorporated into the Protocol are:

- Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.
- Sustainable development embodies reducing poverty, respecting human rights, changing unsustainable patterns of production and consumption, long-term economic viability, protecting and managing the natural resource base, and responsible environmental management.
- Sustainable development calls for considering synergies and trade-offs amongst economic, social and environmental values. This balance should be achieved and ensured in a transparent and accountable manner, taking advantage of expanding knowledge, multiple perspectives, and innovation.
- Social responsibility, transparency, and accountability are core sustainability principles.
- Hydropower, developed and managed sustainably, can provide national, regional, and local benefits, and has the potential to play an important role in enabling communities to meet sustainable development objectives.

The Protocol allows for the production of a sustainability profile for a project, through assessing its performance on certain criteria. To reflect the different stages of hydropower development, the Protocol includes four sections, each of which has been designed as a standalone document. Through an evaluation of basic and advanced expectations, the Early Stage tool may be used for risk assessment and initial dialogue, prior to advancing to detailed planning. The remaining three documents—Preparation, Implementation and Operation—set out a graded spectrum of practice, calibrated against statements of basic good practice and proven best practice. The graded performance within each sustainability topic also provides the opportunity to promote structured, continuous improvement.

Assessments rely on objective evidence to support a score for each topic, which is factual, reproducible, objective and verifiable. The system provides for accreditation by independent assessors. The Protocol will be most effective when embedded into business systems and processes. Assessment results may be used to inform decisions, to prioritize future work and/or to assist in external dialogue.

### 3.1.6 Water Alternatives: WCD + 10

In 2010, 'Water Alternatives', an on-line interdisciplinary journal, addressing the full range of issues that water raises in contemporary societies, published a special edition, styled WCD +10. Its purpose was to provide an opportunity, ten years after the WCD, to take stock of the evolution in thinking about the complex and diverse issues that still surround decisions about dams and development. In a review based on papers submitted, the editors extracted the following trends:

- Perspectives differ on the impact of the WCD Report and process.
- Water and energy demands continue to rise and drive dam development.
- Climate change is now a greater driver of hydropower expansion.
- New financiers are changing the loci and framework for decision-making processes.
- Negative consequences of dams on the environment and livelihoods of dam-affected communities remain critical issues.
- The quest for new decision-making tools and approaches continues, from assessment protocols to economic analyses.
- How can participation, compliance, accountability, and performance be ensured?
- Multi-Stakeholder Platforms (MSPs) continue to show promise for informing and shaping negotiated agreements that result in better sharing of the resources, benefits, and costs associated with dams.

The editors concluded that the papers demonstrated the need for a renewed multi-stakeholder dialogue at multiple levels. 'This would not be a redo of the WCD, but rather a rekindling and redesigning of processes and forums where mutual understanding, information-sharing, and norm-setting can occur'.

### 3.1.7 Mekong River Basin

The Mekong River Basin is being transformed in three dimensions: (i) the changes and challenges revolving around hydropower development, due to rapid economic growth in the GMS and higher price of fossil fuels; (ii) the river provides livelihoods to millions of people through forest and wetlands ecosystems, fisheries and rain-fed and irrigated agriculture; and (iii) no common, established governance and management system exists to deal with the impact of dams on the mainstream and tributaries, because it is a transnational river (Molle, Foran and Kakonen 2009).

The Basin has been jointly managed by the inter-governmental organization called the Mekong River Commission (MRC), whose mandate is to engage in water resources development in the so-called "Lower" Mekong part of the region—the Mekong River Basin in Cambodia, Laos, Thailand, and Vietnam. People call on the MRC for a variety of reasons: to be a social and environmental guardian of the basin; a platform for information exchanges; a knowledge producer, synthesiser and broker; investment facilitator; and convenor of multi-stakeholder processes, demonstrating high-quality deliberative practice (Dore and Kate 2009). The implementation of the MRC is led by a governing Council at the ministerial level, which meets once per year, and a Joint Committee (JC) of senior government officials, which meets formally twice per year (although increasing more frequently—and informally—as the need arises). The Council and JC are serviced by the MRC Secretariats (MRCS), which are responsible for implementing Council and JC decisions, and advising and providing technical and administrative support. The MRCS is currently located in both Vientiane, Laos and Phnom Penh,Cambodia.

Article 1 of the 1995 Mekong Agreement details the four countries' commitment to cooperate in all fields of sustainable development, utilization, management and conservation of the water and water-related resources of the Mekong River Basin. These include fields, such as irrigation, hydropower, navigation, flood control and fisheries. Since 1995, the MRC has been and remains the center of sustainable Mekong river basin development; however, recently the institution has been criticised by civil society and has significantly improved its working focus.

To assist its member states with common tools and frameworks, in 2006 the Asian Development Bank, the Mekong River Commission (MRC) and the World Wide Fund for Nature established a task force to drive an initiative on Environmental Considerations for Sustainable Hydropower Development (ECSHD). The purpose of the ECSHD was to develop tools to assist decision-making for sustainable hydropower development in the Mekong River Basin. The approach was similar to that of the IHA (described above) in that it aligned with the stages of the hydropower project cycle.

In 2010, ECSHD and partners published the Rapid Basin-Wide Hydropower Sustainability Assessment Tool (RSAT). RSAT was designed to target the most important issues for a basin-wide approach to sustainable hydropower development. In 2013 it is now being tested on proposed tributaries of the LMB countries—in Cambodia, the Sre Pok and Stung Pursat river basin, and Tonle Sap Lake; while Laos, Vietnam, and Thailand still waiting.

The primary aims of the assessment tool are:

- To provide a common basis for dialogue and collaboration on sustainable hydropower between key players.
- To highlight and prioritise areas of hydropower sustainability risk and opportunity in a particular basin or sub-basin for more detailed study.
- To identify capacity building needs in the basin.

The key themes are:

- Continual improvement.
- Basin-wide understanding and protection of social, cultural, socio-economic and environmental values
- Integration between basin planning and hydropower development regulatory and management frameworks.
- Co-operation between different countries sharing a river basin.
- Balance of social and environmental criteria with economic and technical criteria in the decision-making processes.
- Consistent approaches across a river basin.
- Informed participation of stakeholders in decision-making and broad community support.
- Climate change as a cross-cutting issue.
- The topics and criteria used in the assessment.

The MRC also formed the Initiative on Sustainable Hydropower (ISH), which is specifically focused on advancing regional cooperation for the sustainable management of the growing number of hydropower projects from a basin-wide perspective. Through the ISH, the MRC assists its member countries in relating decisions on hydropower management and development to basin-wide integrated water resources management perspectives.

**Text Box 3.3 Background – Key Aspects**

- The debate on large dams and hydropower can be traced over several decades through international initiatives and the resulting normative frameworks concerning environmental and social safeguards and human rights, including:
  - United Nations Conference on the Human Environment, 1972.
  - Brundtland Commission, 1987.
  - UN Conference on Environment and Development, 1992.
  - The Millennium Report, 2000.
  - World Summit on Sustainable Development, 2002.
  - The Rio +20 Conference, 2012.
- In 2000, the World Commission on Dams (WCD) proposed an approach to dams based on the recognition of rights and the assessment of risks, five core values, seven strategic priorities and twenty-six guidelines.
- The WCD initiative was continued by the UN (through UNEP - Dams and Development Project (UNEP-DDP)) as a neutral entity to disseminate the WCD Report, and to facilitate a review of its recommendations at national and local levels, through inclusive multi-stakeholder dialogues.
- The International Hydropower Association has achieved much consensus on its 2011 Hydropower Sustainability Assessment Protocol.

| | |
|---|---|
| Discussion topics | The WCD and DDP ended when they had achieved their mandates. Is there an argument for having a permanent institution to guide dams and development (for example, the International Hydropower Association)? |
| | In the world today, is there still room for the view that "if some people suffer, that is fine, provided that more people are benefitting"? |
| | Principle 15 of the Rio Declaration states: "*In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation*." How can this principle be applied to hydropower dams? |
| Exercises | Draw a time line of the most important events in the 'dams and development' dialogue. |
| | List large water infrastructure projects in your country that are controversial or have under-performed technically, economically, environmentally or socially. |

# 4 SOCIAL IMPACT ASSESSMENT

## 4.1 Introduction

| | |
|---|---|
| Purpose | The purpose of this session is to introduce participants to Social Impact Assessment. |
| Objectives | • To introduce the concept and value of Social Impact Assessment |
| | • To outline the sessions, during which Social Impact Assessment will be detailed |
| Preparatory reading | Taylor, C.N., Bryan, C.H. and Goodrich, C.G. (1995). Social Assessment: Theory, Process and Techniques. Second Edition. The Caxton Press, Christchurch, New Zealand |
| | Adams, William (2000) The Social Impact of Large Dams: Equity and Distributational Issues. A final report prepared for the World Commision on Dams: Cape Town 8018, South Africa. |
| | Burge, J. Rabel J (2004) The Concepts, Process and Methods of Social Impact Assessment. Social Ecology Press: Middleton, Wisconsin, USA. |
| | UNEP (2007). Dams and Development: A Compendium of Relevant Practices for Improved Decision-Making on Dams and their Alternatives. Section 4: Dealing with social aspects (Section 4.1 – Social impact assessment). www.unep.org/dams |

Social Impact Assessment (SIA) is a sub-field of the social sciences, which develops knowledge to support systematic appraisal of a project or policy, based on its impacts on people's and communities' environment and quality of life. It is a process of research, planning and managing social change or consequences (positive and negative, intended and unintended), arising from policies, plans, programmes and projects (Taylor, Bryan and Goodrich, 1995). SIA is one of the tools of Integrated Environmental Management (Text Box 4.1), focusing on the human element of development interventions. However, human elements cannot be examined and assessed in isolation from biophysical and economic dimensions. Together, these three dimensions, within a system of sound governance, contribute to attaining sustainability, and must be examined and assessed in an integrated manner. SIA is closely related to a variety of disciplines, such as cultural heritage, socio-economics, gender, politics, and resource utilisation. In particular, during the Environmental Impact Assessment (Text Box 4.2) process, SIA often runs in close association with public participation (Section 8). Therefore, by its nature, SIA is broadly encompassing and requires a team approach, covering several disciplines in an integrated manner.

**Text Box 4.1 Integrated Environmental Management**

Integrated Environmental Management (IEM) can be defined as a comprehensive philosophical framework for assessing and managing each phase of any action at any level (i.e. plan, policy, programme or project) that affects or interacts with the environment (defined as the human context of existence explicitly considering the biophysical, institutional and socioeconomic parts) which is universally applicable in society (Department of Environmental Affairs and Tourism (South Africa), 2004).

**Text Box 4.2 Environmental Impact Assessment**

An Environmental Impact Assessment (EIA) is a detailed study to determine the type and level of effects an existing facility is having, or a proposed project would have, on the environment (considered in its broadest context). Its objectives include (i) to help decide if the effects are acceptable or have to be reduced for continuation of the facility or proceeding with the proposed project, (ii) to design/implement appropriate monitoring, mitigation, and management measures, (iii) to propose acceptable alternatives, and (iv) to prepare an Environmental Impact Assessment Report (EIAR). The adequacy of an Environmental Impact Assessment is based on the extent to which the environmental impacts can be identified, evaluated, and mitigated. An Environmental Impact Assessment is a standard requirement where international agencies (such as the World Bank Group, Asian Development Bank, etc) are involved, and is critically important for projects requiring a major change in land use or those which are to be located in environmentally sensitive areas

(www.businessdictionary.com).

Social impacts refer to the effects on or consequences for individuals and communities from a proposed action, which alters the day-to-day way in which people live, work, play, relate to one another, organize to meet their needs, and generally exist as members of society.

The inter-organisational Committee on Principles and Guidelines for Social Impact Assessment defines social impacts as:

> The consequences to human populations of any public or private actions that alter the ways in which people live, work, play, relate to one another, organize to meet their needs and generally cope as members of society. The term also includes cultural impacts involving changes to the norms, values, and beliefs that guide and rationalize their cognition of themselves and their society (Burge and Rabel 2004).

Social impact assessments document and process a broad range of social, cultural, demographic and economic consequences for those who are likely to be affected by a proposed action. These assessments address all major stakeholders- individuals, groups, communities, and other affected sectors. To undertake a SIA, the assessor utilizes social science methods, supplemented with public involvement procedures, and in consultation with the affected population.

SIA provides guidance in managing social consequences arising from proposed or currently implemented policies or projects. The assessment helps decision-makers by providing information on the potential or actual consequences of their actions. Furthermore, the process helps avoid or minimize potentially adverse impacts and plan for the mitigation of unavoidable, negative impacts—which significantly increases the project or policy's potential success. In addition, SIA assists affected populations in understanding the consequences of others'

actions, and to formulate and articulate their own positions regarding proposed actions. A proper SIA will address the following questions:

- What would happen if a proposed action were to be implemented (Why? When? Where?)
- Who would be affected?
- Who would benefit, and who might lose?
- What would change if certain alternatives were implemented instead?
- How could adverse impacts be avoided or mitigated, and how could benefits be enhanced?

Development implies improvement in social conditions, as well as an increase in Gross Domestic Product (GDP). As a component in development planning, SIA provides a method for incorporating social factors, by identifying features of the social environment with the greatest relevance to (potential to affect or be affected by) a proposed project, policy, or program (see also Taylor, Bryan and Goodrich, 1995). In this regard, the benefit of SIAs accrue both to the project proponent (whether private sector or governmental) and to human communities.

In most developing countries, SIA must be undertaken to:

- Ensure an effective process: Ignoring social impacts at the start guarantees a proponent will spend a great deal of time in the future addressing issues in an adversarial setting.
- Develop programs that work. (SIA refine and improve proposals, provide inputs needed to implement and maintain their solutions, and identify the community infrastructures needed—all of which will improve rates of return.)
- Avoid unintended consequences. (Without SIA, certain impacts might not be discovered until after a decision has been made or a project is in place.)

Decision-makers and impacted communities must include a no-action alternative. For example, if a decision is made to allow open pit mining, the focus of the surrounding community could change from tourism to extraction (e.g. Tourists could be replaced by miners.)

To understand the likely impact of a proposed action and its alternative, both the public and decision-makers must ask the following questions:

- How is the affected community is organized? How do people communicate and interact? Are all social institutions present? Is the local government organized to accept changes?
- How does the community view and adapt to change? (An influx of migrant agricultural workers many not have any impact on a community, which has adapted to different populations in the past, but may provoke a major reaction in a community, where the population has been static for many years.) What has been the history of community response to social change?
- How does the community makes decisions? Which is seen as more important: stability or growth? Who makes decisions in the community? Is the infrastructure present to support the proposed action and/or alternative?

| **Box 4.3: The SIA helps the decision-maker, agency or proponents act, by:** |
|---|
| • Identifying opportunities to enhance social benefits and minimizing or reducing adverse |

social consequences.
- Identifying social issues and/or constraints, which may affect the acceptability of a plan.
- Helping to document the benefits and consequences of each alternative.
- Establishing monitoring procedures to ensure acceptability and viability as new issues emerge during implementation and operation.
- Reminding stakeholders that failing to consider the consequences of any action is dangerous.

SIA has become better defined over the past few decades. The process is one of incremental information-gathering to enable analysis and the projection of affects. Its purpose is to define actions—either to remedy negative impacts or to enhance benefits. In some countries, the word 'environment' is interpreted in its broadest context, comprising social, biophysical, economic, political, cultural, and governance dimensions; while in other countries, the interpretation is narrower, equating mainly to the biophysical elements of the environment. In such cases, the social environment is viewed separately. These interpretations are relevant as they lead to two different approaches to SIA. In the case of the former, SIA becomes a study within a larger EIA; while in the latter, the SIA takes on the proportions of an EIA[1]. The level and intensity of the SIA in each case are not comparable and can lead to different emphases on the outcomes.

It is important to note that, for the most part, SIAs deal with project-specific impacts on communities and people directly affected by proposed projects. SIAs are seldom applied on a wider scale (e.g. strategic or national). In such cases, development proponents usually commission economic assessments to understand and evaluate wider economic and societal benefits that may accrue from a proposed project. The outcomes of such assessments need to be read and understood alongside the outcomes of project-specific SIAs.

[1] In many instances Social Impact Assessment evolved around the Environmental Impact Assessment and, as such, the description and assessment of social impacts closely follow the conventions devised for Environmental Impact Assessment. However, a critical difference is that the social environment is adaptive, and mitigation sometimes means negative impacts can be transformed, with sufficient mitigation, to positive outcomes. However, the limit is resource capacity to implement mitigation.

| **Text Box 4.4 Introduction – Key Aspects** |
|---|
| • SIA is a systematic effort to identity, analyze, and evaluate social impacts of a proposed project or policy change on the individual, social groups within a community, or the entire community, in advance of a decision making process. Information derived from the SIA is intended to support the decision making process.<br>• SIA is a means of developing alternatives to a proposed course of action and determining the full range of benefits and consequences for each alternative.<br>• SIA increase knowledge on the part of the project proponent and affected community, putting residents in better positions to understand the broader implications of the proposed action.<br>• SIA includes a process to mitigate possible consequences to an affected community if the proposed action is accepted.<br>• SIA is one of many sustainability tools in the IEM tool box.<br>• SIA is closely related to other, diverse disciplines, including cultural heritage, socio-economics, gender, politics and resource utilisation. |

| | |
|---|---|
| Discussion topics | What is the social impact assessment process? |
| | Why is it necessary to consider the social environment when proposing and/or implementing large infrastructure projects? |
| | What do decision-makers need to know about social impact assessment? |
| | What are the benefits of an integrated approach, and how are these achieved? |
| Exercises | Identify projects from your own country where the social environment was not considered during planning and implementation. Elaborate on the consequences. |
| | Using a time line, describe how considering the social environment has gained recognition and importance over the past three decades. |

## 4.2 Normative Frameworks

| | |
|---|---|
| Purpose | The purpose of this session is to introduce participants to normative frameworks[2] that govern and/or underpin Social Impact Assessment. |
| Objectives | ❑ To introduce international examples of normative frameworks |
| | ❑ To outline central themes of normative frameworks |
| Preparatory reading | IFC (2006). Policy and Performance Standards on Social and Envi- |

[2] A normative framework refers to a 'formal standard or prescription' that guides processes, activities and the like. This includes legislation, policies, regulations, etc.

| | |
|---|---|
| | ronmental Sustainability. www.ifc.org/enviro |
| | IFC (2007). Guidance Notes: Performance Standards on Social and Environmental Sustainability. www.ifc.org/enviro |

There are a limited number of normative frameworks that deal exclusively and specifically with SIA; however, SIA is implied in many international frameworks (Table 4.1). In addition, SIA is often guided by country-specific policies and national legislation (overarching national policies or policies housed in line-function departments), as well as provincial/state/district/local governments (again, as overarching policies or individual policies housed in different departments). Examples are provided in Table 4.2.

In addition, following the various Earth Summits and other global social and environmental initiatives, international corporations (e.g., industry, mining and power generation) apply elements of SIA in their activities. Similarly, Non-Governmental Organisations, aid agencies, parastatals (various), National Government Funding Agencies (various), and Professional Organisations/Associations (various) also apply normative frameworks to their activities, including those that cover SIA or elements of SIA.

### 4.2.1 Central messages of normative frameworks

Some of the central messages[3] relevant to SIA within normative frameworks are as follows:

- The importance of considering social and socio-economic environments (i.e. people, their livelihood strategies and their economic activities) when planning, implementing, operating and maintaining, and/or decommissioning projects.
- The importance of fully understanding of the impacted social and socio-economic environments early in the project lifecycle.
- Baseline social and socio-economic conditions should be surveyed, established and understood prior to project intervention. In addition to helping understand social and socio-economic environments, baselines also serve as yardstick, against which to measure project effects and mitigation actions.
- Alternatives must be considered in the same level of detail. Avoiding or minimizing impacts are preferred wherever possible.
- For each alternative, indirect, downstream and cumulative impacts should be identified and assessed.
- The involvement/participation of potentially affected communities is important in:
    - o Understanding and quantifying the potential effects of a project.
    - o The planning and implementing of mitigation measures, such as resettlement.
- Considering that resettlement (including economic displacement) is probably the single most important negative impact on the social environment, resettlement programmes should address not only the directly affected resettlers but also the population in host areas. Furthermore, resettlement programmes should be undertaken within a development paradigm to promote sustainable livelihoods (Section 5).
- After the completion of a project (usually its construction), affected peoples' social and socio-economic circumstances should be at least the same as their baseline conditions—but preferably improved.

[3] This is not a summary or treatise of central messages; rather, important ones have been extracted for purposes of illustrating how Social Impact Assessment links to the normative frameworks.

- As with the management of negative impacts, optimizating a project's benefits for its wider community should also be conceptualised, planned and implemented in a sustainable manner.
- The ability of a developer (project proponent) to mobilise necessary resources to manage negative impacts and optimise benefits should be appraised and, where relevant, any constraints or limitations addressed.
- Mitigation measures for potential negative impacts, as well as general project management, should be monitored during and post project implementation to determine whether or not desired outcomes are being achieved. If not, steps should be taken to remedy the course of action.

Within these normative frameworks, it is important to understand the varying places and intensities at which SIA can be applied for different initiatives (e.g. large vs. small, complex vs. simple, national vs. international, single or shared water courses, developing economies vs. developed economies, etc.). Indeed, specific country characterisation often result in the adaptation of normative frameworks .

Table 4.1 Sample list of international normative frameworks that govern Social Impact Assessment

| Organisation | Normative Frameworks | References | Notes |
|---|---|---|---|
| African Development Bank | • Environmental and Social Assessment Procedures (2001)<br>• OS1. Operational Safeguard on Environmental and Social Assessment, Draft (in Integrated Safeguards Systems Working Progress) 2012<br>• Involuntary Resettlement Policy<br>• OS 2. Operational Safeguard on Involuntary Resettlement: Land Acquisition, Population Displacement and Compensation, Draft (in Integrated Safeguards Systems Working Progress), 2012<br>• Handbook on Stakeholder Consultation and Participation in ADB Operations (2001)<br>• Policy on Environment<br>• Strategic Impact Assessment Guidelines<br>• Integrated Environmental and Social Impact Assessment Guidelines (2003) | • www.afdb.org | • The Integrated Safeguards Systems Working Progress presents recommendations on the development of an Integrated Safeguards System, which builds on its existing set of cross-cutting and sectoral policies and its current Environmental and Social Assessment Procedures. |
| Asian Development Bank | • Environment Policy (2002)<br>• Policy on Indigenous Peoples (1998)<br>• Involuntary Resettlement (1995)<br>• Safeguard Policy Statement (2009) | • www.adb.org | • The Safeguard Policy Statement (2009) provides updates to three policy safeguards. |
| European Bank for Reconstruction and Development | • Public Information Policy (2011)<br>• Environmental and Social Policy (2008) | • www.ebrd.com | • The Public Information Policy was updated in 2011.<br>• The Environmental and Social Policy (2008) is a revision of the Environmental Policy (2003), done to enhance commitments to social issues and good governance. |
| European Union | • EU Council Directive 85/337/EEC – Environmental Impact Assessment (1985)<br>• EU Council Directive 2001/42/EC – Strategic Environmental Assessment Directive<br>• EU Guidelines for Assessment of Indirect and Cumulative Impact | • www.ec.europa.eu | |

| Organisation | Normative Frameworks | References | Notes |
|---|---|---|---|
| | • Convention of Environmental Impact Assessment in A Trans-boundary Context (1991) | | |
| Equator Principles | • An Industry Approach for Financial Institutions in Determining, Assessing and Managing Environmental and Social Risk in Project Financing (June 2003)<br>• A Financial Industry Benchmark for Determining, Assessing and Managing Social and Environmental Risk in Project Financing (July 2006) | • www.equator-principles.com<br>• http://www.equator-principles.com/index.php/the-eps | • The Equator Principles are based on the IFC Performance Standards. As of the 1st January 2012, the revised IFC Performance Standards also took effect for the Equator Principles Association Members. |
| Inter-American Development Bank | • Inter-American Development Bank Involuntary Resettlement: Operational Policy 7-10<br>• Inter-American Development Bank Environment and Safeguards Compliance Policy (2006)<br>• Private Sector Department Environmental and Social Guideline (2004) | • www.iadb.org | |
| International Association for Impact Assessment | • Social Impact Assessment: International Principles (May 2003) | • Vanclay, F. (2003)<br>• www.iaia.org | |
| United Nations | • Espoo Convention (1997)<br>• Guidelines on Environmental Due Diligence of Renewable Energy Projects | • www.un.org | • Espoo Convention has been amended twice, both times in 2004, but neither amendment is expected to enter into force for some time. |
| World Bank Group<br>(World Bank, International Finance Corporation and Multilateral Investment Guarantee Agency) | • Operation Policy 4.01 – Environmental Assessment (updated 2011, revised April 2012)<br>• Operation Policy 4.12 – Involuntary Resettlement (revised 2011)<br>• Operational Directive 4.20 – Indigenous Peoples<br>• Operation Policy 4.11 – Physical Cultural Resources (updated March 2007)<br>• Policy on Social and Environmental Sustainability (2006)<br>• IFC Performance Standards on Environmental and Social Sustainability (effective January 2012)<br>– IFC Performance Standard 1 – Assessment and Management of Social and Environmental Risks and Impacts (2012)<br>– IFC Performance Standard 2: Labor and Working Conditions (2012) | • www.worldbank.org<br>• www.ifc.org<br>• www.miga.org | • OP 4.01 Updated in December 2011 to clarify the use of framework instruments and to add strategic environmental and social assessment (SESA) to the list of available instruments.<br><br>It was previously revised in 2007 to reflect the issuance of OP/BP 8.00, Rapid Response to Crises and Emergencies, and in August 2004 to ensure consistency with the requirements of OP/BP 8.60<br>• OP 4.12 was updated in February |

| Organisation | Normative Frameworks | References | Notes |
|---|---|---|---|
| | – IFC Performance Standard 3: Resource Efficiency and Pollution Prevention (2012)<br>– IFC Performance Standard 4: Community Health, Safety, and Security (2012)<br>– IFC Performance Standard 5 – Land Acquisition and Involuntary Resettlement (2012)<br>– IFC Performance Standard 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources (2012)<br>– IFC Performance Standard 7: Indigenous Peoples (2012)<br>– IFC Performance Standard 8: Cultural Heritage (2012)<br>• Bank Policy 17.50 – Public Disclosure | | 2011 to clarify the Use of Escrow Accounts in order to Help Reduce Delays in Implementation of Resettlement, and Clarification of Funding of Grievance Mechanisms. It was also updated in 2007 and 2004 for the same reasons as OP 4.01<br>• OP 4.11 was updated in 2007 to reflect issuance of OP/BP 8.00, Rapid Response to Crises and Emergencies<br>• The IFC Performance Standards were updated in 2012. |

Table 4.2 Sample list of country-specific normative frameworks that govern Social Impact Assessment

| Organisation | Normative Frameworks | References |
|---|---|---|
| Australia | • Commonwealth Environmental Protection and Biodiversity Conservation Act (1999)<br>• Queensland Environmental Protection Act (1994)<br>• Queensland Heritage Act (1992)<br>• Integrated Planning Act (1997)<br>• Holroyd City (2002) (How to Complete a Social Impact Assessment)<br>• Holroyd City (2004) (Social Impact Assessment Policy for Development Applications) | • www.deh.gov.au/epbc/index.html<br>• www.legislation.qld.gov.au<br>• www.randwick.nsw.gov.au/attachments/SIAguidelines30062006.pdf<br>• www.holroyd.nsw.gov.au/html/cfs/policies/siapolicy.pdf |
| Brazil | • Brazilian National Environment Policy Act (Law 6938/81) | • Cited in the Campos Novos Hydroelectric Power Project – Environmental and Social Management Report. Inter-American Development Bank. (2004) |
| Canada | • Canadian Environmental Assessment Act (1992)<br>• British Columbia Environmental Assessment Act (1995) | • http://laws.justice.gc.ca |
| China | • Environmental Protection Law of the People's Republic of China (1989) | • http://www.china.org.cn<br>• http://www.zhb.gov.cn |
| Iran | • Article 50 of the Constitution of the Islamic Republic of Iran<br>• Land Acquisition Law (1980)<br>• Law on Economical, Cultural, Societal Development (1989)<br>• Law for Environmental Protection and Development (1991) | • www.parstimes.com/law/iran<br>• Laws cited in Alborz Integrated Land and Water Management Project - Supplementary Environmental and Social Assessment: Executive Summary. Mahab Ghodss Consulting Engineers. (2004) |
| Nepal | • Environment Protection Act (1996)<br>• Water Resources Act (1992)<br>• Nepal Environmental Policy and Action Plan (1993)<br>• Environmental Protection Rule (1997) (as amended in 1999)<br>• National Environmental Impact Assessment Guidelines (1993)<br>• Guide to Environmental Assessment in Nepal (2002)<br>• Acquisition, Compensation and Rehabilitation Plan | • Cited in the Upgrading Feasibility Study on Upper Seti (Damauli) Storage Hydroelectric Project. NEA. (2004) |

| Organisation | Normative Frameworks | References |
|---|---|---|
| | (ACRP) (Nepal) (1999) | |
| Niger | • Niger “Code de l'Environnement” | • http://www.ibimet.cnr.it/Case/den/Documents/Code_environment.pdf |
| Poland | • Polish Environmental Protection Law (2001)<br>• Polish Historical Conservation and Protection Act (2003) | • Law and Act cited in the ODRA River Basin Flood Protection Project Environmental Assessment. Regional Water Board Gliwice, Government of Poland. (2005) |
| Sierra Leone | • National Environmental Policy (1990)<br>• Environment Protection Act (2000) | • Policy and Act cited in the Bumbuna Hydroelectric Project Environmental Impact Assessment: Draft Final Report. Nippon Koei UK. (2005) |
| South Africa | • Constitution of the Republic of South Africa Act (Act 108 of 1996) as amended by the Constitution of Republic of South Africa Amendment Act (Act 35 of 1997)<br>• National Environmental Management Act (Act 107 of 1998)<br>• Environment Conservation Act (Act 73 of 1989)<br>• National Water Act (Act 36 of 1998)<br>• National Heritage Resources Act (Act 25 of 1999) | • www.info.gov.za/documents/constitution/index.htm<br>• www.info.gov.za/gazette/acts/1998/a107-98.pdf<br>• www.acts.co.za/enviro<br>• www.info.gov.za/gazette/acts/1998/a36-98<br>• www.dac.gov.za/acts/a25-99.pdf |
| Swaziland | • The Swaziland Environment Authority Act, 1992 | ❑ www.ecs.co.sz/leg_sd_files/env_leg_sd_seaact.htm |
| Vietnam | • Law on Environmental Protection (1993)<br>• Decree on Providing Guidance for the Implementation of the Law on Environmental Protection (1994)<br>• Guidelines for Resettlement and Rehabilitation in Vietnam | Cited in:<br>• Bladh, U. & Nilsson, E-L. (2005). How to Plan for Involuntary Resettlement? The Case of the Son La Hydroelectric Power Project in Vietnam<br>• United Nations Development Programme. (2000). Gam River Dam Preliminary Environmental Impact Assessment. (http://www.undp.org.vn/projects/parc/docs/bn6-eia.pdf) |
| Thailand | • There are no Acts directed but related to SIA and Public participation, as follows.<br>• The Thai Constitution B.E. 2550 (2007 has provisions affirming rights and freedoms of the people in the subject of participation in the management of natural resources and environment, which includes 3 perspectives.)<br>• The right of access to date and information.<br>• The right of participation by the people.<br>• The right of access to the justice system. | • Ministry of Public Health<br>• Ministry of Natural Resources and Environment<br>• Ministry of Natural Resources and Environment<br>• Ministry of Interior<br>• Office of the Prime Minister Regulations<br>• Ministry of Justice, except NEQA in MONRE<br>Cited in : |

| Organisation | Normative Frameworks | References |
|---|---|---|
| | • National Health Act of 2007 affirms the people's right to live in a good environment.<br>• National Environmental Quality Act B.E. 2535 (1992) has a provision on the access to environmental information in general terms (section 6); however, no specific prescription exists, which supports access to such information by the public.<br>• National Environmental Quality Act B.E. 2535 (1992) has announced projects (their type and size) that have to perform EIA study. Social impact assessment, including public involvement, are conducted in conjunction with EIA process.<br>• The Administrative Procedures Act B.E. 2539 (1996) sets out general and transparent rules and procedures in decision making processes for all government agencies, by identifying the steps involved in such decision-making and identify the individuals who can participate.<br>• Public Hearings B.E. 2548 (2005) provide an opportunity for the public to participate in decision making processes involving state projects.<br>• Laws related to accessing the judicial system, in which penalties are prescribed for environment violations, for examples:<br>• Civil Procedure Code, the Act on Establishment of the Administrative Courts and Administrative Court Procedures B.E. 2542 (1999),<br>• National Environmental Quality Act B.E. 2535 (1992),<br>• Criminal Code | Synthesis report on "Good Environmental Governance:<br>Public Participation Indicators for Thailand's Sustainable Development" Third Assessment, by The Assessment Initiative Network of 4 Non- Government Organizations;<br>Thailand Environment Institute<br>King Prajadhipok's Institute<br>Sustainable Development Foundation<br>Project Policy Strategy on Tropical Resource Base, under the National Human Rights Commission of Thailand.<br>Supported by United Kingdom Foreign & Commonwealth Office<br>and Ford Foundation. |
| Cambodia | • National law on Environmental Protection and Natural Resource Management (1996) mentions an "Environmental Endowment Fund (EEF)" for industry, agriculture, tourist and infrastructure projects that may contribute to environmental protection and social development, based on Project Concession Agreements.<br>• The national Sub-Decree on EIA (1999), complementing | Ministry of Enviornment (MOE)<br>Ministry of Environment (MOE)<br>Ministry of Economic<br>Ministry of Economic and Finance<br><br>Ministry of Land, Construction and Urban Planning |

| Organisation | Normative Frameworks | References |
|---|---|---|
| | the Law on Environmental Protection and Natural Resource Management.<br>• Ministry of Economic and Finance (Prakas No.961) dated 6 April 2000: disallows any payment to be drawn from the national budget for structures and other assets, located with the ROW (Right of Way)<br>• Sub-decree No. 19 ANK/BK (19 March 2003) deals with social land concession.<br>• Law of Expropriation 2010, by the Ministry of Economic and Finance.<br>• Decision No.13 and Prakas No.098, addressing involuntary resettlement in Cambodia. Decision No.13, issued on 18 March 1997, (more active since 1999) to establish IRC in dealing with resettlement and financing. | Ministry of Economic and Finance<br>Ministry of Economic and Finance (MEF) |
| Lao PDR | • Water and Water Resources Law (1996)<br>• Environmental Protection Law (1999)<br>• Land Law (2003)<br>• Decree 192/PM on Compensation and Resettlement of the Development Project (2005)<br>• Technical guideline on Compensation and Resettlement in the Development project (2005)<br>• Decree 112/PM on Environmental Impact Assessment (2010)<br>• National Policies on Environment and Social Sustainability of Hydropower sector in Lao PDR (2011) | National Assembly of Lao PDR<br>Prime Ministry Office of Lao PDR<br>Ministry of Energy and Mines |

- Indirect, downstream and cumulative impacts should be identified and assessed for each alternative.
- The involvement/participation of potentially affected communities is important in:
    - Understanding and quantifying the potential affects of a project.
    - The planning and implementing of mitigation measures, such as resettlement.
- Considering that resettlement (including economic displacement) is probably the single most important negative impact on the social environment, resettlement programmes should address not only directly affected resettlers but also potentially affected host populations. Furthermore, resettlement programmes should be undertaken within a development paradigm to promote sustainable livelihoods (Section 5).
- After the completion of a project (usually of a project's construction), affected peoples' social and socio-economic circumstances should be at least the same, but preferably improved, when compared to their baseline conditions.
- As with the management of negative impacts, the optimization of benefits for the wider community within which a project is undertaken should also be conceptualised, planned and implemented in a sustainable manner.
- The ability of the development proponent to mobilise the necessary resources to manage negative impacts and optimise benefits should be appraised and, if relevant, any management constraints should be addressed.
- Mitigation measures and general management should be monitored during and post project implementation to ensure desired outcomes are being achieved. If not, remedial interventions should be taken.

Importantly, within these normative frameworks, an understanding should exist of the different levels and intensities at which SIA is applied for different initiatives. Types of initiatives could include large vs. small, complex vs. simple, national vs. international, single or shared water courses, and developing economies vs. developed economies. Indeed, specific country characteristics often result in the adaptation of normative frameworks.

| **Text Box 4.4 Normative Frameworks – Key Aspects** |
|---|
| • A limited number of normative frameworks exist, which deal exclusively and specifically with Social Impact Assessment.<br>• Social Impact Assessment is captured within many international frameworks (funding agencies, associations, non-governmental organisations, etc.) and is often guided by country-specific policies and legislation of national, provincial, state, district and local governments.<br>• Central messages arising from normative frameworks emphasise engaging affected populations, understanding social environments that are likely to be affected by a project, projecting affects, impact avoidance through the consideration of alternatives, and formulating comprehensive plans to deal with negative affects and to optimise benefits.<br>• A developmental approach is advocated, with the goal of affected people being better off than before the intervention.<br>• On-going monitoring and evaluation are necessary to ensure that the desired outcomes are being achieved and, if not, remedial measures should be taken. |

| | |
|---|---|
| Discussion topics | What country-specific normative frameworks exist in your country, and how do these align with the central messages arising from the international normative frameworks? |
| | How can existing normative frameworks be improved to give greater assurance to project-affected people that their impacts will be adequately mitigated and that their livelihoods will be restored and improved? |
| Exercises | Is it feasible and practical in emerging economies to strive to improve livelihoods? |

## 4.3 Social Impact Assessment and the Project Life Cycle

| | |
|---|---|
| Purpose | The purpose of this session is to introduce participants to the application of Social Impact Assessment throughout the project life cycle. |
| Objectives | • To illustrate the application of Social Impact Assessment at each stage of the project life cycle |
| Preparatory reading | UNEP (2007). Dams and Development: A Compendium of Relevant Practices for Improved Decision-Making on Dams and their Alternatives. Section 4: Dealing with social aspects (Section 4.1 – Social impact assessment). www.unep.org/dams |
| | ACER (Africa) Environmental Management Consultants (2007) Dams and Development Project: Compendium of Relevant Practices: Social Impact Assements of Affected People. A final report prepared for United Nations Enviornment Programme-Dams and Development Project. |

### 4.3.1 Introduction to SIA in project life cycle

Project development goes through a series of stages, consisting of planning, implementation and construction, operation and maintenance, abandonment or decommission. Social impacts will be different at each stage. The case study from Thailand shows that not all social impacts will occur at each stage.

#### 4.3.1.1 Planning/policy development

Planning development refers to all activity that takes place a project's visualization to its construction/ implementation. Development includes project design, revision, public comment, licensing, evaluating alternatives, and the decision to go ahead. Social impacts begin the day the action is proposed and can be measured from that point. Social assessors must recognize the importance of local or national social constructions of reality, which begin during the earliest of the four stages—the planning/policy development stage. We often assume that no impacts occur until Stage 2 (construction/implementation); however, real, measurable, and often significant effects on the human environment can begin to take place as soon as there are changes in social or economic conditions. From the time of the earliest announcement of a pending policy change or rumor about a project, both hopes and hostilities can begin to mount; speculators can lock up potentially important properties, politicians can maneuver for position, and interest groups can form or redirect their energies. These changes occur by merely introducing new information into a community or region.

#### 4.3.1.2 Construction/Implementation

The construction/implementation stage begins when a decision happens, a permit is issued, or a law or regulation is enacted. For typical construction projects, initial stages involve clearing land, building access roads, developing utilities, etc. Displacement and relocation of people, if necessary, also occurs during this phase. Depending on the scale of the project, the buildup of a migrant construction work force also may occur**.** If significant immigration

occurs, new residents may strain community infrastructure and create social stresses, due to changing patterns of interaction. Communities may have difficulties responding to increased demands on schools, health facilities, housing and other social services. Further stresses may arise from resentment between newcomers and long-time residents, due to sudden increases in the prices for housing and local services—even by increased uncertainty about the future. When new policies are implemented, local economies and organizations may change, and old behaviors could be replaced by new ways of relating to the environment and its resources.

#### 4.3.1.3 Operation/Maintenance

The operation/maintenance stage occurs after the construction is complete or the policy is fully operational. In many cases, this stage will require fewer workers than construction/implementation. If operations continue at a relatively stable level for an extended period of time, effects can be the most beneficial of any stage. Communities seeking industrial development will often focus on operation and maintenance, because of the long-term economic benefits that often follow. It is also during this stage that communities adapt to new social and economic conditions; accommodation often takes place; and stable populations, quality infrastructure, and employment opportunities can be realized.

#### 4.3.1.4 Abandonment/Decommissioning

Abandonment/decommissioning begins when a proposal is made for a project or policy, in which associated activity will cease at some time in the future. As in the planning stage, the social impacts of decommissioning begin when the intent to close down is announced. The community or region must again adapt—but this time to a loss. At times this means the loss of an economic base as a business closes its doors. Disruptions to a community can be lessened (at least altered) if one type of worker is replaced by another. This was the case in Washington State's Hanford Facility, where nuclear production facilities have been closed down, but employment has increased as environmental cleanup specialists have been hired to help deal with contamination. In other cases, disruption may be exacerbated if the community is not only losing its present economic base, but has lost the capacity to return to a former economic base. Morgan City, Louisiana, the self-proclaimed "shrimp capital of the world" in the 1950's is such an example. During the 1960's and 1970's, Morgan City shifted to offshore oil development. When oil prices collapsed in the 1980's, the community found it could not return to the shrimp industry, because shrimp-processing facilities had closed down, and most of the shrimp boats had been allowed to decay or had left the area.

As with any environmental investigation, a lifecycle approach should be adopted for SIA. In this regard, it is crucial that the SIA commences as early as practically possible and continue throughout the lifecycle of a project—acknowledging that approaches and activities will differ at different stages. A generalised impression is provided in Table 4.3.

**Text Box 4.5 SIA and the Project Lifecycle – Key Aspects**

- Social Impact Assessment should be applied at each stage of the project lifecycle, adapting to different approaches and activities, as well as to varying levels of detail and confidence.
- The earliest possible start to SIA, within the project lifecycle, is recommended.

| | |
|---|---|
| Discussion topics | To what level of detail should a SIA practitioner assess the social environment at each stage of the project lifecycle? |
| | Define a ‘red flag issue’ and ‘fatal flaw’ in the context of the social environment of project-affected people. |
| Exercises | Develop a simple risk assessment matrix that can be applied at each stage of the project lifecycle to assess social risks at varying levels of confidence. |

Table 4.3 Generalised impression of Social Impact Assessment and the project lifecycle

| **Stage in Project Cycle** | **Key Social Impact Assessment Features** | **Outputs** |
|---|---|---|
| Policy<br>Strategic Planning<br>River Basin Planning | The Social Impact Assessment process undertaken at these stages is essentially the same as it would be at project-specific level. However, reliance on higher-order information, addressing higher order decision-making needs would exist. | Key outputs at a macro level include the identification of alternatives, the identification of key social issues, and a first order assessment of impacts and their management. |
| Project Planning | | |
| Conceptualisation | Conceptual input, based on past experience and professional opinion of Social Impact Assessment practitioner(s) | Identification of possible key issues, red flags, and fatal flaws, associated with different conceptual options |
| Pre-Feasibility | Desk-top study and analysis | Confirmation of key issues and red flags, at a better level of assurance |
| Feasibility | Desk-top and field studies, interpretation, analysis, integration, projection of affects, and management actions | Comprehensive Social Assessment Report, covering all social aspects related to particular development options |
| Design | Intensive, iterative process of avoiding, minimising and/or managing social affects. Holistic and integrated approach that results in the formulation of management plans (to manage negative affects, e.g. a resettlement action plan, and benefits, e.g. a social development plan) | Socially friendly/acceptable designs, and management plans to be implemented during construction |

| | | |
|---|---|---|
| Implementation | | |
| Construction<br>Commissioning | Hands-on, in-field implementation of plans | Restoration of livelihood strategies (within a development paradigm) of people negatively affected by development. Realisation of benefits. Monitor, review and evaluate, and make changes as indicated by outcomes |
| Operation | Monitoring, auditing and evaluation | Continued restoration of livelihood strategies, with additional or new mitigation/management actions as indicated by monitoring, auditing and evaluation outcomes |
| Decommissioning | | |
| Closure | The whole Social Impact Assessment process should recommence for decommissioning, closure and the management of residual impacts. | Comprehensive Social Assessment Report covering all social aspects related to decommissioning and closure |
| Residual | Hands-on, in-field implementation of plans | Restoration of livelihood strategies (within a development paradigm) for people negatively affected by decommissioning, closure and residual impacts. Realisation of benefits. Monitor, review and evaluate, and make changes as indicated by outcomes. |

## 4.4 Social Impact Assessment Process and Constituent Elements

| | |
|---|---|
| Purpose | The purpose of this session is to introduce to participants the process of undertaking a Social Impact Assessment. |
| Objectives | • In a step-by-step manner, to illustrate the Social Impact Assessment process and its constituent elements |
| | • To provide examples of some of the tools used during the undertaking of a Social Impact Assessment |
| Preparatory reading | Taylor, C.N., Bryan, C.H. and Goodrich, C.G. (1995). Social Assessment: Theory, Process and Techniques. Second Edition. The Caxton Press, Christchurch, New Zealand |
| | Vanclay, F. (2003). Social Impact Assessment International Principles. International Association for Impact Assessment Special Publication Series Number 2 |
| | Burge, J. Rabel J. 2004. The Concepts, Process and Methods of Social Impact Assessment. Social Ecology Press: Middleton, Wisconsin, USA. |
| | IFC. (2002). Handbook for Preparing a Resettlement Action Plan. IFC: Environment and Social Development Department. The World Bank Group, Washington, USA |
| | www.iap2.org/associations/4748/files/foundations-bro.pdf |

### 4.4.1 Introduction

The goals of the SIA process is to contribute to making Policies, Plans, Programs and Projects (PPPP's) more sound and sustainable by ensuring that selected options fit the individuals and communities served and affected. SIA helps ensure effectiveness by increasing support and tailoring institutional arrangements to the local culture, as well as make PPPP's more inclusive by involving not only selected stakeholders but the larger, more diverse communities (Burge and Rabel 2004).

In some countries of the Mekong, SIA are often combined with EIA. The case from Lao PDR shows that all large hydropower projects must produce a full Environment Impact Assessment (EIA) report and Environment Management and Monitoring Plan (EMMP), Social Management and Monitoring Plan (SMMP), according to the Environmental Protection Law of 1999, and the Environmental Impact Assessment (EIA) Decree No. 112 of 2010. This means a project developer has to:

- Comply with the scope of the study and the terms of references approved by the Water Resources and Environment Administration;
- Collect information on the general situation of an investment project, such as its physical, biological and socio-economic aspects—from sectors and local administration, or by conducting field survey and consultation with the affected people, at the village, district, provincial or capital levels;

- Carry out studies to determine direct and indirect impacts of a project on residents living around the project site, with particular attention to individuals' health, loss of assets and residences, living conditions, and usage of natural resources, as well as other impacts on soil, water, climate, forests, and biodiversity; architectural and cultural heritages and crafts. Incorporate all findings into a report.
- In collaboration with local authorities and departments, organize dissemination meetings at the village level to explain the general situation of the project, including its benefits, and any impacts on the environment and society, which may arise from the investment. Explain measures to prevent and minimize negative impacts, and incorporate any comments and opinions given during the meetings into the report;
- Prepare a report on EMMP, and social management and monitoring plan (SMMP) which includes an assessment of impacts on health and health management measures, and present this report to affected people before submitting it for government approval.

The approach and methodology for SIA vary, depending on its purpose and application. However, a generalised process involves the following:

- Characterisation of the social environment, and definition of boundaries.
- Understanding of the intervention (whether policy, plan, programme or project) to enable a projection effects.
- Estimating the severity of effects, and corresponding management actions—either to remedy negative aspects or to enhance benefits.
- Active management of social change (with review and feedback loops to enable changes if a need is indicated).
- On-going monitoring (post-construction, i.e. during operation) to determine whether or not the desired outcomes have been achieved.
- Evaluation (at an agreed point in the project life-cycle) to inform future initiatives.

Specific elements that characterise SIA, and which lead to tasks that need to be carried out (in varying degrees of intensity) in a SIA, are as follows:

- Public involvement/participation
- The identification and consideration of alternatives
- Profiling of baseline conditions
- Scoping
- Projection of estimated effects
  - Prediction and evaluation of responses to impacts
  - Mitigation of negative impacts and the optimisation of benefits
  - Assessment of indirect and cumulative impacts
- Monitoring, auditing and evaluation

### 4.4.2 Public involvement/participation

Public involvement/participation aims to provide a process of improved decision-making, whereby interested and affected parties, technical specialists, authorities, and the development proponent work together to produce better decisions than if they had worked independently. Public involvement/participation is defined by the International Association of Public Participation (IAP2) as "any process that involves the public in problem-solving or decision-making and that uses public input to make better decisions" (www.iap2.org/associations/4748/files/foundations-bro.pdf).

In terms of relevant practice, IAP2 has developed a set of core values crossing national, cultural and religious boundaries, which aim to "help make better decisions which reflect the interests and concerns of potentially affected people and entities" (www.iap2.org/associations/4748/files/foundations-bro.pdf) as follows:

- The public should have a say in decisions about actions that affect their lives.
- Public participation includes the promise that the public's contribution will influence the decision.
- The public participation process communicates the interests and meets the process needs of participants.
- The public participation process actively seeks out and facilitates the involvement of those potentially affected.
- The public participation process involves participants in defining how they participate.
- The public participation process provides participants with the information they need to participate in a meaningful way.
- The public participation process communicates to participants how their input affected the decision (www.iap2.org/associations/4748/files/foundations-bro.pdf).

In addition to the IAP2 core values, other principles of relevant practice can be applied to public involvement/participation, ensuring that all participants are fairly heard and their views considered. These principles also ensure the process itself is not unjustly attacked or delayed. From experience in various projects (covering various sectors, i.e. not just water resource development and/or hydropower) in South and Southern Africa, the following apply:

- Public involvement/participation is founded on transparency, honesty and the integrity of all persons involved in the process. To assist, all role-players should agree on roles, rights and responsibilities early in any public involvement/participation process.
- Consultation should be inclusive (i.e. should take place within all sectors of society, and afford a broad range of stakeholders the opportunity to become involved, bearing in mind that it may not be practically possible to personally consult with every individual in a project area).
- The opportunity to comment should be announced in various ways over a period of time (for example, by way of letters addressed to stakeholders personally, advertisements, documents left in public places, radio announcements, and personal visits to vulnerable individuals and/or groups).
- Information should be easily accessible and sufficient to allow meaningful contributions. (Information should also be in a language that stakeholders can understand and written or presented in a non-technical way.).
- Opportunities for involvement/participation should be afforded according to the ability and interest level of different stakeholders (highly technical documents for technically orientated people; and simplified versions for lay people).
- Information should be presented in different ways to facilitate assimilation (for example, by way of discussion documents, presentations at meetings and workshops, visual displays, and print and broadcast media releases).
- Stakeholders should be afforded all possible practical means of providing inputs and comments (for example, written submissions, comment sheets, e-mail, fax, briefing meetings, workshops, public meetings and personal contact with study team members).

- Special efforts should be made for vulnerable groups (for example, the elderly and infirm, mentally ill, youth, non-main stream language speakers, etc).
- Sufficient time should be allowed for comment. Equally, however, time should not be wasted on options that have been shown to be unviable.
- Involvement/participation should be ongoing throughout an investigative process, whether an Environmental Impact Assessment, SIA, or feasibility study. In this regard, stakeholders should receive ongoing feedback and acknowledgement, and the opportunity to understand how their contributions have been considered.
- Stakeholders should be afforded sufficient opportunity to exchange information and viewpoints (for example, at workshops and public meetings).

To achieve the above, it is necessary to identify stakeholders (those directly affected and those with a wider interest in the development proposal) as early as possible within the project cycle, acknowledging that stakeholder identification should be an on-going process for the duration of a project. (As the project configuration changes, new stakeholders may emerge.). Stakeholder identification early on in a project cycle also assists in determining eligibility and entitlement rights later on when mitigation measures, such as involuntary resettlement, are to be implemented.

Following stakeholder identification, it is necessary to develop a communications strategy that is customised to different stakeholder groups—by sector, for example, to facilitate meaningful information exchange. Taking note of customised communications strategies, it is critical that consistency is kept among central messages.

Through active, meaningful involvement with the public, both environmental (bio-physical) and social (cultural, political, socio-economic, etc) issues relevant to a development proposal should be identified.

It must be noted that, while there are linkages between public involvement/participation and SIA, and that they provide mutual support, each process has a distinctly different purpose and subsequent set of outcomes—regardless of whether the SIA undertakes its own public involvement/participation or whether it is incorporated into a larger public involvement/participation process. Importantly for both, a primary objective is that a two-way channel of communication is maintained throughout the lifecycle of a project. As such, although SIA and public involvement/participation are sometimes conceptualised as synonymous, they are in fact not.

| **Text Box 4.6 Odra River Basin Flood Protection Project, Poland** |
|---|
| The Odra River Basin Flood Protection Project in Poland serves as a useful example of relevant practice in public involvement/participation. The proposed project was opposed by a number of affected communities. To address community concerns, the development proponent, the Polish Regional Water Board, undertook extensive and intensive consultation over a number of years. Although the outcomes were not agreed by all parties (and this should not be the aim or expected result of public involvement/participation), the consultation that did occur serves as a useful example of relevant practice in terms of how public participation can be conducted, and how public participation can contribute to improved decision-making. |

| **Box 4.7: Public Participation Process in Lao PDR** |
|---|
| The Water Resources and Environment Administration, local administrations, agencies re- |

sponsible for a project's development, and the project developer itself all have a joint responsibility to ensure the participation of affected people in the project's proecess—as well as other stakeholders, in accordance with the process of initial environmental examination or environmental impact assessment, as follows:

At the time of collecting information for the initial environmental examination or environmental impact assessment, the local administration and the project developer must organize village dissemination meetings to inform the villagers, in various ways, of development plan and possible environmental and social impacts. In addition, this is a time to collect opinions from affected people.

During the preparation and review of the report on initial environmental examination, including measures to prevent and minimize the environmental and social impacts (or the report on the environmental impact assessment), the environmental management and monitoring plan (EMMP), the social management and monitoring plan (SMMP), the Water Resources and Environment Administration, local administrators, and agencies responsible for the development project, as well as the project developer itself—all must organize consultation meetings at village, district, and province level. These forums will be opportunities for affected people and other stakeholders to share their opinions on the report and plans, from the first until the final drafts.

During survey-exploration, construction and operation of the project, the project developer must inform the affected people and other stakeholders of the particular activities, which are likely to create environmental and social impact. These could include clearing the ground surface, destroying rocks; transporting, using and storing dangerous chemical objects and substances; discharging of water from a reservoir, etc. The project developer must give affected people and other stakeholders access to detailed and general information about the project.

At the regional level, the four countries have abided by the MRC's Procedure for Notification, Prior Consultation and Agreement (PNPCA), which requires full notification from any development project—either on the mainstream or transboundary tributary of the Mekong river.

**Text Box 4.8 MRC'S Procedures for Notification, Prior Consultantion and Agreement (PNPCA)**

Since 2003, the Mekong River Commission (MRC) Council approved the Procedure for Notification, Prior Consultation and Agreement (PNPCA) in order to:

- Provide steps for the MRC member States to support the establishment of the Rules for Water Utilization and Inter-Basin Diversions.
- Promote better understanding and cooperation among the MRC member countries in a constructive and mutually beneficial manner to ensure the sustainable development, management and conservation of the water and related resources of the Mekong River Basin.
-

These principles are based on sovereign equality and territorial integrity; equitable and reasonable utilization; respect for rights and legitimate interests; good faith; and transparency.

It was agreed that the four member states will give notification if the following uses are proposed**:** intra-basin use and inter-basin diversion on the tributaries, including Tonle Sap; and intra-basin use during the wet season on the mainstream. The notification format and con-

tents will include institutional mechanism, summary impact assessment documents, reports, feasibility study report, EIA, and IEE before consultation takes place.

The procedure is to reconfirm the adaptive approach to the development of water utilization rules and the nature of the Procedures, which are an integral part of the Rules for Water Utilization and Inter-Basin Diversions; and the commitment to work together to address the protection of the environment and the ecological balance in the Mekong Basin including the prevention of harmful effects and taking actions in emergency situations as covered by other Rules/Procedures.

Public involvement/participation is elaborated further in Section 8.

### 4.4.3 Identification and consideration of alternatives

Recognizing that a SIA should commence as early as possible within the project lifecycle, SIA should be used to assist with the identification and consideration of project alternatives.

- In addition to alternatives identified at project conceptualisation (usually by the development proponent), other realistic and feasible alternatives arising from scoping (including baseline surveys and profiling) should be considered. Social aspects should contribute to decision-making on an equal basis with other disciplines.
- The 'no-change' or 'no-development' alternative must always be included. Similarly, alternatives need not be variations of the same theme; for example, the need to provide additional bulk water assurance need not only be met by means of a new impoundment, where alternatives may relate to different dam sites and sizes. In such a case, consideration should be given to non-infrastructural alternatives, such as water use efficiencies, water conservation and water demand management.
- Importantly, all alternatives must be examined in the same level of detail to enable meaningful comparisons.
- Alternatives must be viewed in context—at the international, national, regional and local levels—as applicable to the size, complexity and potential impacts of a project.
- Alternatives that minimise and/or avoid impacts should be given special attention. This is particularly important when considering financial aspects related to each alternative. While social impacts may seem manageable, true costs for social management plans need to be developed and extrapolated over time, to enable meaningful comparisons with possible additional capital costs associated with other alternatives.
- It is critical to examine alternatives, and their impacts/benefits (negative and positive) in relation to other projects (existing and planned for the future) in order to identify and deal with potential cumulative impacts. For example:
    - Air emissions from a proposed factory may be considered acceptable if taken in isolation, but, when added to emissions from surrounding factories, may escalate air pollution to unacceptable levels.
    - Resettlement impacts arising from the development of one hydropower station may seem acceptable and manageable for the single facility, but, when considered in the context of resettlement impacts arising from multiple facilities, may become unacceptable and unmanageable in terms of societal costs borne by both directly and indirectly affected parties.

- Similarly, a policy or plan may be useful in isolation but, without consideration for other policies or plans, may contradict these. In this manner, an alternative may appear favourable in isolation, but not so when cumulative affects are considered.

There are many examples where social aspects have positively influenced the consideration of alternatives (i.e. Alternatives with obvious social impacts were discarded early in the project lifecycle.). This usually occurs during screening, an early project planning activity with the objective to identify social and environmental fatal flaws and red flags. (A fatal flaw is defined as a significant long-term negative consequence on the affected social environment, which is extremely difficult to mitigate or undesirable to promote. A red flag is defined as a potentially serious impact that could have medium- to long-term negative consequences on the affected social or biophysical environment, which can can only be mitigated at significant will, effort and total cost—not only financial and economic considerations). In this regard, an alternative with a fatal flaw should not be considered further.

**Text Box 4.7: Resettlement Comprehensive Supervision System, China**

In China, the Resettlement Comprehensive Supervision System was established in 1994 for Three George Dam project. The Xiaoliangdi Dam project, however, was the first to fully implemented this system since 1996. Later the system was adopted for other projects (e.g. the Wanjiazhai and Shanxi projects). In 1998 the former Ministry of Power and Industry issued *Regulations on Resettlement Comprehensive Supervision for Hydropower Projects*.

An independent, qualified resettlement supervision entity will be contracted for resettlement supervision. Staff will stay on site, supervising the on-time progress of resettlement, according to overall and annual resettlement schedule. Through collecting various information, the staff will focus on supervising and controlling resettlement investment, resettlement quality, and contract management. Supervision reports will be periodically submitted to local government, resettlement bureaus, the project owner, and other stakeholders, if necessary. If there is emergency, the staff can make and submit a special report at anytime. The entity will also play the role of helping the local government realize and resolve any resettlement problems.

| Text Box 4.8 Olifants River Water Resources Development Project, South Africa |
|---|
| The Screening Phase for the Olifants River Water Resources Development Project (Phase 2) in South Africa serves as a useful example of relevant practice in identifying and assessing alternatives. For this proposed development, both dam and non-dam alternatives were considered. For dam alternatives, potential social impacts were examined in detail and contributed to the selection of a preferred dam alternative (that avoided potentially serious social impacts). For non-dam alternatives, aspects such as water conservation, water demand management, ground water options, and the trading of water allocations were investigated. From a social perspective, water trading was examined in detail because of potential negative effects on small-scale irrigators, as well as potential negative social effects on agricultural employment associated with larger, commercial irrigators. In both cases, potential social effects related to loss of employment, loss of income, decreased food security and the possibility of contributing to increased poverty. The examination of dam and non-dam alternatives contributed to a proposed project not only focused on a large storage, but which also addressed non-dam options to contribute to greater water stability and availability in an area where water demand exceeds the supply allocated to competing sectors (including the natural environment, in which ecological water requirements must be met). |

### 4.4.4 Profiling of baseline conditions

Profiling, which involves undertaking baseline surveys, aims to document the relevant human environment, within the area of a development proposal. It is against this existing base of social conditions and trends that the effects of change need to be understood, assessed and measured.

Profiling, which usually occurs simultaneously with scoping, should provide the following:

- A description of the social environment (political context, institutional structures, arrangements and capacities, demographics, socio-economics, land-uses, current conditions, health status of the population, and social trends). Maps should be utilized, as well as narrative descriptions of public agencies, such as local authority areas and their land use zones, tribal boundaries, etc.
- Local and regional economics, and an analysis of potential economic links between the proposed development and the current situation.
- A description and analysis of existing social and cultural values and the relationship of these to the proposed development (and change).
- A framework and plan for the assessment of social affects, including social factors to be used as measurable indicators (Taylor *et al*., 1995).

**The various social impacts of different components of dams: (adapated from Adams, 2000)**

| Developent process | Social impacts indicators |
|---|---|
| Impacts during planning and construction | • Parties affected positively in this stage include contractors, consultants, bankers, workers employed on the project, and businesses providing products and services.<br>• Negative impacts arise from fear and uncertainty created in the project area. |

| | |
|---|---|
| | • The most serious negative impacts are due to the trauma of resettlement or the socio-economic and cultural costs of displaced people who are not resettled.<br>• Women, as marginalized entities within marginalized communities, are forced to shoulder the ordeal of displacement more intensely.<br>• Communities selected to host resettled people can experience negative social, economic and cultural change. |
| Impacts at the dam site | • Dams demand large amounts of unskilled laborers and smallers amounts of skilled workers.<br>• A dam's construction force creates demend for a wide range of products and services.<br>• Unemployment can be a serious problem when dam construction is completed. |
| Impacts in the catchment | • Land use in the catchment above the dam may be restricted to reduce soil erosion and maintain water yield. |
| Building powerlines, irrigation canals and access roads | • The construction of power lines, irrigation canals and access roads creates positive impacts, by providing work opportunities.<br>• In-migration creates negative impacts and can cause economic competition, spread of diseases and challenges to local cultural norms and practices. |
| Impacts of managing a reservoir | • Direct positive impacts can occur through the creation of open-water fisheries.<br>• Downstream positive impacts can occur if dams control floods and protect infrastructure and property and allow development on the floodplain.<br>• Dams change the natural patters of river flow, and this can impact negatively on agriculture and fishing economies. |
| Impacts of the supply water | • A major use of water from dams is for irrigation and to meet demand from urbanisation. |

Particular attention should be paid to profiling vulnerable groups; for example, the youth, elderly, women, the infirm and disabled. While vulnerable groups will differ from project to project, it is important that they are identified and profiled for each project. This will enable customised scoping of these vulnerable groups, enabling specific solutions to be formulated and documented in mitigation plans.

Underlying the aforementioned should be the documentation of data sources and assumptions underlying their analysis and projection. This should include a discussion on the reliability of data, and inconsistencies or gaps that might affect the analyses (Taylor *et al.*, 1995).

According to Taylor *et al.* (1995), potential data sources (secondary (existing) or primary (new)) for profiling include:

- **Statistical data.** These include census reports and data compiled by government agencies and private organisations.
- **Written social data**. These include letters to editors, newspaper articles, written testimonies, histories, graduate theses, annual reports and research studies specific to the project area.

- **Observation and respondent contact data.** These can be derived from talking and interacting with people in the area, in their work environment, at leisure and in other social settings.
- **Survey data.** This involves the undertaking of structured interviews and/or administering questionnaires (applied to a representative sample rather than as a complete census and/or inventory). Prior to undertaking these activities, it is important to do preliminary investigations in order to validate the selection of questions and social variables the questions represent.
- **Public involvement/participation data.** As discussed in Section 4.4.2 and Section 8, public involvement/participation is designed to identify key issues in the public domain. These need to feed into the SIA for analysis and the estimation of projected affects.
- **Agency or project personnel.** Project representatives are a source of data for the communities in which they live and work.
- **Maps.** Topographical maps, aerial and ortho photos, and Google Earth imagery often give clues as to the types of people likely to be impacted and their land use patterns.

Baseline surveys[4] are time consuming and, consequently, can be expensive. Furthermore, careful planning is required as people and the communities interviewed/surveyed should not be disturbed to gather necessary information. This is particularly critical for large projects, or areas where much development is occurring, as people can become weary of providing inputs (so-called 'stakeholder fatigue'), albeit the intention is to assist stakeholders in the long-term. Also, careful planning allows for pre-identified/known impacts to be presented up front, with a view to avoidance—or determining mitigation measures early on, with the active involvement of potentially affected people.

Finally, it should be noted that baseline data form the basis from which potential impacts are assessed, mitigation/management actions are formulated and, importantly, from which variables/indicators are derived for monitoring and evaluation.

**Text Box 4.8 Bumbuna Hydroelectric Project, Sierra Leone**

The Bumbuna Hydroelectric Project in Sierra Leone serves as a useful example of the profiling of baseline conditions. This project was first proposed in the 1970s, and construction occurred between 1982 and 1997. For the majority of this time, Sierra Leone was plagued by civil war. Despite this, extensive baseline data were collected in the country over a protracted period of time, even following the construction of the dam, when a post-facto Environmental Impact Assessment was undertaken. Methods used to gather data included questionnaire surveys with heads of households, focus group discussions with the youth, women, men, elders and chiefs, and consultative meetings with the community. The baseline information gathered was comprehensive with text, data and/or illustrations being provided on general socio-economic conditions, demographics, settlements and infrastructure, ethnic groups, household structure, village size, water supply, solid waste disposal, public health, attitude to resettlement, culture, history and archaeology, social organisation and traditions, religion, sacred sites, secret societies, tourism and recreation. Household surveys were conducted in the 54 villages in the reservoir area and data were collected from a total of 872 households. Importantly, the baseline data served to in-

[4] When undertaking surveys (quantitative, such as rapid rural assessment methods, or qualitative, such as participatory rural appraisal techniques), it is important that the enumerators are well-trained, that they respect local customs, speak the local languages(s), and are reflective of the audience from whom they are gathering information. For example, a female enumerator will have more fruitful engagements with a local women's group than a male enumerator. This kind of attention to detail and respect for communities usually yields beneficial outcomes which may otherwise not be achieved.

form planning and decision-making for the management of social change arising from the dam, and, into the future, can serve as the yardstick against which to monitor, evaluate, and audit.

### 4.4.5 Scoping

Scoping, as a process of identifying **issues**, can take various forms:

- **Technical**[5] scoping, with the development proponent and technical experts.
- **Authority** scoping, with the different authorities that may have an interest in the proposed project (perhaps even as an authorising/licensing authority).
- **Specialist** scoping, with discipline-specific specialists.
- **Public** scoping, in the public domain with members of the public either interested in or affected by a proposed project.

Scoping is an **analytical** process that ensures the assessment is performed at an appropriate level of detail, compatible with the scale and significance of the proposed project. If well done, scoping will ensure that there is a focus on relevant issues and information. It will ensure that important issues are not forgotten and will focus data collection and stakeholder information exchange (public involvement/participation). In this respect, scoping is indispensable, because it focuses the study on **key issues**. Hence, it is essential that the scoping exercise is comprehensive yet flexible.

It is important that scoping does not focus only on negative aspects of proposed developments. There are many opportunities that arise from large-scale infrastructure developments, such as dams and hydropower facilities that need to be identified, elaborated and harnessed. These include employment (short-term during construction and longer-term during operation of the facility), stimulation of local and regional economies, due to increased expenditure, and salaries and wages in the area, improved infrastructure and services (roads, electricity distribution, health-care facilities, etc) and longer-term economic opportunities that may arise from the infrastructure itself (for example, use of a reservoir for fisheries production, tourism activities associated with a reservoir and surrounding land, and tourism activities associated with the facility itself). All opportunities should be investigated and potential benefits projected. This can occur via scenario planning that should inform future social development plans.

Scoping also involves a description of the **boundaries** (temporal and physical) of the study, an assessment of the variables to be measured or described, and an evaluation of possible impacts (negative and positive), which may result from or rely on a proposed project. In this regard, profiling is the necessity to deal with issues related to vulnerable groups. These should be regarded as sensitive components of the receiving environment, requiring their own specific analysis to enable the formulation of customised mitigation measures.

Scoping should also identify sensitive or important elements of the receiving environment, main policies, plans, programmes and projects/operations that may affect the social and socio-economic environments within the chosen boundaries, as well as appropriate information to effectively deal with the potential effects.

During scoping, the following elements are usually attended to:

[5] In this context, 'technical' refers to engineering related disciplines while 'specialist' refers generally to scientific disciplines (natural and social sciences, archaeology, cultural heritage, etc) (although, in some cases it may be necessary to engage an engineering professional (i.e. technical) in the role as specialist.

- Determination of the social and environmental characteristics of the areas to be affected by a proposed development.
- Identification and involvement of relevant parties so that they have an opportunity to express their views about the proposed activities (public involvement/participation).
- Identification of key issues likely to arise as a result of the development or have an impact on the proposed development.

A range of methodologies can be adopted for scoping, utilising primary and secondary information and data, including: discussions, workshops and/or interviews with potentially affected people and/or entities (closely linked to public involvement/participation), the collection and review of literature, plans, maps and other relevant material, questionnaires and surveys. Gaps in information can be closed using information collected as part of profiling. Furthermore, the SIA must evaluate all impacts (direct and indirect) on humans and all the ways that people and communities interact (directly or indirectly) with their socio-cultural, economic and biophysical surroundings (Vanclay, 2003). Thus, according to Taylor *et al.* (1995), scoping covers multiple, yet integrated, social elements, such as:

- Lifestyle (for example, behaviour and relationships).
- Cultural aspects (for example, traditions, customs, values and religious beliefs) and sense of place (involving tangible and intangible aspects).
- Archaeological aspects.
- Community, institutional and infrastructural impacts (for example, infrastructure, services and networks, capacities, etc).
- Amenities and/or quality of life (such as sense of security).
- Health[6] considerations (such as mental and physical well being, pollution affects, HIV/AIDS, etc.).
- Aesthetic, visual and/or other sensory impacts (for example, noise, light, dust, obstructions, etc).
- Demographics (such as gender, age, and sexual orientation).
- Development impacts.
- Economic and fiscal impacts.
- Gender impacts.
- Impacts on indigenous rights.
- Leisure and tourism impacts.
- Political impacts (such as human rights, governance, democratisation, etc).
- Poverty (for example, social upliftment and employment opportunities).
- Physiological impacts.
- Resource use (for example, access and ownership of resources).
- Impacts on social and human capital.
- Vulnerable groups (such as the elderly and infirm, children and the youth, minorities (for example, ethnic), indigenous groups, women, etc).
- Expectations (the creation and management thereof).

[6] Health considerations may indicate the need to undertake a Health Impact Assessment, which addresses the health impacts of policies, plans and projects in diverse economic sectors using quantitative, qualitative and participatory techniques. Normally, there are five steps to undertaking a Health Impact Assessment : (i) screening – to identify if such an assessment is required (ii) scoping – identifying what is required and how to do it (iii) appraisal – identifying health hazards and considering the evidence of impacts (iv) reporting – developing recommendations to reduce hazards and/or to improve health (v) monitoring – evaluation and monitoring. Health Impact Assessments are becoming more important in increasingly vulnerable communities worldwide and help decision-makers to make choices about alternatives and improvements to prevent disease/injury and to actively promote health.

- Other societal and indirect impacts.
- Cumulative aspects (as previously discussed) (Vanclay, 2003).

It is important to note, however, that the extent and intensity of scoping must be consistent with the type, size, extent, and reach of a proposed project and, therefore, it is logical that not every project will require the entire range of disciplines.

There is a close link between scoping and public involvement/participation. As minimum, scoping would involve communication and consultation with representatives of :

- Government (traditional, local, provincial, national)7.
- Development proponent (and sector represented).
- Affected public[8.]
- Environmental lobby and interest groups.
- Independent experts.
- Civil society.

Furthermore, it is important to recognise that there is a close link between scoping and profiling, with the identification of issues being contextualised within baseline conditions. Equally, the social assessment practitioner must have a sound understanding of the development proposal (and alternatives) in order for issues to be correctly identified and understood.

| **Text Box 4.9 Driekoppies Dam, South Africa** |
|---|
| The Driekoppies Dam in South Africa serves as a useful example of scoping. This project commenced in the mid-1990s, with extensive scoping undertaken in communities affected by the proposed dam. Scoping was undertaken within a well-defined policy framework and identified a range of issues, including the loss of productive resources and consequent effects on economic activities, effects on settlements and housing, necessitating resettlement, effects on community facilities and services (in particular, those related to improved services), community organisations and institutional relationships, historical and archaeological sites, population pressures, and social dislocation. It would appear that scoping was comprehensive and enabled the assessment of the significance of potential impacts. Each impact was classified as positive or negative and rated in terms of magnitude, significance, probability and duration. Significant impacts were identified as loss of productive resources (negative), social dislocation (negative), improved domestic water supply (positive) and sub-regional development potential (positive). The outcomes of scoping, as contextualised within the profile of baseline conditions, informed future project activities concerning the management of social change, notably, the formulation and implementation of a Resettlement Action Plan within a development paradigm. |

### 4.4.6 Projection of estimated effects

Scoping, profiling and public involvement/participation provide a sound basis (baseline conditions) from which to project the potential social affects of a proposed project, for all feasible and/or realistic project alternatives, including the 'no-change' or 'no-development' alternative, taking particular account of potential effects on vulnerable groups.

7 Care should be exercised to avoid power elite becoming gatekeepers.

8 It is important to note that "communities" comprise groups of people with similar interests. The notion that a single "community" viewpoint can emerge is usually fallacious.

Experience shows that the projection and estimation of affects is best undertaken in a matrix, assessing the **scale, intensity, duration** and **probability of occurrence** of both negative impacts and benefits. For each project alternative and for each potential impact/benefit, a risk analysis is undertaken (using standardised conventions (Table 4.4) that leads to the assessment of **significance** of a potential impact/benefit for a particular project alternative.

When assessing potential social impacts, it is advisable to formulate a mitigation strategy that includes aspects such as what can be done, how should it be done, what are the constraints, and what follow-up monitoring and evaluation are required, and for how long.

It is important that a risk assessment is not undertaken in isolation for each project alternative. Rather, the assessment must take into consideration all baseline conditions, including unrelated but potentially synergistic, ancillary or downstream development proposals, in order to account for potential cumulative impacts/benefits.

Table 4.4 Example of conventions used in the assessment of potential impacts/ benefits

| Descriptive Adjective | Definition |
|---|---|
| **Nature of Impact** | |
| Positive | The type of effect an activity would have on the social environment |
| Negative | |
| **Scale of Impact** | |
| Local | Limited to the project site and immediate surroundings |
| Regional | Limited to the region |
| National | Limited to the country |
| International | Across international borders |
| **Duration of Impact** | |
| Short-term | >0-5 years |
| Medium-term | 5-15 years |
| Long-term | Will cease only after cessation of the activity itself |
| Permanent | Will occur forever |
| **Intensity** | |
| Low | Minor effects |
| Medium | Major effects |
| High | High severity effects |

| | |
|---|---|
| **Irreplaceability of Resource Caused by Impacts** | |
| Low | No irreplaceable resources will be impacted (the affected resource is easy to replace/rehabilitate) |
| Medium | Resources that will be impacted can be replaced, with effort |
| High | Project will destroy unique resources that cannot be replaced |
| **Reversibility of Impacts** | |
| Low | Low reversibility to non-reversible |
| Medium | Moderate reversibility of impacts |
| High | High reversibility of impacts |
| **Consequence** | |

| | |
|---|---|
| Low | A combination of any of the following:<br>• Intensity, duration, extent and impact on irreplaceable resources are all rated low<br>• Intensity is low, and up to two of the other criteria are rated medium<br>• Intensity is medium, and all three other criteria are rated low |
| Medium | Intensity is medium, and at least two of the other criteria are rated medium |
| High | Intensity and impact on irreplaceable resources are rated high, with any combination of extent and duration<br>Intensity is rated high, with all of the other criteria being rated medium or high |
| **Probability** | |
| Definite | Definite |
| Highly probable | Most likely |
| Probable | Distinct possibility |
| Improbable | Unlikely to occur |
| **Significance** | |
| Low | No influence on project |
| Medium | Could influence project |
| High | Significant enough to block project |

Adapted from the South African Department of Environmental Affairs (South Africa, 2010).

When undertaking an assessment, it should be recognised that accurate projections are difficult to make and, therefore, projection techniques should be used (some of which are economically based) (Taylor *et al.*, 1995):

- Trend extensions.
  This involves the projection of a current trend into the future.
- Population multiplier approaches.
  Using this technique, the current population size is multiplied by a coefficient to account for the amount of change in another variable.
- Computer modelling.
  This involves the mathematical formulation of premises and a process of quantitative weighting of variables.
- Consulting 'experts'.
  This involves drawing on the experience of others, where these consultations make use of and apply other people's knowledge. In this regard, it is important to note that 'experts' do not refer exclusively to professionals but also includes local/traditional community members who hold a wealth of local knowledge, and who should not be under estimated.
- Comparison between communities.
  This technique involves comparing communities (i.e. comparing a community potentially affected by a proposed project with another community that has experienced similar affects).
- Economic base models.
  These can be used when local areas derive economic vitality (for example, employment) from a particular activity.
- Input-output models.

This involves calculating and understanding the relationship between what must go into producing particular goods or services (inputs) and the level of production that results (output).

- Cost-benefit analysis.
  This economic modelling involves weighing costs and benefits to understand economic effects. These are not limited to quantifiable affects, measured by market prices, but also include 'hidden' costs and benefits.
- Quantifying externalities.
- This involves calculating the indirect value of an impact where the impact cannot be directly accounted for in the operational economics of a particular project. For example:
  - Health-care costs attributable to the air emissions of a factory.
  - Transport costs incurred by a local population, due to increased distances arising from an impoundment required for a hydropower facility.
    This is also known as contingent valuation and is a measure of the willingness of a developer to pay for externalities associated with a proposed project or project alternative.
- Econometric models.
  These comprise a system of mathematical equations designed to capture the structure, complexities and interrelationships of a particular economy.
- Social accounting matrices.
  These are complex economic models designed to quantify social benefits and costs (more socially orientated than traditional cost-benefit analyses).
- Scenarios.
  This involves 'thinking the unthinkable' to enable the formulation of theoretical models of possible outcomes.

For many projects, project alternatives, and potential impacts, it is unnecessary to use difficult and complex techniques. Rather, as suggested by Taylor, *et al.* (1995), emphasis should be placed on **experience, logic** and **common sense**. This does not trivialise the assessment of social impacts/benefits, as it must always be remembered that SIA deals with humans and human nature. Many of these aspects are not always quantifiable. Rather, they are more qualitative in nature; therefore, scientifically and/or economically based techniques are not always appropriate.

As stated previously, the projection of estimated effects relies significantly on baseline data previously collected. Furthermore, the same baseline data, as well as the outcomes of the assessment, are used to identify variables that can be measured for the purposes of monitoring and evaluation.

The outcomes of the projection and estimation of effects should be presented in well-written and illustrated reports (or as otherwise indicated by particular normative frameworks, applicable to a particular development and SIA).

**Text Box 4.10 Kandadji Dam, Niger**

The Kandadji Dam Project in Niger serves as a useful example of the projection and estimation of social effects, which appears widely encompassing, covering both negative impacts and benefits, including resettlement (35,000 people from 15 villages), loss of infrastructure (a national road, boreholes, clinics, schools, mosques, slaughterhouses, markets and grain mills), loss of agricultural land (approximately 7,000 ha), a guaranteed water supply (for urban and rural domestic water, irrigation, livestock and aquaculture), a reduction in dependence on energy imports, food security and opportunities for sustainable development, impacts on public health, and indirect impacts (reduced rural migration, up- and down-stream industrial opportunities, employment opportunities during dam construction and a contribution towards the attenuation of desertification). For the Kandadji Dam Project, these potential effects were projected at an early stage in project planning, enabling issues and potential impacts to be addressed in subsequent planning phases. It is also pertinent to note that the projection of potential effects did not only focus on negative aspects, but also included the estimation of benefits, thereby informing planning to enable the realisation of benefits over time.

#### 4.4.6.1 Prediction and evaluation of responses to impacts

There are a number of methods that can be used to predict and evaluate impacts, including: analogues, expert opinion, literature reviews, and cause-effect relationships. When selecting methods, consideration should be given to the following criteria:

- Appropriateness for the proposed development.
- Acceptability to relevant interested and affected parties.
- Professionally acceptable.
- Relative ease of application and management limitations.
- Applicability to the range of key issues.
- Provision of results that enables professional judgement to be made in evaluating the impacts.

The significance of a particular impact is a function its potential scale, intensity, duration and probability of its occurrence.

There are many examples of potential impacts, which may arise from a proposed project. For the most part, these can usually be managed via a technical solution; for example, the realignment of a road, suppressing dust on a construction site, limiting noise, etc.

However, one impact is significantly more difficult to manage, and for this, technical solutions do not exist. This impact is resettlement, including economic displacement, the loss of access to areas of interest, sacred and/or religious sites, and natural resources. Where resettlement is unavoidable, careful attention should be paid to the formulation of a Resettlement Action Plan with close involvement of the affected people, and noting that all resettlement activities are closely aligned with those of the primary development project). Resettlement is detailed in Section 5.

**Text Box 4.11 Thukela Water Project, South Africa**

The Thukela Water Project (Feasibility Study) in South Africa serves as a useful example of the prediction and evaluation of responses to impacts. For this proposed project, the Social Impact Assessment identified and discussed potential social issues and effects at two levels. Firstly, it examined a number of contextual issues relevant to the proposed project, which had come to the fore during investigation. Of these, the most critical were the potential impact of HIV/AIDS, population trends in potentially erodible areas, the potential impacts of sedimentation, land reform and land restitution, impacts on the downstream environment, and impacts on the receiving environment. Thereafter, the study focused on the potential effects of each of the major project components, including the Jana Dam, Mielietuin Dam, and the conveyance routes (canals and steel pipe lines). The assessment was carried out in detail, with the outputs seamlessly interfacing with the formulation of future social management plans to deal with macro issues, negative social impacts, and the optimisation of project benefits on a local and regional scale.

**Text Box 4.12 Nam Theun 2 Hydropower Project, Laos**

The Nam Theun 2 Hydropower Project, located in central region of Laos, serves as a useful example of prediction and evaluation of responses to impacts. For this proposed project, the Environment Impact Assessment (including the social aspect) identified and discussed potential social issues and effects at three levels. First, it examined the regional issues, relevant to the proposed project. Of these, the most critical were the potential impact on biodiversity, impacts on the downstream environment, and source of food and income. Thereafter, the study focused on the project zone. The project area has been divided into fifteen zones of activity and/or impacts, including the inundation area, protected area, resettlement area, road area, and others. The third level was the potential effects of each of the project's major infrastructure components, including the dam, saddle dam, power station, downstream hydrolic control and conveyance structure, transmission line, and others. The assessment was carried out in detail, with the outputs interfacing with the formulation of future social development plans. These plans dealt with macro issues, negative social impacts, and the optimization of project benefits on a local and regional scale.

#### 4.4.6.2 Mitigation of negative impacts and the optimisation of benefits

Mitigation is the avoidance or minimization of negative impacts associated with a project—done so in a sustainable manner. In short, mitigation involves implementing a Social Management Plans that both achieves desired project outcomes and optimises social benefits.

Essentially, there are two categories of Social Management Plans: those that deal with negative impacts and those that deal with benefits. In each case, the over-riding consideration should be the sustainable development of the affected people. In this regard, Social Management Plans should be formulated within a development paradigm and should move beyond 'leaving people affected at least as well-off as before the project intervention'. First, this requires the restoration of livelihoods and livelihood strategies, and secondly, the sustainable social and socio-economic advancement of people and their societies.

It is also important to note that Social Management Plans, whether dealing with the mitigation of negative impacts or the optimisation of benefits, need to make special provision for dealing with the needs and aspirations of vulnerable people. These provisions can either be documented within the overall plan, or separate plans can be produced (for example, a Gender Action Plan, to deal with gender-specific aspects).

In terms of negative social impacts, most have a technical solution that either completely avoids the impact or, at minimum, reduces it. In most cases, if acceptable levels of avoidance or reduction are not possible, resettlement becomes the preferred mitigation/management action. In these cases, resettlement is undertaken within the provisions of a Resettlement Action Plan. The ultimate goal of a Resettlement Action Plan is "to enable those displaced by a project to improve their standard of living" (IFC, 2002).

At minimum, a Resettlement Action Plan, should contain the following:

- Identification of the impacts of a project and affected populations.
- A legal framework for land acquisition and compensation.
- A compensation framework (with eligibility criteria and entitlement matrices).
- A description of resettlement assistance and restoration of livelihood activities.
- A detailed budget.
- An implementation schedule.
- A description of organisational responsibilities.
- A framework for public consultation, participation and development planning.
- A description of provisions for redress of grievances.
- A framework for monitoring, evaluation and reporting (IFC, 2002).

Great care is required in the formulation of Resettlement Action Plans. Following the early identification of affected populations, it is necessary to ensure that eligibility rights and entitlements are agreed upon as early as possible in the resettlement planning process. This will require negotiations with affected peoples that clearly spell out the rights and responsibilities of all parties involved. In terms of responsibilities, affected people need to assist the development proponent to counter false or spurious claims, either by directly affected people or newcomers entering a project-affected area, with a view to obtaining compensation.

Importantly, resettlement plans and their implementation should receive the same priority (planning, resources, etc) as the primary development intervention and should be implemented concurrently with the primary project.

In many cases, the area of influence of a project is wider than the people directly affected—by resettlement, for example. In all cases, Social Development Plans should be formulated

for the optimisation of project benefits. Importantly, these plans need to be aligned with government strategies in order to ensure optimal—and sustainable—benefits from primary, as well as downstream, developments—or to ensure that individual projects receive the necessary government support into the future (from staffing of schools to the provisioning of clinics). In this regard, it is critical for development proponents to clearly understand the influences of a proposed project on the social environment, as well as the converse: understanding the influences of the social environment on a proposed project.

Social investment is a necessity, not a luxury. To this end, corporate social responsibility programmes[9] need to build relationships for enduring mutual benefit rather than for promotional value. As with the Social Development Plan, social responsibility programmes should be aligned with government strategies to optimise benefits.

Therefore, Social Development Plans should be developed to the same extent and level of detail, including budgets and implementation schedules, as plans developed to mitigate negative impacts. To this end, the greater the commitment and involvement of the development proponent, the more likely these social interventions will be successful and sustainable.

As with mitigation plans, Social Development Plans need to be formulated prior to the development intervention and, *inter alia,* should contain the following information:

- Purpose and need statements (including encouraging the application of sound social and environmental management practices for the lifecycle of the proposed project); the provision of practical guidelines to facilitate and manage social change (dealing with both positive and negative aspects arising from the proposed development); and overarching aims and objectives.
- Philosophy and underlying principles.
- Organisational structure and responsibilities, including channels of communication and a grievance process.
- Accountability, responsibility and reporting procedures.
- Development programmes and sub-projects (including implementation schedules and budgets).
- Management actions (per programme and per sub-project).
- The definition of performance indicators, against which aims can be measured.
- The definition of a Monitoring and Evaluation framework to measure social environmental performance and to apply remedial actions, if necessary.

#### 4.4.6.3 Assessment of indirect and cumulative impacts

The assessment of indirect and cumulative impacts essentially follows a cause-effect model that establishes how ‘resources of value’ (in this case, social and socio-economic in nature) are affected by multiple impact sources. It employs a systems approach to define cumulative effects and impact relationships. Resulting trends are evaluated against identified objectives and indicators (monitoring). Usually, this kind of impact assessment is undertaken within a

[9] Corporate Social Responsibility (CSR) has various differing definitions but is essentially an obligation by business, beyond that required by the law, to pursue long term goals that are good for society. It is a way in which a company manages itself to ensure an overall positive impact on society and its stakeholders. More specifically, CSR involves ‘a business identifying its stakeholder groups and incorporating their needs and values within the strategic and day-to-day decision-making process’. CSR involves: (i) conducting business in an ethical way and in the interests of the wider community (ii) responding positively to emerging societal priorities and expectations (iii) a willingness to act ahead of regulatory confrontation (iv) balancing shareholder interests against the interests of the wider community (v) being a good citizen in the community. It is important not to ‘mix’ or ‘confuse’ corporate social responsibility (which is usually voluntary) with compensation and benefit-sharing (which are usually mandatory (Section 6). In this regard, CSR goes beyond compensation and benefit-sharing to add additional value to that which may arise from opportunities arising from a project and accruing to affected and/or beneficiary communities.

broader strategic framework—at national, provincial, district or local levels. Mitigation measures must be proposed for the negative cumulative affects identified and recommendations made for the enhancement of the resources of value. Consistent with the principles of Integrated Environmental Management, the appropriate involvement of interested parties and stakeholders is essential.

The cumulative affects assessment process is an iterative one, and precautionary principle should be applied in recognition of the limits of current knowledge.

Essentially, the same elements that characterise SIA characterise the assessment of indirect and cumulative affects, e.g. public involvement/participation, profiling, scoping, projection of estimated effects, as well as monitoring, auditing and evaluation, for all alternatives under consideration.

| **Text Box 4.13 Tuyen Quang Dam and Flood Prevention Project, Vietnam** |
|---|
| The Tuyen Quang Dam and Flood Prevention Project in Vietnam serves as a useful example of the assessment of indirect and cumulative impacts. Project documentation suggest that the completion of the dam and the flooding of the reservoir would significantly change patterns of land and water use in the Na Hang District. It is estimated that the dam should fill up within a year. Thereafter, the reservoir should stabilise over the next few years as conditions change and submerged vegetation degrades. Within five to ten years it could be expected that conditions will be suitable for the development of both water-related tourism activities and fisheries (although no plans have yet been produced for these). Nevertheless, it was anticipated that both tourism development and the development of fisheries might be long-term positive socio-economic effects. Equally important was the projection that there would be no potential indirect negative effects arising from the proposed project. |

### 4.4.7 Monitoring, auditing and evaluation

In terms of compliance, **monitoring** serves to identify discrepancies between the expected and actual affects of a project (Taylor *et al.*, 1995), thereby facilitating adjustments that may be necessary to manage change or the change already being implemented, to help reduce unanticipated and unwanted affects—or to enhance benefits. Thus, monitoring is informative for a project.

Monitoring programmes are best initiated as early as possible in the SIA process and must continue throughout the period of change so as to assess the effectiveness of the mitigation measures, and provide feedback on the trends, impacts and current issues in order to modify the Social Management Plans as necessary (Taylor *et al*, 1995). This is especially important when monitoring the outcomes of provisions catering to vulnerable groups.

Taylor *et al.* (1995) note that often, the description and management of social change, as well as the assessment of its significance, are major methodological problems in monitoring, and that it is difficult to differentiate among the various origins of specific social changes. Thus, monitoring requires that some criteria be established to focus efforts on key variables and issues. These criteria—key variables and key issues—should be sourced from data gathered during profiling and scoping.

Therefore, the monitoring system (data collection, storage and analysis) must be compatible with the system established during profiling and scoping, and must also be designed to facilitate sim-

ple and rapid reporting to affect quick changes before severe or irreparable damages are caused—or to optimise benefits.

Again, it is necessary for the monitoring programme to link with public involvement/participation to ensure that key issues are monitored and addressed.

Monitoring is an important component of project **evaluation**. However, in this context, evaluation is cumultative, at times pointing towards the conclusion of a project, with a view to informing other, future projects. In this sense, evaluation is viewed as the final part of the SIA process, albeit it is not only undertaken at project's conclusion. Furthermore, evaluation is seen as separate from monitoring and management of social impacts, although it is complementary (Taylor *et al.*, 1995).

Casley and Kumar (1987) have defined evaluation as *a periodic assessment of the relevance, performance, efficiency and impact of the project in the context of its stated objectives*. In order to achieve this, it is necessary to make use of monitoring data; however, this may also require additional data collection or involve comparisons with other, similar projects (Taylor *et al.*, 1995). In this regard, Casley and Kumar (1987) believe that evaluation should take place three times during a project:

- First, in the middle of project implementation, at a time when the social affects have started to have an impact.
- Second, at the end of project implementation.
- Finally, considerably after the project's conclusion, in order to identify long-term effects.

In addition to monitoring a project's direct and indirect social change, undertaking external, independent **audits** of SIA processes and outcomes can prove useful . Apart from providing a completely external perspective, an audit also demonstrates to all role-players that project activities are totally transparent and open to scrutiny.

For the most part, monitoring and evaluation tend to focus on the management of social change and the respective Social Management Plans developed to minimise and/or enhance these changes. However, the SIA process itself can also be monitored and evaluated in order to inform future work, as well as to advance SIA concepts and methods for new projects (Taylor *et al.*, 1995).

**Text Box 4.14 Brilliant Expansion Project, Canada**

The Brilliant Expansion Project in Canada serves as a useful example of monitoring. In order to monitor and report on the social and economic impacts and benefits associated with the expansion of the generating capacity at the Brilliant Dam, and to identify deviations from outcomes anticipated, the Columbia Power Corporation hired an independent, third-party contractor to serve as the Socio-Economic Monitor for the project. The Socio-Economic Monitor objectively monitored and reported on both the impacts and benefits, resulting from the expansion project. Through investigating a range of social and socio-economic variables, the Socio-Economic Monitor could gauge the impact of the expansion project on the local communities and the region (i.e. within a 100 km radius of the project site). The Socio-Economic Monitor used various indicators to measure the benefits and impacts of the project. Aspects investigated in terms of employment and expenditure included the number of local hires, trades, female workers, First Nation workers by Nation and by Band, and disabled workers, the number of apprenticeships, the ratio of project employment to the regional labour force, the direct and induced expenditures by communities, and the number of local

firms that benefitted from the project.

**Text Box 4.15 Social Impact Assessment Process – Key Aspects**

Social Impact Assessment is a process. The specific elements that characterise SIA (in varying degrees of intensity, often dictated by the size and/or complexity of a project and the receiving social environment) are as follows:

- Public involvement/participation.
- The identification and consideration of alternatives.
- Profiling of baseline conditions.
- Scoping.
- Projection of estimated effects.
  - Prediction and evaluation of responses to impacts.
  - Mitigation of negative impacts and the optimisation of benefits.
  - Assessment of indirect and cumulative impacts.
- Monitoring, auditing and evaluation.

There are several examples from large dam and hydropower projects from around the world, which illustrate the SIA process and possible outcomes.

| | |
|---|---|
| Discussion topics | Discuss why it is important to consider alternatives, the benefits of avoiding or minimising certain impacts, and optimising benefits. |
| | Apart from alternative locations, discuss other types of alternatives that could be considered to avoid and/or minimise impacts on the social environment? |
| | Scoping is used to define the physical boundaries of a project. Discuss how this would be applied within the development context; specifically, for mitigating social impacts, (e.g. through the implementation of resettlement action plans), or for optimising benefits (e.g. through the implementation of social development plans). |
| Exercises | Using an example from your own country, evaluate the approach and methodology applied during the Social Impact Assessment, and provide an opinion on good and inadequate aspects. |
| | From your own experiences, provide an assessment of tools that have proven useful during the undertaking of Social Impact Assessments. |
| | Elaborate on a range of participatory appraisal techniques than can be used during a Social Impact Assessment. |
| | Develop a simple generic monitoring and evaluation framework, explaining which variables are to be measured and what they will indicate. |

# 5 RESETTLEMENT

## 5.1 Introduction and Normative Frameworks

| | |
|---|---|
| Purpose | The purpose of this session is to introduce participants to involuntary resettlement and governing normative frameworks. |
| Objectives | ❑ For participants to understand what constitutes involuntary resettlement and key aspects of normative frameworks |
| Preparatory reading | Asian Development Bank. (1998). Summary of the Handbook on Resettlement. A Guide to Good Practice. Asian Development Bank, Manila, Philippines |
| | IFC. (2002). Handbook for Preparing a Resettlement Action Plan. IFC: Environment and Social Development Department. The World Bank Group, Washington, USA |
| | IFC Performance Standards on Environmental and Social Sustainability (January 2012): Performance Standard 5: Land Acquisition and Involuntary Resettlement (www.ifc.org) |
| | International Finance Corporation - Policy and Performance Standards on Social and Environmental Sustainability (2006): Performance Standard 5: Land Acquisition and Involuntary Resettlement (www.ifc.org) |
| | International Finance Corporation – Guidance Notes: Performance Standards on Social and Environmental Sustainability (2007): Guidance Note 5: Land Acquisition and Involuntary Resettlement (www.ifc.org) |

Increasingly, international funding and donor agencies are committed to financing environmentally and socially sound projects that improve the lives of people. Possibly the single greatest impact of large infrastructure projects, such as dams and hydropower facilities, is the involuntary resettlement of project-affected people.

Resettlement is involuntary when project-affected people do not have the right to refuse land acquisition, which results in their displacement. It is common that this displacement is negotiated between the proponent, government and affected people (and does not require forced removal).

Land acquisition for projects that do require involuntary resettlement—including the loss of physical (shelter, homestead assets and resettlement) and/or economic (assets or access to economic assets, leading to a loss of income sources or livelihood means) displacement—represent significant challenges, which, without proper planning and management, may result in long-term hardship for affected people and environmental damage to the locations where they are resettled. Indeed, the history of large infrastructure developments, such as dams and hydropower facilities, shows many negative legacies where people displaced by projects continue to struggle to restore their livelihoods. This was recognised and led to the World Commission on Dams, the outcomes and follow-ups of which are provided in Section 3 of this Training Manual.

However, through proper resettlement planning, a project proponent can improve the living standards of affected people. Investment in local economic and social development pays dividends to the project proponent in the form of enhanced goodwill within the wider community where the project is located, as well as enhanced national and international corporate reputation.

Project proponents should avoid involuntary resettlement wherever feasible or minimize it by exploring alternative project designs and sites. Where involuntary resettlement is unavoidable, project proponents should engage affected people in the planning, implementation, and monitoring of the resettlement process. In this regard, current international thinking is that involuntary resettlement should be planned and executed as a development initiative to ensure that the livelihoods and living standards of affected people are improved. This is different from previous thinking, in which the aim was to restore livelihoods to the same level as prior to the development intervention.

The problem was globally recognized in the 1980s as a result of mass protests and demonstrations (among affected communities and NGOs), concerning the negative impact of mega-development projects on people living in the project sites—such as agricultural families being reduced to landless poverty. Development finance institutions now require that affected people and community conditions be better off—included as project beneficiaries where possible.

The social safeguards concept gave rise to the term “involuntary resettlement,” which encompasses both (i) compensation (at market or replacement cost) for or the replacement of all lost assets (land, homes, productive assets) and (ii) restoration or rehabilitation of lost livelihoods, cultural and social capital. The term “resettlement” as used in this context, is somewhat misleading because it may or may not entail the physical relocation of households or communities to a new resettlement site.

There are a number of international and national normative frameworks that govern involuntary resettlement, many of which are based on policies and procedures developed by the World Bank Group. Some examples include:

- African Development Bank – Involuntary resettlement Policy (www.afdb.org).
- Asian Development Bank – Involuntary Resettlement (www.adb.org).
- Inter-American Development Bank – Inter-American Development Bank Involuntary Resettlement Operational Policy 7-10 (www.iadb.org).
- Iran – Land Acquisition Law (www.parstimes.com/law/iran).
- IFC Performance Standards on Environmental and Social Sustainability (January 2012): Performance Standard 5: Land Acquisition and Involuntary Resettlement (www.ifc.org).
- International Finance Corporation - Policy and Performance Standards on Social and Environmental Sustainability (April 30, 2006): Performance Standard 5: Land Acquisition and Involuntary Resettlement (www.ifc.org).
- International Finance Corporation – Guidance Notes: Performance Standards on Social and Environmental Sustainability (July 31, 2007): Guidance Note 5: Land Acquisition and Involuntary Resettlement (www.ifc.org).
- Nepal - Acquisition, Compensation and Rehabilitation Plan (Nepal) (1999)
- Swaziland – The Swaziland Environmental Authority Act (1992) (www.ecs.co.sz/leg_sd_files/env_leg_sd_seaact.htm)
- Vietnam - Guidelines for Resettlement and Rehabilitation in Vietnam (Loc cit - Bladh, U. & Nilsson, E-L. (2005). How to Plan for Involuntary Resettlement? The Case of the Son La Hydroelectric Power Project in Vietnam

- World Bank Group[10] – Operational Policy and Bank Procedure 4.12 – Involuntary Resettlement (www.worldbank.org, www.ifc.org and www.miga.org).

Some of the central messages of these normative frameworks are as follows:

- To avoid or at least minimize involuntary resettlement wherever feasible by exploring alternative project designs or locations. It is important to note that this applies to all components of a project; for example, for a hydropower facility, there will be the need for transmission infrastructure (sub-stations and lines), which must be taken into account as part of the overall project impact and mitigation measures, including involuntary resettlement.
- To mitigate adverse social and economic impacts from land acquisition or restrictions placed on affected persons' use of land by:
    - Providing fair and appropriate compensation (Section 6) for loss of assets at replacement cost.
    - Ensuring that resettlement activities are implemented with the appropriate disclosure of information, consultation, and the informed participation of those affected.
    - Investigating and implementing incentives or other forms of benefits, including benefit-sharing opportunities if these exist on a particular project (Section 6).
- To restore and improve the livelihoods and standards of living of displaced persons
- To improve living conditions among displaced persons through the provision of adequate housing with security of tenure[11] at resettlement sites.

**Text box: 5.1 World Bank Policy on Involuntary Resettlement in Summary**

"The overall objectives of the Bank's policy on involuntary resettlement are the following :

(a) Involuntary resettlement should be avoided where feasible, or minimized, exploring all viable alternative project designs.

(b) Where it is not feasible to avoid resettlement, resettlement activities should be conceived and executed as sustainable development programs, providing sufficient investment resources to enable the persons displaced by the project to share in project benefits. Displaced persons should be meaningfully consulted and should have opportunities to participate in planning and implementing resettlement programs.

(c) Displaced persons should be assisted in their efforts to improve their livelihoods and standards of living or at least to restore them, in real terms, to pre-displacement levels or to levels prevailing prior to the beginning of project implementation, whichever is higher.

This policy covers direct economic and social impacts that both result from Bank-assisted investment projects, and are caused by :

- the involuntary taking of land resulting in
    - relocation or loss of shelter,
    - loss of assets or access to assets, or
    - loss of income sources or means of livelihoods, whether or not the affected per-

[10] World Bank, International Finance Corporation and the Multilateral Investment Guarantee Agency.

[11] In many countries, land is owned by the state, with people having occupation and use rights. In this context, therefore, security of tenure is designed to protect displaced persons from further forcible displacement in the future (i.e. it does not infer security of tenure through land title where such land title does not exist).

sons must move to another location; or
- The involuntary restriction of access to legally designated parks and protected areas resulting in adverse impacts on the livelihoods of the displaced persons.

| **Text Box 5.1 Introduction and Normative Frameworks – Key Aspects** |
|---|
| • Involuntary resettlement arises through land acquisition for a project (comprising all project components), where the people currently occupying or otherwise using that land cannot refuse to be displaced.<br>• Involuntary resettlement covers physical and economic displacement.<br>• There are a number of international and national normative frameworks that govern resettlement—many of which are based on policies and procedures, developed by the World Bank Group.<br>• Involuntary resettlement should be avoided. Where avoidance is not possible, involuntary resettlement needs to be properly planned and executed, in close consultation with affected people.<br>• Involuntary resettlement needs to be implemented within a development paradigm that restores and improves the livelihoods of affected people and communities where they are resettled. |

| | |
|---|---|
| Discussion topics | What normative frameworks governing involuntary resettlement exist in your country. How do they compare with those that exist internationally? |
| | How can normative frameworks be improved to provide people affected by involuntary resettlement with a greater assurance that their livelihoods will be restored and improved? |
| Exercises | Despite normative frameworks being in place for many years, there are many examples of shortcomings on projects. Describe why this has been the case. |
| | What mechanisms can be put in place to ensure that governments and proponents abide by the provisions of normative frameworks—not only to receive project finance but also to ensure the sustained livelihoods of affected people? |

## 5.2 Resettlement Requirements

| | |
|---|---|
| Purpose | The purpose of this session is to introduce participants to the requirements of financiers when involuntary resettlement is required for a large infrastructure project. |
| Objectives | ❑ For participants to understand financiers' requirements for involuntary resettlement |
| Preparatory reading | IFC Performance Standards on Social and Environmental Sustaina- |

| | |
|---|---|
| | bility (January 2012): Performance Standard 5: Land Acquisition and Involuntary Resettlement (www.ifc.org). |

Involuntary resettlement applies to physical or economic displacement resulting from land acquisition through expropriation (or other compulsory procedure) and land acquisition through negotiated settlements with property owners or those with legal rights to land (including customary or traditional rights recognized or recognizable under the laws of the country) if expropriation or other compulsory process would have resulted upon the failure of negotiation. Provision is also made for displaced persons with no recognizable legal right or claim to the land they occupy.

### 5.2.1 General requirements

#### 5.2.1.1 Project design

The generally accepted premise is that feasible alternative project designs that avoid or at least minimize physical or economic displacement, while balancing environmental, social, and financial costs and benefits, are preferred.

**Text Box 5.3 Case study: Resettlement Action Plan for Nam Ngum 2 Hydroelectric Power Project**

Nam Ngum 2 Hydroelectric Power Project (NN2HPP) was developed to generate an annual energy output of 2,218 GWh for Thailand under the 30 years (2007-2037) Concession Agreement (CA) between Government of Lao PDR (GoL) and Nam Ngum 2 Power Company (NN2PC). The project is located about 90 km in the north of Vientiane Capital, about 35 km northeast and upstream of the existing Nam Ngum 1 dam. The dam type is a concrete face-rock fill dam (CFRD), approximately 181 meters high, with 6,774 million cubic meters (MCM) of reservoir storage capacities, and with an inundation area of about 122 $km^2$ at full supply level (FSL), 375 meters above sea level.

The project requires relocation/resettlement of 1,107 households from 16 project affected villages. Muang Fuang Resettlement Site (new location) was developed to accommodate 1,053 families. The Resettlement Action Plan (RAP) was developed to mitigate social impacts from relocation/resettlement of Project Affected Persons (PAPs) from their former villages to new locations.

RAP was formulated in early 2005. Four planning reports were prepared and submitted to authorities for review and approval, specifically;

- Resettlement Action Plan (RAP); 25 November 2005
- RAP; Supplementary Report on Public Consultation; 25 November 2005
- Ethnic Minorities Development Plan (EMDP), 15 March 2006
- Social Development Plan (SDP), 15 March 2006

RAP Implementation began November 2005 with the appointment of committees, public consultations, design and construction of new communities, compensation of the affected properties, and grievance responses. Physical relocation of PAPs to new communities were organized during January to February 2010, followed by Social Development Program.

Compensation program and physical relocation of all PAPs families to new communities were accomplished as planned in late February 2010 before reservoir impoundment. Social Development and Ethnic Minority Development Programs have been implemented and will be continue until the end 2020 with 7 follow up activities until the end of the concession agreement in 2037.

However, results of the programs/activities implemented for the resettlement area should be revised if social and environmental problems are encountered. Public participation is strongly required in the monitoring and evaluation of the implemented activities.

**Sources:** Amnat Prommasutra**.** Planning and Implementing Resettlement Action Plan for Nam Ngum 2 Hydroelectric Power Project in Lao PDR. TEAM Consulting Engineering and Management Co., Ltd. Bangkok, THAILAND. E-Mail: amnatp@team.co.th

www.teamgroup.co.th/index.php/en/downloads/category/**2**.html?...**2**-l

#### 5.2.1.2 Compensation and benefits for displaced persons

When displacement is unavoidable, the project proponent is required to offer displaced persons and communities, compensation for loss of assets at full replacement cost. In addition, the proponent is required to assist affected people to restore and improve their standards of

living or livelihoods. The project proponent should liaise closely with the government to agree on procedures and standards for the compensation and benefits for affected persons.

Standards for compensation must be transparent and consistent within the project. Where livelihoods of displaced persons are land-based, or where land is collectively owned, the proponent is required to offer land-based compensation, where feasible. Furthermore, the proponent is required to provide opportunities to displaced persons and communities to derive appropriate development benefits from the project.

Compensation is detailed in Section 6 of this Training Manual.

#### 5.2.1.3 Stakeholder participation and consultation

The project proponent is responsible for stakeholder consultation throughout the resettlement process. The consultation plan should be customised to local circumstances and must include all affected persons, including host communities. The consultation plan should be designed in such a manner that stakeholders actively contribute to decision making. Stakeholder participation, engagement and consultation should continue during the implementation, monitoring, and evaluation of compensation payment and resettlement.

Stakeholder participation is detailed in Section 8 of this Training Manual.

#### 5.2.1.4 Grievance mechanism

Processes such as involuntary resettlement are seldom without disputes and grievances. Therefore, as part of the resettlement process, it is important that a grievance mechanism be formulated and agreed between parties early on in the process. The grievance mechanism should be designed to receive and address specific concerns around the resettlement process and compensation, as raised by displaced persons or members of host communities. The mechanism should enable the resolution of disputes in a transparent and impartial manner.

#### 5.2.1.5 Resettlement planning and implementation

The following are the general requirements for planning involuntary resettlement, which should be documented in a Resettlement Action Plan (RAP):

- A census/survey of relevant demographic, socio-economic and land use baseline data:
    - To identify persons who will be displaced by the project.
    - To determine who will be eligible for compensation and assistance.
    - To discourage an influx of people who are ineligible for benefits. Importantly, the proponent, in consultation with the government, must establish a cut-off date for eligibility. Information regarding the cut-off date must be well documented and disseminated throughout the project area.
- Establish a compensation framework, eligibility criteria and entitlements of all categories of affected persons (including host communities), paying particular attention to the needs of the poor and vulnerable.
- Establish organisational responsibilities.
- Identify resettlement assistance needs and measures required to restore and improve livelihoods.

- Monitoring and evaluation methods and frequency.
- The RAP should also contain a detailed budget and a programme that is closely aligned with the programme for the primary investment initiative[12].

In cases involving economic (but not physical) displacement of people, the proponent must develop procedures to offer the affected persons and communities compensation and other assistance. The procedures must establish the entitlements of affected persons or communities and ensure that these are provided in a transparent, consistent and equitable manner.

**Text Box 5.4: The case from Lao PDR[13]: Size and Impact that need the Resettlement Plan**

[12] In terms of the timing of resettlement, financiers usually require that land acquisition, the payment of compensation for affected assets, and resettlement associated with a project (or project component) be complete before the onset of project impacts. However, it should be noted that a project may have subprojects or multiple components that cannot be identified before project approval or that may be implemented sequentially over an extended period. Under these circumstances, provision can be made for the preparation of a resettlement policy framework to establish the principles, procedures, and organizational arrangements by which the proponent will abide during project implementation. The proponent must then prepare a RAP, consistent with the policy framework for each subsequent subproject or project component, that entails physical and/or economic displacement.

[13] Source: Lao PDR Prime Minister's Office, Science Technology and Environment Agency (STEA), November, 2005

For Lao PDR, the Decree on Compensation and Resettlement of the Development Projects divides the size and impact that need the resettlement plan as below:

Social Category 'S1': Sub-projects with significant impacts on people. These are defined as follows:

200 persons (40-50 households) or more severely affected due to 20% loss of productive assets or a loss of less than 20% with remaining assets rendered economically unviable;

- -Displacement due to the loss of land and/or structures
- -Permanent loss of incomes and employment

200 or more persons (40-50 households) belonging to the following vulnerable groups, which will be severely affected by the project:

- -ethnic minorities
- -squatters and those with weaker titles
- -indigenous peoples
- -poverty groups
- -women headed households

Project categorized as 'S1' will require full Resettlement Plan or a standalone EMDP. In projects with 'S1' category the impacts would be considered significant.

Social Category 'S2': Where the impacts of the sub-project are marginal:
Impacts are marginal although the number of people affected may be more than 200 in the case of loss of productive assets or for vulnerable groups (ethnic minorities, poverty group, squatters, women-headed households).

Only a simple resettlement plan or a Land Acquisition and Compensation Report would be required for category 'S2' projects. Impacts in 'S2' projects would be considered Marginal or Insignificant.

Social Category 'S3': Sub-project does not result in acquisition of assets, displacement, loss of incomes and employments, restricted access to community resources, community ties, and restrictions imposed on cultural practices of vulnerable and/or ethnic minority groups.
No further studies on resettlement issues necessary for 'S3' category of projects.

RAPs are further elaborated in Section 5.3.

#### 5.2.1.6 Public disclosure

To comply with the policies of most international financiers, all RAPs are required to be publicly disclosed. This can be done by displaying the RAP and supporting documents in public venues and also on web sites. It is also important to note that when disclosing these documents, the public should be made aware that the documents are available for public review (via verbal communication, letters, advertising and banners on web sites).

### 5.2.2 Displacement

#### 5.2.2.1 Physical displacement

If people living in a project area must move to another location, the proponent must:

- Offer displaced persons choices among feasible resettlement options, including adequate replacement housing or cash compensation where appropriate.
- Provide resettlement assistance suited to the needs of each group of displaced persons, with particular attention paid to the needs of the poor and vulnerable.

Alternative housing and/or cash compensation must be available prior to actual resettlement. Furthermore, resettlement sites built for displaced persons must offer improved infrastructure, services and living conditions. The intention is for resettlers to be offered a choice of options for housing, along with security of tenure, so that they can resettle legally without facing the risk of future eviction.

Resettlers should also be offered relocation assistance sufficient for them to restore their standards of living.

Where displaced persons own and occupy structures, the proponent must compensate them for the loss of these assets as well. Extra assets include dwellings and other improvements to the land, at full replacement cost, provided owners occupy the project area prior to the cut-off date for eligibility. Compensation in kind will be offered *in lieu* of cash compensation, where feasible (Section 6).

While land acquisition does not necessarily require displacing people or occupying used land, it may affect the living standards of people who depend on resources located in, on, or around that land. For example, a farming family may lose a portion of its land to a project without having to vacate its homestead; nevertheless, the loss of even a portion of farmland may reduce overall productivity. This threat is magnified among agrarian populations in developing countries, where farm fields are typically small and often widely scattered. Alternatively, land acquisition may restrict a community's access to commonly held resources, such as rangeland and pasture, non-timber forest resources (such as medicinal plants or construction and craft materials), woodlots for timber and fuel wood or fishing grounds.

Similarly, a project's use of water resources may not entail land acquisition nor physical relocation; however, it may still have negative effects on the livelihoods of people living in the project area. For example, the diversion or impoundment of a river's flow for the generation of hydroelectric power may affect the livelihoods of downstream farmers, who rely on minimum flows for irrigating crops. A coastal power plant or factory using ocean water for cooling purposes may affect fish habitats, thereby affecting the livelihoods of people who fish the coastal waters.

Proponents are not required to compensate or assist those who encroach on the project area after the cut-off date.

#### 5.2.2.2 Economic displacement

If land acquisition for the project causes loss of income or livelihood, regardless of whether or not affected people are physically displaced, the following requirements apply:

- Promptly compensate economically displaced persons for loss of assets or access to assets at full replacement cost.
- In cases where land acquisition affects commercial structures, compensate the affected business owner for the cost of re-establishing commercial activities elsewhere,

for lost net income during the period of transition, and for the costs of the transfer and reinstallation of the plant, machinery or other equipment.

- Provide replacement property (for example, agricultural or commercial sites) of equal or greater value, or cash compensation at full replacement cost where appropriate, to persons with legal rights or claims to land which are recognized or recognizable under the national laws.
- Compensate economically displaced persons without legally recognizable claims to land for lost assets (such as crops, irrigation infrastructure and other improvements made to the land) other than land, at full replacement cost.
- Provide additional targeted assistance (for example, credit facilities, training, or job opportunities) and opportunities to restore and improve income-earning capacity, production levels, and standards of living to economically displaced persons, whose livelihoods or income levels are adversely affected.
- Provide transitional support to economically displaced persons, as necessary, based on a reasonable estimate of the time required to restore their income earning capacity, production levels, and standards of living.

The proponent is not required to compensate or assist opportunistic settlers who encroach on the project area after the cut-off date.

Compensation is detailed in Section 6 of this Training Manual.

**Text Box 5.3 Rapid Census - Dealing with Opportunistic Settlers**

Large infrastructure projects draw people to a project area, primarily due to the hope of gaining employment. However, a common problem is that people also move to project areas in the hope of receiving compensation and resettlement benefits. These are opportunistic settlers. This is the primary reason for establishing a well publicised cut-off date after which eligibility for compensation and resettlement benefits falls away. Experience from projects where significant amounts of damage compensation has been paid shows that a rapid census is desirable and useful to establish the baseline demography of a project affected area. The rapid census is designed to collect a minimum of data from households to confirm their eligibility for future compensation. The eligibility of the enumerated persons is confirmed by traditional and local leadership structures, and each person enumerated is issued with a project-specific identity card, with a photo. A duplicate of this identity card, and photos, is retained by the project team, and filed alongside the census data (co-ordinates of the homestead, household head's name, number of people resident at the homestead, structures at the homestead, and land uses). The rapid census needs to be completed prior to the cut-off date.

**Text Box 5.4 Resettlement Requirements – Key Aspects**

- The following general requirements apply:
  - Project design to avoid or minimise resettlement.
  - Compensation and benefits for displaced persons.
  - Stakeholder participation and consultation.
  - Grievance mechanism.
  - Resettlement planning and implementation.
  - Public disclosure.
- There are specific provisions that apply to physical (including the loss of access to

natural resources) and economic displacement.

- Importantly, people who enter a project affected area after a well-publicised cut-off date for establishing eligibility (so called opportunistic settlers), are not entitled to compensation and resettlement benefits.

| | |
|---|---|
| Discussion topics | Much is written about avoiding involuntary resettlement where possible. Discuss whether or not it is truly possible to avoid involuntary resettlement. |
| | Using examples from your own country, identify examples where project cut-off dates were set, and describe the outcomes. Similarly, identify examples where project cut-off dates were not set, and describe these outcomes. |
| Exercises | From your experience, what are the most important challenges when a government or project proponent is faced with involuntary resettlement associated with a large infrastructure project? |
| | Develop a simple and generic questionnaire that can be administered amongst project-affected people to establish legitimate occupants. |

## 5.3 Resettlement Action Plans

| | |
|---|---|
| Purpose | The purpose of this session is to introduce participants to the requirements for and the preparation of Resettlement Action Plans. |
| Objectives | ❑ For participants to understand what is required in a Resettlement Action Plan and how to go about assembling the plan |
| Preparatory reading | IFC. (2002). Handbook for Preparing a Resettlement Action Plan. IFC: Environment and Social Development Department. The World Bank Group, Washington, USA |

A Resettlement Action Plan is a document drafted by the project proponent or other parties responsible for resettlement (such as government agencies), specifying the procedures to be followed and the actions that to be taken to properly resettle and compensate affected people and communities.

The RAP must identify the full range of people affected by the project and justify their displacement after consideration alternatives to minimize or avoid displacement. The RAP outlines eligibility criteria for affected parties, establishes rates of compensation for lost assets, and describes levels of assistance for resettlement and the reconstruction of affected households. Also, the RAP protects the proponent against unanticipated or exaggerated claims from individuals with spurious eligibility for resettlement benefits. In this regard, the mediation of such claims can cause significant delays in project implementation, resulting in costly overruns.

### 5.3.1 Types of resettlement

Involuntary resettlement can occur in a wide variety of projects, and the scale of displacement associated with those effects will vary from project to project. Common types of resettlement and associated issues include:

- **Rural resettlement.**

  Displacement of people in rural areas typically results from a project's acquisition of farm land, pasture, or grazing land or the obstruction of access to natural resources on which affected populations rely for livelihoods (for example, forest products, wildlife, and fisheries). Major challenges associated with rural resettlement include: requirements for restoring income based on land or resources; and the need to avoid compromising the social and cultural continuity of affected communities, including those host communities to which displaced populations may be resettled.

- **Urban resettlement.**

  Resettlement in urban or peri-urban settings typically results in both physical and economic displacement affecting housing, employment, and enterprises. A major challenge associated with urban resettlement involves restoration of wage-based or enterprise-based livelihoods that are often tied to location (such as proximity to jobs, customers, and markets). Resettlement sites should be selected to maintain the proximity of affected people to established sources of employment and income, and to maintain community and neighbourhood networks. In some cases, the mobility of urban populations and the consequent weakening of social safety nets, characteristic of rural communities, require that resettlement planners be especially attentive to the needs of vulnerable groups.

- **Linear resettlement.**

  Linear resettlement applies to projects having linear patterns of land acquisition (highways, railways, canals, and power transmission lines). In sparsely populated rural areas, a linear project, such as a power transmission line, may have minimal impact on any single landholder. Compensation is characterized by a large number of small payments for the temporary loss of assets, such as standing crops. If well designed, linear projects can easily avoid or minimize the demolition of permanent structures. Conversely, in a densely populated urban area, a linear project such as a road upgrading may require the demolition of structures along the project right-of-way, thereby significantly affecting large numbers of people. Linear resettlement contrasts with site-specific resettlement because of the problems that frequently arise when resettlement actions have to be coordinated across multiple administrative jurisdictions and/or different cultural and linguistic areas.

- **Site-specific resettlement.**

  Site-specific resettlement is associated with discrete, non-linear projects such as factories, ports, highway interchanges, hotels, commercial plantations, etc., where land acquisition encompasses a fixed area. However, site-specific resettlement associated with mining and other extractive industries, such as oil and gas, may require progressive land acquisition over long periods. As a result, displacement of communities may occur in phases over a number of years—even decades. Communities threatened with displacement at some future date often prefer to remain in place until resettlement is absolutely necessary. The major challenge in such incremental resettlement

is maintaining a consistent approach to compensation and income restoration over the life of the project. Similarly, the creation of reservoirs for hydropower and irrigation projects can result in significant economic and physical displacement of rural communities.

Arising from the aforementioned, it is clear that the scope and level of detail of resettlement planning will vary with circumstances, depending on the project's complexity and the magnitude of its effects. As a minimum requirement, a RAP must ensure that the livelihoods of people affected by the project are restored to levels prevailing before inception of the project. However, simple restoration of livelihood may be insufficient to protect affected populations from adverse project impacts, especially induced effects such as competition for resources and employment, inflation, and the breakdown of social support networks. Therefore, resettlement activities should result in measurable improvements in the economic conditions and social well-being of affected people and communities.

### 5.3.2 Components of a Resettlement Action Plan

The essential components of a RAP are as follows:

- Identification of project impacts and affected populations.
- Legal framework for land acquisition and compensation.
- Compensation framework.
- Description of resettlement assistance and restoration of livelihood activities.
- Detailed budget.
- Implementation schedule.
- Description of organizational responsibilities.
- Framework for stakeholder participation, consultation and development planning.
- Grievance mechanism.
- Framework for monitoring, evaluation, and reporting.

#### 5.3.2.1 Identification of project impacts and affected populations

The first task in planning resettlement is to identify a project's adverse impacts and the populations that will be affected. This usually requires the participation of qualified experts, who have appropriate training and experience. Resettlement planning involves more than simple cadastral surveys or inventories of affected assets. The ultimate goal of a RAP is to enable those displaced by a project to improve their standard of living–a goal that requires an examination of social, environmental, and economic conditions beyond simple physical inventories.

The RAP must identify all people affected by the project and all adverse impacts to livelihoods due to land acquisition. Typical effects include the breaking up of communities and social support networks; loss of dwellings, farm buildings, and other structures (wells, boreholes, irrigation works, and fencing), agricultural land, trees, and standing crops; impeded or lost access to community resources, such as water sources, pasture, forest and woodland, medicinal plants, game animals, or fisheries; loss of business; loss of access to public infrastructure or services; and reduced income resulting from these losses.

Consultation with officials of local government, traditional and community leaders, and other representatives of the affected population is essential to gaining a comprehensive understanding of the types and degrees of adverse project effects. The project proponent must

discuss plans for a census and registration program with local leaders and representatives of community-based organizations. Census and asset inventory enumerators may be the first project-related personnel that affected people will encounter. Enumerators must be thoroughly briefed on the project's objectives and timetable and plans for physical relocation, compensation for lost assets, and restoration of livelihoods.

Care must be taken to include areas and communities to where affected people will resettle. People inhabiting these areas are known as 'host populations' or 'host communities.' Hosts may be adversely affected by new settlement and should, therefore, be identified as a category of persons affected by the project. The RAP must address and mitigate adverse effects associated with resettlement in host communities, including increased pressure on land, water, natural vegetation (forests, woodlands, savannas, grasslands, and wetlands), plantations and woodlots, or other common property resources, public infrastructure, and services. Host communities should be informed and consulted as part of the resettlement planning process. Consultation involving representatives of both host communities and the communities to be displaced helps build familiarity and resolve disputes, which inevitably arise during and after resettlement. Any payment due to host communities for land or other assets to be provided to new settlers should be promptly agreedupon and paid.

A number of steps, not necessarily discrete or undertaken sequentially, which need to be followed in identifying affected populations and project impacts. It should also be noted that information arising from the SIA can inform data gathered in these steps.

- Mapping that identifies features such as population settlements, infrastructure, soil composition, natural vegetation areas, water resources, and land use patterns.
  The area *from which people will be moved* as well as the area *to which people will be resettled* should be mapped in detail. Ideally, a detailed large-scale map (if possible, supported with aerial photography) on which individual affected households are demarcated (identified with registration numbers derived from the population census) should be produced. This should be supported by land surveys, showing different types of land (according to uses), and their potential (crop suitability assessments, natural vegetation, and livestock carrying capacity assessments, as examples). From these survey maps, resettlement planners can prepare various thematic maps, which identify the location and extent of important types of land use. Additional thematic maps should be prepared that identify: land use categories; the location of common property resources; cultural property (for example, places of ritual significance, graveyards, and monuments); road and transportation networks; and the location of employment and services.

  In addition to important planning uses, mapping of the project area, affected households, natural resources, fixed assets, and infrastructure provides the proponent with a spatial reference or baseline, with which to protect the project from people who move into the affected area after the cut-off date.

- A census that enumerates affected people and registers them according to location.

  The census of people affected by the project is a key initial stage in the preparation of the RAP. The census serves five important, interrelated functions:

  - Enumerating and collecting basic information on the affected populations.
  - Registering the affected population by residence or locality.

- Establishing a list of legitimate beneficiaries before the project's onset that counters spurious claims from those moving into the project area solely in anticipation of benefits.
- Laying a framework for subsequent socio-economic research needed to establish fair compensation rates and to design, monitor, and evaluate sustainable income restoration or development interventions.
- Providing a baseline for monitoring and evaluation.

#### ENUMERATION AND REGISTRATION

Census and registration provide information on the scale and complexity of the required resettlement planning (for example, the size, distribution, and socio-economic diversity of the population). The census must encompass all people adversely affected by the project, regardless of their legal status (landowner, holder of land rights, tenant or illegal squatter) or whether they are actually living on an affected site at the time of the census. This means that a lack of legal land title does not disqualify people from resettlement assistance. Private landowners and holders of rights to land, as well as any person currently occupying public or private land for shelter, business purposes, or other sources of livelihood (for example, caretakers and squatters), should be included in the census. While landless people or squatters may not be eligible for land compensation, they may be eligible for resettlement assistance, compensation for assets (such as shelters and standing crops, orchards, or woodlots), and, where practical, the benefits of development interventions, which may include the provision of land.

Particular attention must be given to vulnerable groups living in the project area. These groups may include households headed by women or children, people with disabilities, the extremely poor, the elderly, and groups that suffer social and economic discrimination, including indigenous peoples and minorities. Members of vulnerable groups may require special or supplementary resettlement assistance because they are less able to cope with the physical and/or economic displacement than the affected population. Also, care must be taken to account for people who may not occupy a site required by a project at the time of enumeration. Refugees or people internally displaced by civil conflict may be unable or unwilling to return to a location to exercise their land claims after a conflict. In Mozambique, for example, proponents of an industrial estate provided resettlement assistance to farmers who had fled the project area during years of civil war. This is despite these farmers being absent from the land at the time of the census. Nevertheless, they were included among the affected population and compensated on their return. In such instances, systems for checking and validating land claims are essential, most often relying on local and traditional leaders to verify eligibility.

#### BENEFICIARY CAPPING

The completion of the census represents a provisional cut-off date for eligibility for resettlement assistance. Importantly, this cut-off date must be made widely known. Furthermore, affected people should be provided with documentation that confirms their enumeration (identity cards or a witnessed copy of the survey, endorsed by the household head). This can (at least partially) stop the influx of people into the project

area after the cut-off date, who are not eligible for compensation. However, if there is a significant time lag between the completion of the census and resettlement implementation, provision should be made for population movements and natural population increases and expansions of households.

#### SOCIO-ECONOMIC STUDIES

The census can be combined with the gathering of pertinent demographic information (age, sex, family size, births, and deaths) and related social and economic information (ethnicity, health, education, occupation, income sources) among affected people. This information provides a general understanding of the communities affected by the project, including host communities, and the scope of compensation and resettlement assistance necessary to mitigate adverse effects. These data also provide a baseline from which more targeted socio-economic studies (such as studies of land and resource management practices, analyses of specific income streams, assessment of gender roles and vulnerable groups) can be undertaken to improve compensation and livelihood restoration strategies.

#### BASELINE DATA FOR MONITORING AND EVALUATION

The census will also provide quantitative data that enables the budgeting of resources and services to track the delivery of those resources and services to the affected population, and to correct problems in the delivery of resources and services throughout resettlement implementation. In addition, information gathered during the census can yield important baseline data at the household and community levels, which can be used to establish indicators—both for resettlement implementation and the monitoring and evaluation of income restoration and sustainable development initiatives associated with the resettlement programme.

- An inventory of lost and affected assets at the household, enterprise, and community level.

  The proponent must undertake a detailed survey of all losses that will result for each household, enterprise, or community affected by the project. The survey should account for land acquisition and loss of physical assets, as well as loss of income—either temporary or permanent—resulting from household members displaced from their places of employment or other income-generating resources (for instance, potters from clay deposits, fishers from fishing grounds, small-scale suppliers or vendors from customers). Communal assets, such as water sources, livestock grazing areas, irrigation systems, and community structures, should be recorded separately. Stakeholder participation is essential in order to develop a reasonable consensus on the methods and formulas for assigning values to lost assets and income forgone during resettlement. In some jurisdictions, it may be necessary for local authorities to validate claims to assets. However, inventories of assets compiled should be signed-off by household heads to reduce the possibility of subsequent claims or disputes regarding claims. The following are important inventory categories:

#### LAND USE AND LAND CAPABILITY

All land acquired or otherwise affected by the project, whether on a permanent or a temporary basis, must be surveyed, classified by type, and recorded. Civil authorities typically classify and assess the value of land by use (for instance, irrigated agriculture, dry land agriculture, pastures, forests, housing and commercial). However, care must be taken not to overlook the difference between present and potential land use requirements of affected people, particularly where rotational cropping is undertaken. This usually requires detailed soils maps and an assessment of land capability and carrying capacity.

Follow-up studies are usually required to support estimates of the annual revenue derived from different land uses or land types, such as irrigated land, dry land farming land, fish-farming ponds, and woodlots. Typically, a productive assets inventory covers land areas by type and use, annual net income per hectare (net$/yr/ha), income loss for the household (% taken and value/lost production ($)), replacement value on the prevailing market, and tenure status.

#### HOUSES AND ASSOCIATED STRUCTURES

These include dwellings, separate kitchens, toilets, storerooms, barns, stables, livestock pens, granaries, and workshops for cottage industry and should be classified by construction materials (timber, wattle, bamboo, reed, brick and mortar, concrete and earth). All structures should be included in the inventory, regardless of whether they are permanently inhabited or occupied intermittently.

#### OTHER PHYSICAL ASSETS

These include non-moveable assets such as standing crops, fruit and fodder trees, firewood and timber woodlots, plantations, fencing, wells, irrigation structures, and graves or tombs.

#### PRIVATE ENTERPRISE

These include shops, workshops, stalls, factories, and other business establishments. These should be classified according to ownership (private business, public enterprise, joint venture, etc). Individuals losing their enterprises, employees losing jobs, or vendors losing customers should be enumerated, and the value of these losses incurred during the resettlement period should be estimated.

At the community level, the assets survey should provide an inventory and assessment of the losses of public resources, including:

#### COMMON PROPERTY RESOURCES

These include forests and woodlands (sources of building and craft materials, biomass for domestic energy) and pastures.

#### PUBLIC STRUCTURES

These include schools, clinics, meeting halls, places of worship, wells/communal water points, livestock watering points, livestock dips, bathing and washing platforms, bus shelters, and monuments.

**CULTURAL PROPERTY**

This includes archaeological sites, burial grounds, monuments, shrines, places of worship, artifacts, and sites of religious or historical significance.

**INFRASTRUCTURE**

All infrastructure, which will be destroyed or disrupted by the construction of the project, should be enumerated, including roads and bridges; irrigation and drainage channels; water and sewage lines; power lines; and communication lines.

The inventory of assets should be cross-referenced and linked with the census. It is desirable and valuable to photograph, document, and register all assets by household, enterprise, or community organization.

- Socio-economic surveys and studies of all affected people (including seasonal, migrant, and host populations), as applicable.

  A substantial amount of household-level socio-economic data are collected during the census and inventories of assets. However, low income households (those commonly affected by resettlement), particularly in rural areas, typically have diversified livelihood strategies that combine agriculture with wage labour and small-scale enterprises. Therefore, it is important to survey all income sources in order to calculate income loss from project land acquisition as a proportion of total income. Therefore, socio-economic studies may be required to collect additional quantitative (supported by qualitative) information in two important areas:

  - Household level income streams and livelihood strategies that were not identified in the census and inventories of assets.
  - The structure, organization, and economic interdependencies within the larger community affected by a project.

  The analysis of these data will help identify those households most at risk from physical or economic displacement.

  The socio-economic studies should be linked closely with the census and inventories of assets to provide comprehensive information on household economic resources, including common property resources. The census and inventory of assets should have already identified the basic social unit of production or economic organization. Typically, this unit is the household, which functions as a single economic unit (a household may consist of a nuclear family, extended family, or non-related members). If income streams are based exclusively on agriculture and associated activities, the socio-economic study can be largely completed by merging the census and assets data. It is then necessary to quantify net returns from income streams and to establish replacement values for land and assets. This information provides an un-

derstanding of household income streams and of how these streams can be restored after resettlement is complete. It also provides a baseline for evaluating the success of livelihood restoration and sustainable development initiatives. Furthermore, it is important to disaggregate production and income stream data by gender to clearly see the roles that men and women play in maintaining a household and design appropriate strategies to restore income.

In places where other activities contribute to the household economy (such as seasonal wage labour, remittances, or income earned by pastoralists herding livestock in areas distant from the community), the socio-economic surveys should identify net returns from these income streams. In many parts of the world, rural people may appear to be agriculturalists; however, further analysis may reveal that the agricultural base is insufficient for subsistence, and represents only a small portion of household income—while the bulk of household income is actually derived from migratory wage labour or informal sectoral economic activities.

Quantitative data gathering in resettlement situations can be problematic. Factors such as the adequacy of sample frames, the experience of field staff and adequacy of field staff supervision, the knowledge and cooperation of respondents, transportation and communications can bias sampling and data collection. Therefore, it is necessary to balance quantitative and qualitative methods of gathering data to ensure as complete an understanding of income streams as possible.

- The analysis of surveys and studies to establish compensation parameters, to design appropriate income restoration and sustainable development initiatives, and to identify baseline monitoring indicators.

  Analysis of the data collected in the census, assets inventory, and socio-economic studies serves three main purposes:

  - It provides the information needed to establish an entitlement matrix for household- and community-level compensation.
  - It yields basic economic and social information needed to design appropriate livelihood restoration and development interventions.
  - It provides quantifiable demographic, economic, educational, occupational, and health indicators for future monitoring and evaluation of resettlement implementation.

  Household data can be aggregated for the purpose of comparing returns to labour or investment in different income stream options (for instance, farming, livestock or commerce). This information is needed to design livelihood restoration measures for affected households and communities. Similarly, the assessment of losses due to a project are better understood in the context of local economies. Household data can also be disaggregated to identify economic strata within communities (the poorest and most vulnerable households, households dependent on remittances, etc), appropriate assistance, and further development strategies .

  Socio-economic studies also yield important information on the ways in which affected communities are organized and function. These studies should provide an understanding of leadership and decision making processes within the community that may function independently of the prevailing political and administrative structures. This understanding also helps to identify informal social support networks, important for

the survival of the community and, in particular, more vulnerable members of the community.

- Stakeholder participation specifically covering the mitigation of effects and development opportunities.

  Throughout resettlement planning, stakeholder participation and consultation must be active. A committee of community representatives can serve as a focal point for consultations on the types of proposed assistance as well as for subsequent community participation in resettlement implementation. Where host communities are affected by resettlement decisions, representatives of these communities should be included in consultations.

  A project's impact may extend beyond a discrete number of affected households to the wider community. This means a project may result in disruptions to economic and social relations within a community, which cannot simply be offset by compensation measures that restore affected households' income. An example of this would be the reduced viability of a farmers' cooperative after some of its members have been physically displaced by a project. It is important that stakeholder participation captures these cumulative impacts.

  Generally, development interventions relate to productivity or production enhancements of existing income streams through the extension of existing irrigated agriculture, construction of storage facilities, support for small-scale credit, and the formation of cooperatives and marketing strategies—or the promotion of new commodities and enterprises. Project employment, during both construction and the long-term operations phase, should also be considered as part of the overall development package.

  In addition to the restoration and improvement of livelihoods, resettlement may provide opportunities for an affected community to improve its housing, public infrastructure, and services—and to engage in land use planning that contributes to the long-term development objectives of individuals and the community as a whole.

  Once development opportunities have been identified, it is necessary to design appropriate interventions, in close collaboration with beneficiaries, local authorities, and, where appropriate, local community–based organizations. Proposed development interventions will require documentation similar to resettlement plans: an implementation schedule; clear and effective organizational responsibilities; a program for stakeholder participation and consultation; a mechanism for dispute resolution and problem solving; a detailed budget; a schedule for monitoring and evaluation; and mechanisms for taking corrective actions identified in the evaluation.

#### 5.3.2.2 Legal framework

The legal framework of a RAP describes all laws, decrees, policies and regulations relevant to the resettlement activities associated with a project. Many countries have legislation and policies governing land expropriation and compensation for affected assets. However, policy governing resettlement is often poorly defined—if not altogether lacking. Therefore, adopting well-developed international normative frameworks, to be applied within the legal framework of the country in question, is appropriate:

- The scope of the power of eminent domain and the nature of compensation associated with it, both the procedures for assessing compensation values and the schedule for making compensation payments.
- Applicable legal and administrative procedures, including the appeals process and the normal time for such procedures.
- Land titling and registration procedures.
- Laws and regulations relating to the agencies responsible for implementing resettlement and those related to land compensation, consolidation, land use, environment, water use, and social welfare.

Care must also be taken to respect local customs and traditions that govern affected communities.

The legal framework lays the foundation for three key elements of a RAP:

- Establishing rates of compensation.
- Determining eligibility for compensation and resettlement assistance, including development initiatives aimed at improving the social and economic well-being of affected populations.
- Establishing mechanisms to resolve grievances among affected populations related to compensation and eligibility.

#### 5.3.2.3 Compensation framework

The compensation framework specifies all forms of asset ownership or use rights among the affected population and the strategy for compensating partially or completely. The compensation framework should include a description of the following:

- Any compensation guidelines established by the host country government.
- In the absence of established guidelines, the methodology that the proponent will use to value losses.
- The proposed types and levels of compensation to be paid.
- Compensation and assistance eligibility criteria.
- How and when compensation will be paid.

Compensation is detailed in Section 6 of this Training Manual.

| **Text Box 5.5 Land-For-Land Compensation** |
|---|
| Land-based resettlement options should be provided to displaced people whose livelihoods depend on the land (e.g. farmers and herders). These options may include resettlement on |

or access to land acquired or purchased for resettlement. This kind of land-for-land compensation must take into account the following:

- Replacement land should be equivalent or superior in productive potential to the land from which people will be displaced.
- Replacement land should be located in reasonable proximity to land from which people will be displaced.
- Replacement land should be provided free of any “transaction costs” such as registration fees, transfer taxes, or customary tributes.
- Replacement land should be prepared (cleared, levelled, and made accessible) for productive levels similar to those of the land from which people will be displaced (preferably, affected people should be paid by the project to do this work).

In situations where arable land available for compensation is fundamentally different from the land from which people will be displaced, the project should provide technical support and appropriate inputs to farmers to bring the land to its full productive potential.

In situations where arable land is unavailable, the project should provide support (such as skills training, grants, or credit for enterprise start-up) to affected people to adjust to non-farming occupations. The same principle applies to people whose principle livelihood is animal husbandry, but for whom suitable pasture or grazing land is not available.

**Although laudable, more often than not, replacement land is either unavailable or of a lower quality than the land lost, requiring long-term interventions and support by the proponent to affected persons.**

#### 5.3.2.4 Resettlement assistance and livelihood restoration

Resettlement should be planned and executed as a development initiative that provides displaced persons with opportunities to participate in planning and implementing resettlement activities—as well as to restore and improve their livelihoods. This requires the following actions:

- To inform affected people of their options and rights concerning resettlement.
- To provide technically and economically feasible options for resettlement, based on consultation with affected people and assessment of resettlement alternatives.
- Whether or not physical resettlement is required, to provide affected people with prompt and effective compensation—at full replacement value for any loss of assets due to project activities.
- Where physical resettlement is necessary, to provide assistance with resettlement expenses (moving allowances, transportation, special assistance and health care for vulnerable groups).
- Where physical resettlement is necessary, to provide temporary housing, permanent housing sites, and resources (in cash or in kind) for the construction of permanent housing, agricultural sites for which a combination of productive potential, local advantages, and other factors at least equivalent to the advantages of the old site.
- To provide affected people with transitional financial support (such as short-term employment, subsistence support or salary maintenance).
- To provide affected people with development assistance in addition to compensation for lost assets.

**Text box 5.6: Case study of well-executed resettlement and income restoration from two dam projects in China: Shuikou and Yantan.**

At the Shuikou site, 67,000 people were relocated from the valley floor and another 17,000 from Nanping City (at the upstream end of the reservoir) to make way for embankments. This project avoided the relocation of more of Nanping's 200,000 inhabitants. The entire relocation was completed by 1992. Although the original resettlement plan called for rehabilitating 74 percent of those displaced using traditional agricultural means, in actuality 75 percent were rehabilitated through other means. Local government officers aggressively developed the reservoir fishery, oyster beds, fruit and timber trees, and township and village enterprises—and even recruited foreign investors to establish factories to employ resettlers. The incomes of displaced people recovered to pre-move levels by 1994 and increased 44 percent by 1996, almost doubling income growth in the host area. Treating resettlement as a development opportunity led to the most successful resettlement outcomes.

Yantan displaced 43,000 people and affected the incomes of another 19,000. Located in a more remote and isolated region, Yantan did not benefit from a rapidly growing coastal economy. Nevertheless, resettler incomes increased and were supplemented by a grain ration until they reached the target level. Furthermore, the government arranged to transfer several thousand households to two sugar estates and another state farm in other parts of the province. Average incomes among these resettlers in particular have increased the fastest.

Source: WB Operation and Evaluation Department (2000) Involuntary Resettlement: The Large Dam Experience.

The acquisition of land and other assets should not take place until compensation is paid and, where applicable, resettlement sites and moving allowances are provided to displaced persons. In situations where the responsibility for some tasks related to resettlement is passed through to contractors (such as preparation of resettlement sites, provision of temporary social services and transportation), the proponent should ensure that appropriate arrangements, such as penalty clauses for non-performance, are written into contracts and enforced. Similarly, in situations where a host government assumes responsibility for resettlement with financial support from the proponent, the proponent should negotiate performance-based implementation agreements with the applicable government agency, linking disbursement of funds to the achievement of agreed milestones.

Resettlement involving the physical displacement of people has the following components:

- Site selection and preparation.
- Influx management.
- Resettlement schedule and assistance.
- Replacement of services and enterprises.
- Restoration of livelihood.
- Treatment of cultural property.
- Special assistance for women and vulnerable groups.

#### SITE SELECTION AND PREPARATION

The resettlement site must be chosen through consultation with all displaced people and host communities. Resources and plans for land use must be evaluated. Site selection and

shelter and infrastructure options provided at the new sites should reflect both the preferences of the affected population and the best opportunities for the timely restoration of livelihoods. The two most critical concerns in selection of a resettlement site are location and community preservation. The selection of resettlement sites that provide people with reliable access to productive resources (arable and grazing land, water, and woodlands), employment, and business opportunities is key to the restoration of livelihoods.

Resettlement options should avoid breaking up communities as the maintenance of the social networks linking members of the affected communities may be critical to the successful adaptation of those communities to their new circumstances. However, although community preservation is a primary concern, some members of a community may have other settlement preferences, including a preference to not remain part of the affected community—hence the need to consult all members of an affected community.

The RAP must describe the site selection process, provide a description of the selected site (including alternative sites), describe preliminary site evaluation (including the outcome of the environmental assessment of sites and social assessments of the host population) and describe housing options, land preparation requirements, and service infrastructure requirements (access roads/pathways, piped water supply, electricity, lighting, drainage, and waste management).

#### INFLUX MANAGEMENT

Problems arising in a host community from an influx of newcomers and greater issues of resettlement are closely linked.. Resettlement sites are often located close to project areas and, therefore, can be obvious gathering places for job seekers. In many societies, providing accommodation and support to extended family members is an important social obligation. Large-scale projects (in particular mining and power projects in remote, rural areas) often attract significant numbers of newcomers seeking employment or other opportunities associated with construction and project operation. For example, on a mine project in Mali, the influx and largely uncontrolled settlement of more than 3,500 newcomers had severe negative effects on host communities in and around the project area—as well as on the project itself. Subsequent expansion of the mine necessitated the resettlement of newcomers within only two years after their arrival. To avoid these unfortunate circumstances, it is necessary to take a proactive approach and prepare an influx management plan to develop a single and coordinated response to social and economic effects of a possible influx of people.

#### RESETTLEMENT SCHEDULE AND ASSISTANCE

The RAP should outline the details of the physical movement of people scheduled for resettlement. This outline should include dates and times of movement, how information on resettlement will be disseminated to affected people, logistics of transportation of people and belongings, and arrangements for temporary shelter and services (food, water, emergency medical care, and waste management) en route to and upon arrival at the site. Any moving allowances to be paid in lieu of resettlement assistance must be documented and justified. Provisions will need to be made for members of vulnerable groups (such as pregnant women, the aged, or handicapped), who require special assistance.

#### REPLACEMENT OF SERVICES AND ENTERPRISES

The RAP must provide details on how social services, such as health clinics and schools, as well as shops, service providers, and other community services will be replaced. This must be done in close co-ordination with the host government to ensure the continuity of social services provided by government agencies. In other words, the government must make a commitment to staff, operate, and maintain these facilities.

#### LIVELIHOOD RESTORATION

In cases where resettlement affects the income-earning capacity of displaced families, compensation alone does not guarantee the restoration or improvement of their living standards. The following are examples for the design of rehabilitation measures for improved and sustainable livelihoods.

- Land-based livelihoods.
  Resettlement sites may require dependable access to grazing land, forest, and water resources, physical preparation of farm land (clearing, levelling, creating access routes, and soil stabilization), fencing for pasture or cropland; agricultural inputs (seeds, seedlings, fertilizer, irrigation), veterinary care, small-scale credit including rice banks, cattle banks, and cash loans, and access to markets.
- Wage-based livelihoods.
  Wage earners in the community may benefit from skills training and job placement, provisions made in contracts with project sub-contractors for employment of qualified local workers, unemployment insurance and small-scale credit to finance start-up enterprises.
- Enterprise-based livelihoods.
  Established and emerging entrepreneurs and artisans may benefit from credit or training (business planning, marketing, inventory, and quality control) to expand their business and generate local employment. Proponents can promote local enterprise by procuring goods and services for their projects from local suppliers.

#### TREATMENT OF CULTURAL PROPERTY

The RAP should document all necessary efforts to protect, move and restore the cultural property of all affected people. The movement of cultural artifacts must be carried out in consultation with communities and in collaboration with the designated government agencies. The relocation of artifacts and structures associated with religious worship can occur only after consultation with ritual practitioners (priests and spirit mediums) and must include compensation for associated rituals. Families must be compensated for both the logistical and the ritual costs of exhuming family graves and transferring remains to a new site.

**SPECIAL ASSISTANCE FOR WOMEN AND VULNERABLE GROUPS**

Women comprise a disproportionately large number of the poor in most countries. Gender discrimination limits women's access to resources, opportunities, and public services necessary to improve the standard of living for themselves and their families. As a result, women are often the first to suffer when resettlement is planned or badly executed. Women tend to rely more heavily than men do on informal support networks, such as the help of friends, neighbours, or relatives for child care. Women with children also have less physical mobility to travel to find ways of earning a livelihood. For these reasons, it is important to maintain the social continuity of communities affected by a project (whether through the physical design of new sites, measures to prevent the disintegration of the community, or the provision of specialized social services at the sites).

Gender sensitivity is pivotal to successful resettlement. Some of the immediate and practical initiatives that can be considered to improve women's adaptation to the resettlement site include:

- Ensuring that land titles and compensation entitlements are issued in the name of both spouses.
- Reducing women's workloads by providing, for example, standpipes, hand pumps, grinding mills, woodlots, fuel efficient stoves, ox carts and ploughs.
- Improving health services by providing training for village midwives, primary health care centres, child spacing/family planning counselling, clean water supply and sanitation training.
- Improving family services by providing immunizations, child care for wage earning women, primary schools, inputs for food-crop production and housing.
- Increasing incomes by setting up credit groups, skills training, and access to markets.

However, the social or legal status of women may remain restricted and, therefore, their ability to improve their own and their family's livelihoods will be compromised without longer-term 'strategic' efforts to change gender discrimination. Some strategic initiatives that can improve women's livelihoods in their new settings include:

- Improving educational opportunities (providing literacy and numeracy training, and promoting girls' education).
- Improving access to productive assets.
- Improving participation in decision making (support for women's interest groups).
- Promoting equal opportunity for women's employment.

Vulnerable groups can include households headed by women, households affected by HIV/AIDS that are headed by children, households made up of the aged or handicapped, households whose members are impoverished, or households whose members are socially stigmatized (as a result of traditional or cultural bias) and economically marginalized. Special assistance to vulnerable groups may consist of the following:

- Provision for separate and confidential consultation.
- Priority in site selection in the host area.
- Relocation near to kin and former neighbours.
- Provision of a contractor, if necessary, to construct their new house.
- Assistance with dismantling salvageable materials from their original home.
- Priority access to all other mitigation and development assistance.
- Monitoring of nutritional and health status to ensure successful integration into the resettled community.

The RAP should document the rehabilitation measures that the sponsor will put into effect for all vulnerable groups during physical resettlement and rehabilitation of affected communities.

#### 5.3.2.5 Budget and implementation schedule

The actual costs of resettlement planning and implementation are commonly underestimated. It is essential that all costs be estimated carefully and included in a detailed budget. Without an accurate assessment of the costs of land acquisition, compensation for lost assets and physical displacement, project planners cannot determine the real cost of project or design alternatives, such as new routes for power transmission lines or new sites for green field projects. The proponent should itemize resettlement costs by categories of impact, entitlement, and other resettlement expenditures, including training, project management, and monitoring.

The RAP budget must include a justification of all assumptions made in calculating compensation rates and other cost estimates, and must take into account both physical and cost contingencies.

In situations where the host government assumes responsibility for the payment of compensation and resettlement assistance allowances, the proponent should collaborate with the responsible government agency to ensure that payments are made on schedule. If the proponent is financing government resettlement efforts, it should do so in instalments and link the disbursement of funds to performance-based milestones. In situations where the proponent assumes sole responsibility for resettlement funding, it must describe its arrangements for the timely disbursal of funds.

The RAP budget should be linked to a detailed implementation schedule for all key resettlement and rehabilitation activities. This schedule should, in turn, be synchronized with the project's schedule of civil works for construction. The timing of RAP field activities (consultation, census, and survey implementation) is crucial: commencement of field activities too soon before the project begins may raise local expectations and attract newcomers, while commencement of activities too late after the project starts may interfere with project implementation. Linking resettlement and construction schedules ensures that project managers place key resettlement activities on the same critical path as key project construction activities. Linking schedules in this way creates an imperative for coordinating resettlement with other project activities.

#### 5.3.2.6 Organisational responsibilities

The RAP must identify and provide details on the roles and responsibilities of all organizations (public or private, governmental or nongovernmental) that will be responsible for resettlement activities, as well as their capacities to fulfil their responsibilities.

Depending on the scale of resettlement associated with a project, it may be appropriate for the proponent to create a resettlement advisory group (or steering committee, or task force) to coordinate the implementation of a RAP. This advisory group should consist of representatives of the project proponent, relevant government line and administrative departments, community organizations, NGOs involved in support of resettlement as well as representatives of the communities affected by the project, including host communities. The advisory group should convene at regular intervals during the design and implementation phases of

the RAP to ensure the regular exchange of information among all parties and the coordination of all resettlement activities. Membership of the advisory group should include government representatives with the requisite authority over both line and administrative departments. This level of authority is required to ensure timely implementation of resettlement activities and redress of grievances.

Under circumstances in which it assumes direct responsibility for the resettlement of affected people, the proponent typically establishes a resettlement unit within the overall management structure of the project to coordinate, manage, and monitor the practical day-to-day implementation of all resettlement activities.

Early in the resettlement process, the sponsor should encourage the formation of resettlement committees within the affected population. These committees should comprise the formal leadership of the affected population as well as representatives of interest groups within the community that may have no formal leadership role (such as artisans, landless householders and women). The resettlement committees can play an important role in negotiating resettlement compensation with project management, designing strategies for restoration and development of livelihood strategies, and monitoring overall implementation of the RAP.

In the Mekong countries, the entities responsible for RAP vary between the countries. In China, for example, according to the latest Regulation on the Compensation for Land Acquisition and Resettlement of the Construction of Large and Medium-sized Water Conservancy and Hydroelectric Projects (2006), the project owner has the responsibility to make the resettlement action plan. If there is no project owner, the competent department of the project—jointly with the people's governments at or above the county level in the resettlers' original and host areas—will be responsible for making the RAP. The RAP will be submitted to and approved by the people's governments of the provinces, autonomous regions, and municipalities, directly under the Central Government or the resettlement administrative organ under the State Council, according to the limits of powers for examination and approval.

In Cambodia, RAP is prepared by project proponents and will get approval from interministrial committee (IRC) under the Ministry of Economy and Finance.

#### 5.3.2.7 Grievance mechanism

Regardless of scale, involuntary resettlement inevitably gives rise to grievances among the affected population over issues ranging from rates of compensation and eligibility criteria to the location of resettlement sites and the quality of services at those sites. The timely redress of grievances is vital to the satisfactory implementation of resettlement and to completion of the project on schedule.

The proponent must ensure that procedures are in place to allow affected people to lodge a complaint or a claim (including claims that derive from customary law and usage) without cost and with the assurance of a timely and satisfactory resolution of that complaint or claim (Text Box 5.6). In addition, the project may have to make special accommodation for women and members of vulnerable groups to ensure that they have equal access to grievance redress procedures. This may include employment of women or members of vulnerable groups to facilitate the grievance redress process or to ensure that groups representing the interests of women and other vulnerable groups take part in the process.

Grievances are best redressed through project management, local civil administration, or other channels of mediation acceptable to all parties. These channels of mediation may involve customary and traditional institutions of dispute resolution. Project management should make every effort to resolve grievances at the community level. Recourse to the legal system should be avoided except as a last resort.

The RAP should describe the grievance redress framework that will be put in place, which should include:

- Institutional arrangements.
- The procedures for recording and processing grievances.
- The mechanisms for adjudicating grievances and appealing judgments.
- A schedule, with deadlines, for all steps in the grievance redress process.

Grievances can also be handled via arbitration, which is a mechanism of dispute resolution, outside of a country's court system, where the disputing parties refer the matter to one or more persons by whose decision they agree to be bound. The arbitrator, typically a senior legal professional (who may be assisted by discipline-specific professionals to better understand the nature and intricacies of a dispute) listens to the dispute in a private setting and makes a final decision for the parties involved.

#### 5.3.2.8 Monitoring and evaluation

Good practice requires proponents to monitor and report on the effectiveness of resettlement implementation, including the physical progress of resettlement and rehabilitation activities, the disbursement of compensation, the effectiveness of public consultation and participation activities, and the sustainability of income restoration and development efforts among affected communities. The objective of monitoring is to provide feedback on resettlement implementation and to identify problems and successes as early as possible to allow timely adjustment of implementation arrangements. This requires that monitoring and evaluation activities should be adequately funded, implemented by qualified specialists, and integrated into the overall project management process.

The RAP must provide a monitoring plan that identifies the organizational responsibilities, the methodology, and the schedule for monitoring and reporting. The three components of a monitoring plan should be performance monitoring, impact monitoring, and a completion audit (taking note that the scope of the monitoring plan should be commensurate with the scale and complexity of the RAP).

| **Text Box 5.6** | **Example of a Grievance Mechanism – Sasol Natural Gas Project, Mozambique** |
|---|---|
| As a means of dealing with complaints and issues arising from the resettlement process, Sasol formulated a grievance mechanism through which affected people could lodge a claim or grievance in a simple and affordable manner. The project proponent hoped this would facilitate speedy and satisfactory resolution of disputes. This procedure allowed for the reassessment of decisions when affected people voiced concerns regarding the results of the resettlement process and assisted in the taking corrective action. The procedure also facilitated transparency.<br><br>Sasol followed protocol to obtain the information necessary to determine if affected households raised any grievances. The following procedure was followed by Sasol and the Gov- | |

ernment of Mozambique representative in addressing disputes with affected people:

- Sasol and the in-field government representative investigated the dispute, and, if necessary, discussed it with the local chief, before they re-evaluated the decision.
- If the dispute could not be resolved at the field level, it was referred to the Joint Task Group (consisting of proponent and government representatives, and established specifically to oversee the resettlement process) for resolution. If the Joint Task Group could not resolve the dispute, it was referred to the Project Liaison Committee (highest project oversight body comprising proponent and government representatives) for a decision.
- If the claimant did not accept the decision of the Project Liaison Committee, he/she could appeal the decision in the manner normally available to him/her though the Mozambican legal system. This involved an appeal to the District Administrator in the first instance, thereafter to the Provincial Governor, and, in the final instance, the matter could be referred to a Mozambican court of law.

A written record of all disputes/grievances raised during construction was maintained by Sasol. These records were monitored regularly by an independent agency as part of the ongoing monitoring and evaluation process.

The grievance mechanism, although simple, worked well when grievances were lodged (in this instance, spanning a three year period, very few compensation and resettlement grievances were lodged by affected parties).

**Text Box 5.8 Innovative Resettlement - Good Practice from Yunnan Province, China**

Yunnan Province created new resettlement methods especially for the hydropower projects in the middle part of Jiansha River basin in 2007. The so-called ‘16118’ policy refers to one long-term compensation, six means of auxiliary resettlement for various affected people (including urban resettlement, urban and rural combined resettlement, land resettlement, cash resettlement, scattered resettlement, and employment resettlement), one dam area development fund, one post-project support subsidy, and eight measures to assist resettlement (including to work for more accurate physical inventory, to build small towns developing tourism and aquatic breeding to resettle affected people, to develop special agriculture and related ecological tourism, to better use the collective assets, to create more jobs, to provide more social services such as schools, medical insurance, to help poor families get new houses, and to protect environment of dam area including helping resettled to build biogas tank or solar panels).

- Performance monitoring.

  This is an internal management function enabling the organization responsible for resettlement to measure physical progress against milestones established in the RAP. Progress is usually reported against a schedule of required actions. Examples of performance milestones are as follows:

  - Public meetings held.
  - Census, assets inventories, assessments, and socio-economic studies completed.
  - Grievance redress procedures in place and functioning.
  - Compensation payments disbursed.
  - Housing lots allocated.
  - Housing and related infrastructure completed.
  - Resettlement of people completed.
  - Income restoration and development activities initiated.
  - Monitoring and evaluation reports submitted.

  Performance monitoring reports should be prepared at regular intervals (monthly, quarterly, semi-annually, and annually) beginning with the commencement of any activities related to resettlement.

- Impact monitoring.

  Impact monitoring gauges the effectiveness of the RAP—and its implementation—in meeting the needs of the affected population. The purpose of impact monitoring is to provide the agency responsible for resettlement implementation with an assessment of the effects of resettlement, to verify internal performance monitoring, and to identify adjustments in the implementation of the RAP, if and as required. Affected people should be included in all phases of impact monitoring, including the identification and measurement of baseline indicators.

  The effects of resettlement are tracked against the baseline conditions of the population before resettlement. This baseline is established through the census, assets inventories, land-use assessments, and socio-economic studies of the population and the area affected by the project. The organization responsible for resettlement implementation should establish objectively verifiable indicators for measuring the impact of physical resettlement on the health and welfare of the affected population and the effectiveness of impact mitigation measures, including livelihood restoration and development initiatives.

  This monitoring should continue for a number of years beyond the completion of resettlement to ensure that the income restoration efforts and development initiatives have succeeded and that the affected population has successfully re-established itself at its new site. Regular monitoring alerts the proponent to problems arising among the affected population (such as a decline in crop yields, increased incidence of disease, and a decline in household incomes) that should trigger remedial actions by the proponent.

  In addition to quantitative indicators, impact monitoring should be supplemented by the use of qualitative indicators to assess the satisfaction of affected people with resettlement initiatives and, thus, the adequacy of those initiatives. The most effective qualitative monitoring methodology is direct consultation with the affected populations through regu-

lar meetings and/or focus group discussions. There are a number of participatory exercises that are particularly useful in eliciting qualitative information.

- Completion audit.

  The key objective of a completion audit is to determine whether the efforts to restore the living standards of the affected population have been properly conceived and executed. The audit should verify that all physical inputs committed in the RAP have been delivered and all services provided. In addition, the audit should evaluate whether the mitigation actions prescribed in the RAP have had the desired effect. The socio-economic status of the affected population, including the host population, should be measured against the baseline conditions of the population before displacement.

  The completion audit should be undertaken after all RAP inputs, including development initiatives, have been completed.

**Text Box 5.7 Key components of a Resettlement Action Plan - China**

**In China, key legal frameworks include:** the Land Management Law (2004)

**China National Administration regulations:** Regulation on the Compensation for Land Acquisition and Resettlement of the Construction of Large and Medium-sized Water Conservancy and Hydroelectric Projects, issued in 1991, revised in 2006.

**National Technical Specifications:** Specification of Resettlement Planning and Designing for Hydroelectric Projects, issued by China, accompanied by seven other specifications for 1) identification of the landfill scope 2) physical loss survey 3) planning and designing for rural resettlement 4) planning and designing for special item 5) planning and designing for town reconstruction 6) designing for reservoir cleaning 7) resettlement compensation budget preparation.

**Local regulations and rules**: Province/City/County level, issued by provincial and local governments.

**Special projects' resettlement policies and implementation rules**: e.g. Regulations on Resettlement for the Construction of the Three Gorges Project on the Yangtze River, issued in 1993, revised in 2001.

At present domestic and foreign-funded hydropower projects both need resettlement plans; however, the content and emphasis of these plans are distinct.

Foreign-funded hydropower projects (e.g. WB or ADB funded) must follow WB or ADB requirements for developing resettlement plans. Eight sections are required: (1) impact analysis, (2) demographic and socio-economic status of affected persons, (3) legislative framework and compensation standard, (4) livelihood and income restoration plan, (5) participation and grievance, (6) institutional arrangement, (7) budget estimation and resettlement schedule, and (8) monitoring and evaluation.

In China, domestic hydropower projects follow the requirement of *Regulations on Land Requisition Compensation and Resettlement for Construction of Large and Medium-sized Water Conservancy and Hydropower Projects* (2006) (thereafter shortened as 2006 resettlement regulations) and eight other technical specifications (2007). Resettlement plans shall entail arrangements for (1) socio-economic survey, (2) physical index survey and outcome, (3) re-

settlement of rural resettlers, which includes the calculation of resettlers and carrying capacity, resettlement scheme, productive resettlement planning, relocation planning, etc., (4) relocation of cities or towns, (5) relocation of industrial and mining enterprises, (6) relocation or reconstruction of special facilities, (7) construction of protective works, (8) exploitation of reservoir waters, (9) measures for follow-up support to resettlers for reservoir construction, (10) a budgetary estimate for land requisition compensation and resettlement, etc.

Both resettlement plan for domestic projects (RPD) and resettlement plan for foreign-funded projects (RPF) will collect local socio-economic information, identify project affected communities and analyze the project's impact on affected households/persons (AHs/APs). Thus, through the preparation of resettlement plan, Chinese hydropower projects should meet the HSAP basic practice requirements of I-9 Assessment 3a and I-10 Assessment 3a. However, in general, RPDs provide less for gender and vulnerable groups than RPFs. Also, RPDs emphasize on statistics of physical index data, while RPFs focus on analysis of impact on households/persons.

**Text Box 5.8 Key components of a Resettlement Action Plan - Laos**

**In Laos,** key legal frameworks include the Regulation on the Water and Water Resources Law (1996) Environmental Protection Law (1999), Land Law (2003), Decree 192/PM on Compensation and Resettlement of the Development Project (2005), Technical Guideline on Compensation and Resettlement in the Development Project (2005), Decree 112/PM on Environmental Impact Assessment (2010), National Policies on Environment and Social Sustainability of Hydropower sector in Lao PDR (2011).

**Local Culture & Practices**

During planning, construction and operation periods, project owners shall consider local cultural and religious properties, practices and beliefs. Project owners shall define mitigation measures and socio-economic benefits to improve the status of ethnic communities, shall be in harmony with their cultural preferences, and shall be decided in consultation with affected communities.

**Public Participation and Consultation**

The project owners shall implement the resettlement program in a participatory manner, ensuring that affected persons, local authorities, and other stakeholders are fully informed and consulted, and that their concerns are taken into account at all stages of the project cycle—particularly during the planning and implementation phases of the land acquisition, valuation and resettlement.

**Grievance Redress Mechanism**

Project owners shall establish an effective mechanism for hearing and grievance redress during the resettlement planning and implementation in a project with concerned government authorities.

**Resettlement Cost and Budget**

Project owners shall prepare the Resettlement Plan with detailed cost estimates for compensation and other resettlement entitlements and relocation of affected persons.

**Reporting and Documentation**

The project owners shall provide reports and documents to responsible government authorities to consider. In addition to a description of the project, those reports and documents shall include:

(a) Name of project owners;

(b) Project type;

(c) Project scale and location;

(d) Project objectives;

(e) Number and sources of labor that will be used during construction and

operation periods;

(f) Estimated number of people, who will be affected by the project, as well as the types of impacts;

(g) Estimated social costs and benefits of the project;

(h) Impact mitigation measures.

After screening project reports and documents, if it seems the project will cause adverse social impacts, the project owners shall carry out necessary studies and field investigations including census, inventory of lost assets and socio-economic baseline surveys, and prepare the following reports and documents on social impacts to submit to concerned government authorities for approval:

(a) Initial Social Assessment (ISA) / Land and assets Acquisition Assessment

(b) Social (Impact) Assessment

(c) Land Acquisition and Compensation Report

(d) Resettlement Plan (RP)

(e) Ethnic Minority Development Plan (EMDP)

**Text Box 5.9 Resettlement Action Plans – Key Aspects**

- There are different types of resettlement, each with unique issues:
  - Rural resettlement.
  - Urban resettlement.
  - Linear resettlement.
  - Site-specific resettlement.
- The essential components of a Resettlement Action Plan are the following:
  - Identification of project impacts and affected populations.
  - Legal framework for land acquisition and compensation.
  - Compensation framework.
  - Description of resettlement assistance and restoration of livelihood activities.
  - Detailed budget.
  - Implementation schedule.
  - Description of organizational responsibilities.
  - Framework for stakeholder participation, consultation and development plan-

ning.
    - Grievance mechanism.
    - Framework for monitoring, evaluation, and reporting.
- Resettlement is sensitive and complicated, and requires adequate resourcing and dedicated personnel.
- Particular care must be shown to women and vulnerable groups.

| | |
|---|---|
| Discussion topics | Resettlement Action Plans can become large documents with vast amounts of information. Discuss what level of detail is appropriate for different types of infrastructure projects. |
| | How much time should be afforded for the development of Resettlement Action Plans, and how often should they be updated? |
| | Identify examples of good Resettlement Action Plans from your own country, explain why they are considered examples of good practices, and elaborate on the outcomes of their implementation. |
| | Much is written about land-based displacement. Discuss non land-based displacement (for example, offshore and river fishing grounds), and describe how this displacement can and should be handled. |
| Exercises | Provide an example of a database that can be used for the capture, storage and manipulation of baseline data, gathered for the purposes of compiling a Resettlement Action Plan. |
| | For the physical and economic displacement of 200 households, provide a realistic RAP budget and programme. |
| | Within the above-mentioned example, elaborate on specific measures that need to be implemented to assist vulnerable groups, comprising three elderly and five child-headed households, and ten physically disabled persons. |
| | Using prevailing conditions in your country, compile a generic organisational framework, inclusive of individual responsibilities, through which involuntary resettlement can be planned and implemented. |

## 5.4 Implementation of Involuntary Resettlement

| | |
|---|---|
| Purpose | The purpose of this session is to introduce participants to some aspects related to the implementation of involuntary resettlement. |
| Objectives | ❑ For participants to gain an understanding of some of the requirements and complexities of implementing involuntary resettlement |
| Preparatory reading | The World Bank. (2004). Involuntary Resettlement Sourcebook. Planning and Implementation in Development Projects. The World Bank, Washington, USA |

The RAP serves as a guideline for implementation. Experience suggests that resettlement outcomes depend on the quality of implementation. Even the best plans, prepared with tremendous attention to detail, do not by themselves improve the lives of resettlers. Implementing resettlement is challenging and, therefore, resettlement programs need to be diligently implemented.

### 5.4.1 Preparation

Preparation for the implementation of involuntary resettlement commences during the final stages of project preparation. A first, important step is to ensure that the implementing agencies are ready:

- Explain the key features of the RAP to senior project managers, key project staff, and all staff working in the resettlement implementation agency. This is an important action. Note:
    - Most often, teams involved in the planning of a project are not involved during construction (i.e. new project staff come to the site with limited background to what occurred during planning stages).
    - It is also common for people involved in the preparation of the RAP to be different from those responsible for its implementation.
    - There may be significant time lags between the finalisation of the RAP and its actual implementation.

  Therefore, it is necessary for all staff involved in the roll-out of the RAP to be fully apprised of its history, content, key elements and program. Staff should be encouraged to debate complexities and to identify potential problems, supported by hands-on training if required.

- Align staff resources to the requirements of the RAP implementation schedule. Staffing requirements in terms of numbers and expertise will be different at different stages of the roll-out of the RAP. To ensure that staffing levels match the required skills and number of staff, careful advance planning is required, as well as the timely recruitment and training of staff (in terms of the requirements of the RAP).
- Allied with the above, the resettlement implementation unit must be adequately equipped (for example, with vehicles, computers, office space, furniture, communication devices, etc.) before implementation begins.
- Ensure that all government agencies playing a role in the resettlement process are on board in order to effect good coordination between all parties. Coordination is important and should be activated prior to the commencement of resettlement. In this manner, the intention is to have a smooth start to the resettlement programme with minimum problems.
- Continue consultation with persons to be displaced and their host communities. On many projects, a long gap occurs between resettlement planning and actual implementation. During this time, the needs and priorities of affected persons may change, requiring modifications in the resettlement programme. In addition, it is necessary to maintain communication at all times in order to allay fears, anxieties and expectations of affected persons.
- Update surveys (for example, census, socio-economic surveys and land use). Many large projects, such as dams and hydropower facilities, have a long gestation period

with long time lapses between resettlement planning and implementation. In such cases, circumstances may change, requiring an update of social data (demographics, socio-economics, and land use), as well as the socio-economic status of affected people (some people may pass away, there may be births in families, some people will age and enter the 'vulnerable' category, etc). This updated information is invaluable for the resourcing of the RAP and its smooth and successful roll-out.

## 5.4.2 Implementation

### 5.4.2.1 Payment of compensation

Payment of compensation is an essential activity of almost all resettlement programmes. The following measures help smooth the payment process:

- Pay compensation into bank accounts and not directly to affected persons. This helps reduce incidences of bribery and corruption during the compensation payment process. Compensation deposited into bank accounts is also less likely to be spent unproductively. This is because involving a bank in the compensation payment process exposes affected persons to savings and credit options that help them reconstruct their livelihoods. A good option is to use joint bank accounts requiring the permission of both the affected person and the resettlement agency. Importantly, it is recognised that, in many instances, persons affected by resettlement, living in remote rural areas, do not have access to formal banking systems. In these cases, cash compensation needs to be paid to individuals. This can be as one lump sum or in the form of tranches, paid over a period of time. As many cash compensation payments are made in remote rural areas, often involving substantial sums of money, it is critical to ensure adequate security—for both the payroll bureau that is dispensing the cash compensation, and for the affected persons receiving the cash compensation.
- Involve local NGOs in the compensation process. In many cases, there are suspicions concerning the payment of compensation. Reaching out helps foster transparency; in addition, NGOs usually assist affected persons decide on optimum uses for their cash compensation—such as acquiring productive resources.
- It is important to inform all household members about compensation payments. Most often, household heads receive the compensation although intended beneficiaries are wider; for example, all household members. Not only does this ensure the fair and equitable distribution of compensation, it can also lead to the better application of the funds received (hopefully avoiding obvious misuse on alcohol, tobacco, unnecessary luxury goods, etc.).
- Maintain meticulous and accurate records. Unfortunately, cash and compensation often leads to disputes over what has been paid, amounts, timing, etc. It is essential that the resettlement implementation unit maintain documentary records, inclusive of supporting data, such as bank records, cash compensation receipts, photographs, etc., of all compensation dealings. These are invaluable in the event of disputes, which need to be resolved. They are in the interests of the affected person, the project itself, and the overall well-being of relationships between communities and the project.

#### 5.4.2.2 Physical resettlement

Physical resettlement, (i.e. moving people from their current place of residence to a new one) is possibly one of the most traumatic aspects of resettlement as a whole.

- It is essential to confirm with affected persons that they are generally ready to accept specific resettlement sites (selected during resettlement planning phase, with their consultation). This involves making sure that each individual household/entity is willing to occupy its specific resettlement site. If an affected household finds features of a specific site undesirable, disadvantageous or culturally inappropriate, site improvements or an alternative site are advisable.
- Resettlement sites must be prepared and completed prior to the date of the actual move. It is highly recommended that 'temporary resettlement sites' are avoided at all costs. To achieve this requires very close coordination between the resettlement implementation unit and project team members responsible for land acquisition. This, in turn, requires close alignment with the project manager, who is responsible for the project's overall construction programme. If possible, resettlement sites should be completed in advance of the physical move as this enables affected persons to undertake activities at both their current and their new home—in particular, establishing productive resources at the resettlement site.
- The resettlement implementation unit should provide relocation assistance to affected households. This involves aspects such as transport assistance (household furniture and affects, livestock, poultry, etc) and permitting affected persons to salvage materials from their current home.

The level of planning and the amount of effort physically required to resettle households should not be underestimated. It is a challenging undertaking and, depending on the numbers of affected people, can span many months. In this regard, care should be taken not to resettle people during unfavourable times of the year; for example, in poor weather conditions or at times of celebration. Furthermore, vulnerable groups will require special assistance to physically relocate.

#### 5.4.2.3 Alignment of resettlement with the overall project construction programme

Experience shows that, in many projects, resettlement usually lags behind the land acquisition aspects of a project. To avoid delaying construction (and subsequent cost escalations arising from late penalties or down time), affected persons can be resettled to temporary sites until the permanent resettlement sites are available and complete. This is an undesirable situation, which should be avoided. Care should be taken to ensure that land for resettlement sites is acquired and developed in a timely fashion. This requires the following activities:

- Detailed census and socio-economic survey of affected households.
- Compensation for affected assets.
- Identification of residential and agricultural resettlement sites (if required by the project), which are acceptable to those people, who will be displaced.
- Development of the resettlement sites, including provision of civic amenities and required, basic agricultural inputs.
- Offer of resettlement sites for occupation by affected persons.
- Offer of employment, if provision of alternative employment is part of the resettlement package.

- Offer of training, seed, capital, credit, and other agreed entitlements, if the resettlement package includes assistance for self-employment.
- Payment of cash compensation for economic rehabilitation, if a cash option is selected by an affected person.

#### 5.4.2.4 Reconstruction and relocation to replacement homesteads

Where new housing is being constructed under the resettlement program, house layouts and designs, as well as the location of community infrastructure, should be determined with resettler participation and approval. Affected persons and/or communities can assist to make the designs meet their specific needs, such as space for livestock, gardens, and other activities, which may not be obvious to the resettlement implementation unit. Ideally, there should be a range of housing options, which should not be overly standardized. Wherever possible, housing options should allow affected people to add their own resources so that they can obtain larger or better houses—either immediately or over time. In some cases, housing options should include a cash option, which allows affected persons to build their own houses or move elsewhere. Importantly, housing options should not exceed the financial means of the average affected person so as not to lead affected persons into debt through mortgages, rent, utilities, and other costs.

In many rural resettlement programs, an important question is whether the resettlers want to live in a nuclear community, on their respective farmlands, along roads, or according to some other alternative or combination of alternatives. Nuclear villages have the advantage of proximity to community infrastructure and other households, but they also increase the distance to agricultural lands for some community members. Living along roads makes transportation more convenient and may provide additional livelihood options. The resettling community should be allowed to choose the options best suited to their needs and their socio-cultural preferences. The implications of the options should be thoroughly discussed with affected households.

- In terms of the allocation of housing, new housing should be allocated on the basis of clearly defined criteria that the resettlers understand and to which they have agreed. The arbitrary allocation of housing by the resettlement implementation unit should be avoided as it could be perceived by resettlers as non-transparent and an injustice.
- If resettlers are to construct their replacement homes themselves, it is necessary to provide assistance. In particular, arrangements should be made to ensure that resettlers have enough time to dismantle old housing, transfer salvaged materials or obtain new ones, and to build new housing on an available and adequately prepared site. The pace and process of construction should be supervised by the resettlement implementation unit so that any problems beyond the control of the resettlers can be addressed expediently. Special arrangements are usually necessary to provide the vulnerable (elderly people, female heads of households, or physically disabled people) with supplemental sources of labour for movement and reconstruction.
- If completely unavoidable, it may be necessary to arrange for temporary accommodation. Added to the temporary accommodation, this transitional arrangement may require the resettlement implementation unit to provide assistance with commuting, expenses, transportation, etc.

#### 5.4.2.5 Infrastructure and services

Resettlement sites may be completely undeveloped and unoccupied, or there may be host communities. In either event, it will be necessary to pay attention to infrastructure and services that will be required by both the resettlers and the host.

- If resettlers are moving into existing communities, the infrastructure and services of the host communities (for example, schools, health clinics, water supply and sewerage, and roads) should be expanded or upgraded. The level of community infrastructure and services in the new location should be the same as—if not better than—what the affected persons had at their previous place of residence. Improved infrastructure and services help a host community to cope with the increased demand and also gives them a positive impression of the resettlement process. The situation of a higher standard of infrastructure and services in resettlement sites compared to host communities should be avoided as this inevitably leads to conflict and a poor impression of the resettlement process. The same standards should apply to resettlers and hosts.
- If new infrastructure and services are required, use of the infrastructure and services should not be restricted to the resettling population, although for facilities such as schools, a preference can be given to resettling communities. If the new infrastructure created for resettlers is of a better quality to the existing facilities for the communities living in the vicinity, a good practice is to invest in improving the facilities of host communities. Indeed, the absence of such measures could give rise to feelings of discontent in host communities.
- It is necessary to discuss with affected populations (resettlers and hosts) maintenance arrangements for infrastructure and services. In many cases, affected populations and local governments do not fully appreciate the financial and organisational implications of operating and maintaining infrastructure after the resettlement phase of a project—or they cannot afford these costs. In this regard, it is important that the development of infrastructure and services is closely aligned with government plans. (In some cases, schools have been constructed, but the government has been unable to sustain the necessary educators; similarly, clinics have remained unstaffed for many years until the government has been able to provide the necessary staff and medical resources. Obviously, these are undesirable outcomes of resettlement that should be avoided). In addition, it may be necessary, as part of the resettlement programme, to provide training to resettlers, hosts and local government employees in order that they can undertake the necessary operations and maintenance of the infrastructure and services.

#### 5.4.2.6 Income replacement and improvement strategies

Before initiating planned income replacement and improvement strategies, the resettlement implementation unit should confirm that these strategies are still feasible and generally acceptable to the affected persons. Thereafter, the following should be kept in mind (and may be required):

- It is important to initiate livelihood activities as early as possible. This is because some income improvement strategies, such as the development of horticulture or irrigation systems or the provision of employment, mostly require skills and capacity enhancement, or may have substantial lead times before income flows start. In these

cases, preparatory measures should begin well before the affected persons are deprived of their present sources of income.

- It is necessary for the resettlement implementation unit to provide all inputs required for different types of income improvement strategies. This should be done as soon as practically possible so that affected persons have sufficient time to implement the selected strategies. Providing various inputs, such as cash assistance, replacement land, pumping equipment, seeds and fertilizers, can be complicated and time-consuming. Therefore, project schedules should be updated before the start of implementation and all required actions should be completed on time.
- At the same time, arrangements should be made to implement other activities, such as the provision of training, credit and advice on markets, as well as marketing of goods and services produced by resettlers. Many of these activities have long lead times and require coordination with many specialised agencies. The relative positions of these activities on the project schedules for implementing income improvement strategies should be carefully determined; activities should begin at the appropriate times.
- If income recovery cannot be expected at the time of displacement, affected persons should be provided with transitional support. Communities with subsistence livelihoods should normally receive food-based transitional arrangements, but affected persons practicing commercial agriculture or living in urban areas may prefer cash. The termination of transitional assistance should be linked to monitorable benchmarks, such as fully developing income-generating assets or attaining agreed income levels. Providing gradually declining transition assistance is advisable so assistance is not perceived as core income, and affected persons are not faced with its abrupt termination at the end of the transitional phase. If implementation problems hamper or delay income restoration measures, transitional support should continue until alternative approaches are formulated and adopted and start yielding sustainable incomes.

**Text box 5.10: China Treats Resettlement as a Development Opportunity**

Two dam examples from China—at Shuikou and Yantan—show how sound resettlement practices can lead to successful and relatively rapid income restoration for affected households. These successes were despite the fact that large numbers of people were moved to less hospitable farming terrain.

Both dams filled river valleys surrounded by steep hills, forcing most resettlers to forsake traditional paddy farming for intensive farm crops, tree crops, and non-farming employment.

In some cases, especially in Yantan, families had to migrate to other areas to be assured jobs. Despite this lifestyle change, most households incomes have increased substantially. Housing and services are better than before, and resettlers, especially in Shuikou, express satisfaction with their situations. Shuikou families' economic improvement was boosted by strong regional growth, which was no the case in the more isolated Yantan. Nonetheless, in both areas most resettled households restored and increased family incomes surprisingly quickly.

China's performance in these two projects is impressive. When funding shortfalls and delays in execution upset the implementation schedule for relocating households, the executing agencies were determined to catch up—and invariably did so. The emphasis on jobs and incomes, and the thoroughly participative process, whereby households and local govern-

ment authorities are brought into planning and implementation, represent “best practices” for involuntary resettlement efforts.

The Shuikou income policy was spurred by the rapid industrialization of the southeastern Chinese coast. Yantan’s progress in job recreation and income restoration has been slower; however, Yantan authorities were able to organize workers’ migration to areas with additional, more fertile land. For both schemes, the spontaneous migration of workers also helped broaden the income base.

Four elements from these two examples could be applied elsewhere:

- The idea of approaching involuntary resettlement as a development opportunity and marshaling a range of instruments to carry it out.
- An imaginative exploration of micro-opportunities, propelled by the conviction that any but the most hostile environment offers a multitude of options. The ability to force the expansion of fish farming from cages and pens, of pearl culture from these and similar pens, of stone cutting, of exotic fruits when the traditional ones fail, and even of polished golf club heads, is an acquired skill, not unique to the Chinese.
- The flexibility to adjust strategies when early ones break down, shifting to other sets of employment opportunities if necessary, or stepping back in to rehabilitate or restructure failing enterprises.
- The crucial involvement of local governments, especially the elected leaders. The objective is not only to secure their ownership but also to “wed their interests to those of local residents.”

*Adapted from WB Operation and Evaluation Department (2000). Involuntary Resettlement: The Large Dam Experience.*

#### 5.4.2.7 Monitoring and evaluation

Monitoring of the resettlement programme should begin at the commencement of implementation and continue throughout the implementation phase. If an external, independent monitoring agency is engaged, the contractual arrangements should be finalised before the start of implementation. The agency can then monitor early resettlement, when problems of timely provision of required inputs and services arise. Internal monitoring arrangements should also be promptly finalised. A process should be established for the systematic tabling of the results of internal and external monitoring at the regular coordination meetings of the resettlement implementation unit. Each coordination meeting should discuss the follow-up of the issues and problems identified through internal and external monitoring.

#### 5.4.2.8 Grievance redress

All RAPs should contain a mechanism for the redress of grievances. Due to the complexities and challenges involved in implementing resettlement, it is inevitable that some affected persons will feel aggrieved by decisions and/or actions (indeed, a complete absence of grievances should be carefully examined as it may be an indicator of the inadequacy of the grievance mechanism). Before the commencement of resettlement implementation, officials responsible for handling grievances should have procedures ready for recording and processing grievances and recording official responses.

### 5.4.3 Records

Throughout the implementation of resettlement programmes, it is important to keep accurate and up to date records. These include (but are not limited to):

- Census (demographic), socio-economic and land-use surveys.
- Maps and aerial imagery (on which field-generated GPS coordinates can be plotted).
- Registration certificates.
- Asset inventories.
- Compensation certificates.
- Photographic records.
- Minutes of meetings.
- Proceedings of grievance processes.

These records should be assembled into well-organised manual and electronic filing systems, for easy access.

### 5.4.4 Contingency planning/plans

A RAP is a plan. However, social environments are dynamic and, therefore, the RAP should be regarded as a document of estimation and guidance rather than a blueprint. It is to be expected that the RAP will need to be adapted, responding pro- and re-actively to changing circumstances and conditions.

Many resettlement tasks are inherently complex. Economic rehabilitation is the obvious example, especially when affected persons are required to shift to new and sometimes unfamiliar income-earning activities. These impacts can usually be anticipated in advance; indeed, providing feasible means for economic rehabilitation is a key element in resettlement planning. However, effective implementation often requires close coordination of a number of agencies and often depends on the responsiveness of affected persons to new opportunities and circumstances. Effective implementation is also influenced by the simple passage of time. Resettlement implementation does not occur in a vacuum; generally, the longer the implementation period, the greater the likelihood that significant changes may occur in the project area.

The complexities of agent coordination, affected persons' responsiveness, and changes occurring in the project area cannot be wholly anticipated by resettlement planners. Therefore, the people responsible for resettlement implementation, monitoring, supervision and evaluation have to use their judgment in difficult matters. Thorough resettlement planning is essential to successful implementation, but contingencies in the actual implementation environment can create significant gaps between the RAP and reality. However, in most cases, the RAP itself includes measures to improve responsiveness to such contingencies. These include:

- Contingency funds to meet increasing costs or unanticipated expenses.
- A formula (in some cases) for periodically updating compensation rates for various categories of affected assets.
- A resettlement coordination group or other key set of administrators designated as responsible for addressing unanticipated problems or issues.
- External monitoring, with terms of reference to identify issues of inadequate or obsolete planning.

- Grievance procedures by which affected persons can seek redress for problems specifically affecting them but not anticipated by planners.
- An early review of resettlement implementation, which includes a review of plan appropriateness or effectiveness.

Not all factors relevant to resettlement implementation can be identified in advance. Although the need for judgment is consistent, three general principles should influence all decisions to depart from the agreed provisions in RAP:

- Assistance to affected persons is the fundamental objective. Changes in the project environment may create unanticipated administrative burdens or greatly increase resettlement costs. Achieving efficiencies may be possible by changing classification schemes or service delivery mechanisms, but improving or restoring the incomes and living standards of affected persons must remain the fundamental objective.
- Partnership with the borrower is essential to successful resettlement implementation. RAPs cannot serve as blueprints; therefore, modifications are usually necessary. In complex resettlement operations unfolding over time, situations often arise that are beyond the direct control of the project team, such as a general economic downturn or an adverse shift in the terms of trade. In such circumstances, better results could be achieved through cooperative efforts to adjust the approach to resettlement or to devise an entirely new one. When this happens, the RAP should be amended to describe the new approach to resettlement.
- Partnership with the affected persons is also essential to successful implementation. As a practice, it is important to provide affected persons with relevant information on changes in approach. Importantly, if planning changes are intended to allay the expressed concerns of affected persons (most often, they are the first to identify where problems are arising or planned interventions are not having the desired outcomes), this cannot succeed without their active support. This requires on-going communication and consultation with affected persons.

#### 5.4.4.1 Circumstances giving rise to RAP changes

A number of factors may give rise to the need to amend RAPs. Examples include:

- Changes in the project area.
- Unanticipated adverse impacts that need to be remedied.
- Changes in the configuration of a project or components of the siting/alignment of project infrastructure.
- A need to change compensation rates, particularly if resettlement implementation occurs over a long period of time.
- Remedial measures may not always deliver the desired outcomes necessitating a change in what is being undertaken or how it is being undertaken.

#### 5.4.4.2 Documenting changes

All changes to the RAP should be carefully documented, with the provision of all supporting documentation, such as minutes of meetings with the project team, affected communities, government, etc. Where external financing institutions are involved in a project, changes should be signed-off by these institutions prior to being effected in the field.

### 5.4.5 Post-resettlement support

Resettlement does not comprise discrete activities that, once complete, can simply be signed-off as compliant with RAP requirements, project funding agreements, and/or commitments. Rather, resettlement is a process of many and varied activities, most of which require some form of on-going support, following technical completion. Post-resettlement support goes beyond merely monitoring outcomes; it involves proactive and hands-on support to affected persons. In most cases, post-resettlement support is required during the roll-out of the income and livelihood restoration strategies, especially where these strategies require affected persons to adapt to new lifestyles and learn new income generating activities.

Post-resettlement support programmes must be included within RAPs and SDPs. They will be customised to particular situations but should contain the usual elements describing aims, objectives, methodologies, organisational responsibilities, budgets and programmes.

It is evident that support programmes cannot continue indefinitely; therefore, it is essential that the approach to support is one that aids affected persons to adapt to changed circumstances without creating dependency. This should be achieved through the gradual reduction of support over a period of time as specific programme objectives are achieved. Monitoring is needed to ensure support is not withdrawn too quickly (equally, where elements of a RAP can be signed-off, they should be, without necessarily waiting for the completion of the overall resettlement programme). Furthermore, the need for support must be measured within the context of the surrounding environment to ensure that the needs of affected persons are project-related .

### 5.4.6 Close out

Resettlement interventions cannot continue indefinitely; therefore, it is necessary for the RAP and SDP, with its support programmes, to set clearly identifiable and measurable goals, in agreement with affected persons/communities, at which time the resettlement programme can be closed out. These goals should align carefully with government development programmes.

It should be noted that it is extremely difficult to close out resettlement programmes—in particular, to draw a distinction between project-induced requirements and normal developmental desires, aims and objectives of a community or government. This matter requires careful consideration between all role-players (project, government, affected persons, NGOs and the like) to achieve consensus. It is important not to close out too early or too late, which could potentially create damaging dependencies or communities taking advantage of a situation to the detriment of neighbouring communities. Therefore, while the WCD stressed the recognition of rights and the assessment of risks, it is equally important to stress that with rights come responsibilities; and, at some point, persons affected by development need to take responsibility for their own well-being and sustainable livelihoods. Most often, this is a ‘big step’ to take (not because people are unwilling to take the step but, rather, due to the many economic uncertainties in most countries).

The close out of a resettlement programme should be via majority consensus of role-players and widely announced to affected communities and the wider population. It is a formal event that must be signed-off as the final activity of a resettlement programme.

**Text Box 5.8 Implementation of Involuntary Resettlement – Key Aspects**

- The RAP serves as a guideline for implementation. Changes are to be expected during the roll-out of the resettlement programme.
- There are several key steps in implementing involuntary resettlement programmes:
  - Preparation.
    - Ensuring all project team role-players understand the RAP and what is required at different times during its roll-out.
    - Ensuring the correct staff are available at the correct times to roll-out the RAP.
    - Ensuring staff have the necessary resources to fulfil their responsibilities.
    - On-going consultation with persons to be displaced and host communities.
    - If the need is indicated, such as a time lag between preparation and implementation of the RAP, it may be necessary to update data and information on which the original RAP was based.
  - Implementation.
    - Paying compensation.
    - Undertaking physical resettlement (making sure that resettlement sites are prepared in advance and are complete prior to resettlers arriving at their new homes).
    - Aligning resettlement activities with the overall project construction programme.
    - Reconstruction and relocation to replacement homesteads.
    - The provision of infrastructure and services at resettlement sites for the use and benefit of resettlers and hosts.
    - Implementation of income replacement and improvement strategies.
    - On-going monitoring and evaluation.
    - Addressing grievances.
  - Record keeping.
    - It is essential to maintain accurate and complete records of all resettlement activities, which should be readily available, when required.
  - Contingency planning/plans.
    - Circumstances change; this may give rise to RAP changes.
    - It is important to document and sign-off on RAP changes.
  - Post-resettlement support.
  - Close out.

| | |
|---|---|
| Discussion topics | Discuss resettlement organisational structures and budgets; in particular, their influence on the successful implementation of RAPs. |
| | Using a resettlement example from your own country, discuss elements of a RAP that did not produce the desired outcomes and the changes that were made to rectify the situation. Elaborate on the success or not of the implementation of these remedial actions. |

| | |
|---|---|
| | Discuss support mechanisms that could be implemented for communities resettled 30 km distant from their original homesteads, requiring resettlers to completely rebuild their livelihoods. |
| Exercises | Using a time line and a resettlement example from your own country, track the implementation of resettlement with a view to identifying where problems arose and how they affected the overall resettlement schedule. |
| | Design a simple manual and electronic record keeping system for a resettlement programme that comprises the physical resettlement of 10 households (50 affected persons). |
| | Elaborate measurable indicators that could be used, when achieved, to formally close out a resettlement programme. |

# 6 COMPENSATION POLICY AND BENEFIT-SHARING

In the past, large dams often left a legacy of social injustices (such as the displacement (largely involuntary resettlement) of millions of people and lost livelihoods), environmental degradation (such as lost and damaged ecosystems) and economic difficulties (such as debt burdens), which outweighed benefits[14]. In many cases, an unacceptable and unnecessary price has been paid, especially in social and environmental terms, to obtain the benefits of dams. To redress this, for the past few decades, international agencies have developed normative frameworks to be applied when planning, implementing and operating large infrastructure projects like dams. For the social environment, social issues need to be identified and assessed, and processes must be developed with affected communities to address impacts and optimise development opportunities. Arising from this, it has become apparent that once-off mitigation is insufficient, and there is a need for longer-term involvement with displaced communities.

In the context of sustainable development, compensation[15] and benefit-sharing[13] help to address the frequent disconnect between national and local development. Benefit-sharing, which is founded on the principles of normative frameworks, is a uniquely powerful, practical and adaptable management tool, which serves to underpin the sort of partnerships needed to involve people in development decisions that affect them. Benefit-sharing also supports the practice of Integrated Water Resource Management.

[14] It should be recognised that it is difficult to evaluate and adjudicate on a project that is in the national interest (for example, a large dam and hydropower facility required for the supply of electricity to an important industrial centre of a country), but which may have significant negative consequences for local/regional communities (who may need to resettle and completely transform their lives and livelihood strategies). In this instance, negative consequences are experienced at the project site/region while benefits are experienced further afield. Therefore, it is imperative to deal with negative consequences fairly and to address the equitable balance and distribution of benefits (locally, regionally and nationally).

[15] As stated in Section 4, it is important not to 'mix' or 'confuse' corporate social responsibility (which is usually voluntary but sometimes legislated, for example, in South Africa as part of the South African Government's Broad Based Black Economic Empowerment initiative) with compensation and benefit-sharing (which are usually mandatory). In most countries and contexts, corporate social responsibility spending goes beyond compensation and benefit-sharing to add additional value to that which may arise from opportunities arising from a project and accruing to affected and/or beneficiary communities.

## 6.1 Background

| | |
|---|---|
| Purpose | The purpose of this session is to raise awareness on the international policy principles and guidelines pertaining to compensation and benefit-sharing in the context of large infrastructure (dam) development. |
| Objectives | ❑ To gain an understanding of compensation and benefit-sharing policy principles and guidelines, and their international importance |
| Preparatory reading | UNEP, 2007. Dams and Development: A Compendium of Relevant Practices for Improved Decision-Making on Dams and their Alternatives. Section 5: Compensation Policy (focus on benefit-sharing mechanisms). www.unep.org/dams |
| | WCD (World Commission on Dams). 2000a. Thematic Review I.3: Displacement, Resettlement, Rehabilitation, Reparation and Development. |
| | Susanna Price (2008) Compensation, Restoration, and Development Opportunities: National Standards on Involuntary Resettlement, in Cernea, M.,M and Hari Mohan Mathur (eds.) Can Compensation Prevent Impoverishment? Reforming Resettlment through Investments and Benefit- Sharing (pp .147-179). Oxford University Press |

### 6.1.1 Need for improved compensation for involuntary resettlement

One of the key points put forward in recent debates on involuntary resettlement is that 'dams have made an important and significant contribution to human development, and the benefits derived from them have been considerable' (WCD, 2000). These benefits are varied and include power generation, flood control, irrigation, industrial and domestic water supply, navigation, and recreation.

However, dams are the source of both significant and unavoidable environmental and social impacts. The most important unavoidable impacts are generally related to the flooding of land in the impoundment zone upstream of a dam and to changes to water flows and water levels downstream of a dam. These frequently result in loss of housing, land, productive resources and/or community services by locally affected people. This has been the case in the past and, conceivably, can be expected to be the case in the future. Several dam projects have been abandoned or postponed for reasons including poorly managed involuntary displacement and loss of livelihoods for populations living within or downstream of the impoundment zone. Additional reasons include the loss of means to support traditional ways of life, particularly in the case of culturally vulnerable indigenous or ethnic/religious minority groups that are largely dependant on locally available land and natural resources.

An important body of social research carried out over the last 20 to 30 years has concluded that a large number of dam projects in developing countries have resulted in inadequate compensation and the impoverishment of locally affected populations. This has occurred despite international standards set in the 1980s, respecting resettlement and development of persons affected by dam projects, and stressing the need for the equitable compensation of all affected parties. The rebuilding of affected communities and supporting the development of affected parties' livelihoods have been equally emphasised.

The question arises: what has gone wrong? It is important to recognise that funding and managing resettlement programs is difficult for governments in the developing world, particularly in low-income countries confronted with land scarcity, competing needs and limited resources, as well as severe institutional capacity constraints. Moreover, the absence in many developing countries of effectively functioning land and labour markets, inadequacies of compensation systems for property appropriated by the state, and the absence of adequate social safety nets—are three central reasons why the simple cash compensation of property losses under eminent domain laws cannot realistically be expected to provide satisfactory outcomes for displaced populations.

The literature on dam projects in the developing world also indicates that the means put into place to attain the required standards have not always been adequate. The amplitude and complexity of resettlement have frequently been underestimated. This has resulted in insufficient long-term funding of resettlement and development activities. Frequently voiced concerns include: delays in project implementation and benefits foregone; high levels of destitution among project-affected persons, which constitute a significant drain on developing nations' economies; and increasing concern about fundamental human rights and people's welfare.

The need to properly manage these issues is underscored by a globally accepted framework for setting universal goals, norms and standards. The foundations of the framework are the United Nations Charter (1945) and the Universal Declaration of Human Rights (1947). In the last two decades of the 20$^{th}$ century, the United Nations General Assembly reinforced this framework with the UN Declaration on the Right to Development (1986) and the Rio Declaration on Environment and Development (1992). The WCD Report (2000) made the case that the traditional 'balance sheet' approach of assessing costs and benefits of a project is an inadequate tool for development planning and decision-making: 'Given the significance of rights-related issues, as well as the nature and magnitude of potential risks for all parties concerned, the Commission proposes that an approach based on 'recognition of rights' and 'assessment of risks' (particularly rights at risk) be developed as a tool for guiding future planning and decision making'. Such an approach should also be balanced with needs, and above all the 'need to reduce poverty', which is particularly relevant in developing countries (Gagnon, Klimpt and Seelos, 2002).

Recent social research indicates that there is a requirement for compensation policies to clearly set out mechanisms that must be put into place in order to attain the policy objectives pursued under international standards. Policy provisions need to clearly establish the key elements that must be taken into account to ensure that improved livelihoods, living standards, and opportunities are the outcome of involuntary resettlement and development processes. In addition, to providing adequate compensation for lost assets, key elements should include: specific provisions for the poorest affected persons (including those without legal title to assets, female-headed households and other vulnerable groups, such as indigenous peoples), and benefit-sharing.

These principles were supported in the Beijing Declaration on Hydropower and Sustainable Development (United Nations, 2004): 'With respect to social aspects, we note that the key ingredients of successful resettlement include minimization of resettlement, commitment to the objectives of resettlement by the developer, and rigorous resettlement planning with full participation of affected communities, with particular attention to vulnerable communities. We are encouraged by the trend of some governments to go beyond good practice resettlement by providing benefit-sharing with host communities and call on governments to consider incorporating such approaches in their legal and regulatory frameworks. We further call on governments and regional and local authorities to accord special consideration to culturally sensitive areas'.

### 6.1.2 Normative frameworks

Project induced resettlement takes place in a multi-layered normative framework composed of:

- International policy and law.
- National laws.
- State or provincial laws.
- Sector level laws and policies (energy, transportation, agriculture, etc.).
- Laws governing the activities of dam building and operating agencies (for example, policies developed by the International Hydropower Association).

Resettlement and compensation policies adopted by international development agencies are implemented in the context of this overall framework.

Until recently, few developing countries had put into place comprehensive compensation and resettlement normative frameworks. As a result, over the years, international development agency guidelines have played an important role in many development-induced resettlement programs. More recently, international financing institutions, such as the World Bank Group, have also played an important role in the development of national compensation and resettlement normative frameworks. More and more national governments are formulating resettlement guidelines and a few, such as China, appear to have these guidelines firmly in view when planning and undertaking project-induced resettlement programs.

The World Bank Group's involuntary resettlement normative/policy framework has been particularly influential in shaping the policies of other donors, and the World Bank Group's guidelines on involuntary resettlement (including those of the International Finance Corporation) are often used as a reference by potential public and private sector investors in dam projects. The World Bank policy on involuntary resettlement has been periodically updated since 1980 (e.g., in 1990, 1994, 1998 and 2004), but its fundamental principles—to prevent impoverishment and rebuild affected people's livelihoods--remain. However, certain aspects of the World Bank's normative framework for involuntary resettlement have recently been called into question by the human rights-oriented approaches of many UN agencies, by the World Commission on Dams (2000) and by a number of bilateral donor agencies and international Non-Governmental Organisations (NGOs).

A number of United Nations agencies have a mandate to address issues that are relevant to 'forced eviction' (involuntary resettlement) or 'internal displacement'. The most important ones are the United Nations Centre of Human Settlements (UNCHS/Habitat), the United Nations Commission on Human Rights (UNCHR), and the Food and Agriculture Organization (FAO). For most UN agency activities, conflict-induced resettlement has traditionally been given greater attention than development-induced resettlement. However during the 1990s, development-

induced resettlement issues became an area of increasing concern. This was linked to ongoing work and policy initiatives on human rights carried out under the auspices of the UN.

It is now recognised that development-induced displaced people can be classified as a distinct group of persons requiring protection under international human rights law. In 1994, forced eviction was recognised as a human-rights violation by the UN Secretary-General, as well as in the 1997 UNHCR formulated guidelines on displacement, titled 'The Practice of Forced Evictions: Comprehensive Human Rights Guidelines on Development-Based Displacement'. 'Guiding principles on Internal Displacement' have been formulated at the level of the UN Secretary-General. These principles identify rights and guarantees that apply to the protection of persons from forced-displacement. They also identify rights and guarantees that apply to the protection and assistance of displaced people during displacement and resettlement.

In principle, bilateral donors from countries who are members of the Organisation for Economic Cooperation and Development (OECD) follow 'OECD - Development Assistance Committee (DAC) Guidelines.' Guideline No. 3 'Aid Agencies on Involuntary Displacement and Resettlement in Development Projects' specifically addresses compensation and resettlement issues. It provides for compensation of losses at replacement cost and assistance during the transition period. Displaced people should be assisted in their efforts to improve their former living standards—or at least to restore them. Both OECD and World Bank normative frameworks contain similar premises, which are: 'the avoidance of resettlement whenever possible, planning and execution of resettlement as a development project and due attention given to people's needs and to environmental protection'.

The implementation record of the World Bank's Safeguard Policies, including the Bank's involuntary resettlement policy, has been the subject of growing controversy. According to some NGOs and civil society organisations, the record clearly indicates that the Bank's policies are currently inadequate for protecting the human rights, livelihoods and environment of affected communities. Criticisms of the effectiveness of World Bank standards led the Bank to contribute to the establishment of the World Commission on Dams. The WCD's mandate was to produce, through a participatory process, a comprehensive review of dams and to propose a decision-making framework for future dam projects. The WCD Report published in 2000 advocated strengthened standards for compensation and resettlement in order to avoid the impoverishment of affected populations. The WCD proposed that affected peoples be provided with legal support in negotiating mutually agreed Mitigation, Resettlement and Development Action Plans.

The WCD also recommended that no dam project be allowed to proceed on indigenous and tribal peoples' lands without obtaining their free, prior and informed consent. In its response to the WCD Report, the World Bank indicated that it was '…dedicated to ensuring that the views of affected people are carefully documented and taken into account by project decision makers, without infringing on the right of the state to make decisions which it judges to be the best solution for the community as a whole (World Bank, 2000)'. The WCD's recommendations introduced a new framework for resettlement and compensation issues. A number of international NGOs and civil society organisations have since advocated the adoption of these recommendations by international development agencies and export-credit agencies. Some European bilateral development agencies have used the WCD's recommendations.

Compensation and benefit sharing are also consistent with Mekong national development policy of reducing poverty and closing the gap between the rich and the poor. As set out the MRC Basin Development Strategy (2011), benefit sharing is the key to advance sustainable hydropower by moving beyond income restoration and compensation process.

It is recognised that when the MRC Initiative on Sustainable Hydropower was formulated in a multi-stakeholder processes in 2008-2009 consensus was that benefit sharing was a key ingredient in sustainable hydropower. Consequently, benefit sharing was included in the ISH Work Plan (e.g. this output).

- It is clear that principles of benefit sharing are embodied in the policies and legislation of Mekong countries, which define sustainable development:
    - In Viet Nam, for example, sustainable development is legally defined as: "Development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs, on the basis of a close and harmonized combination of economic growth, assurance of social advancement and environmental protection".
    - Benefit sharing mechanisms (BSM) help make the "assurance of social advancement" a reality--not just for some, but for all stakeholders.
    - At the same time, BSM help bring all three dimensions of sustainability together. This is important, because these aspects are often inseparable to people living in riverine communities.
    - Other Mekong countries have similar legal definitions that reflect internationally accepted definitions enshrined in UN Conventions, to which Mekong countries are signatories (e.g. Agenda 21).

- The world view is also that sharing of benefits among all stakeholders is an integral part of sustainable hydropower. This is clearly seen by the prominence of benefit sharing themes in today's new generation of hydropower sustainability assessment tools, developed in multi-stakeholder processes at international levels (as discussed in Section 2. 3).
    - At the regional level, the MRC is helping Member Countries identify, measure, and monitor steps to improve sustainable outcomes in hydropower. A key initiative is the collaborative development of the rapid basin-wide hydropower sustainability assessment tool (RSAT). The tool is currently undergoing field trials in tributary basins in Mekong countries, coordinated by the MRC.
        - This basin / sub-basin hydropower sustainability assessment tool is the product of several years of conceptualization and preparation under the Partnership Initiative called the Environment Criteria for Sustainable Hydropower (ECSHD) with the ADB, MRC and WWF.

        - RSAT was developed in close collaboration with NMCS and national line agencies in processes led by the ISH working with the Environment Division of MRCS.
        - RSAT considers what needs to be taken into account at all stages of the project-cycle, from planning and design through operations. The range of topics and criteria in RSAT reinforces the inherent multi-disciplinary nature of the sustainability hydropower challenge.
        - Benefit sharing is one of the 11 assessment topics in RSAT, namely "TOPIC 8: Sharing of benefits and use of innovative financing measures for sustainability (local and transboundary).
            - Topic 11 addresses equitable distribution of project benefits to different groups within the river basin and across jurisdictions.
            - In the RSAT method an assessment is made of the presence of or unrealized opportunities for BSM in terms of (i) equitable access to electricity services, ii) non-monetary entitlements to enhance resource access, and (iii) revenue sharing.
            - RSAT is not a prescriptive tool. Rather it engages people in structured and informed discussions and points to areas where stakeholders can agree on a scope for progressive improvement in current practices.
    - Multilateral Development Finance institutions, including the Asian Development Bank (ADB) and World Bank, proactively support benefit sharing as a key aspect to advance sustainable forms of hydropower in their project lending.

- The 1995 Mekong Agreement is central to sharing benefits across transboundary dimensions and at different scales (regional to national to local).
    - The principles of transboundary benefit sharing, embodied in 1995 Mekong Agreement, are related to clauses on:
        - Equitable and reasonable utilization;
        - No harm; and
        - Freedom of navigation.
    - Recently the MRC Basin Development Strategy clarified the approach to discuss sharing benefits as part of the development opportunity space (DOS). In comments on priorities for the MRC to help advance sustainable hydropower.
        - The BDS notes the "DOS can also be used as a "cooperation space" or "negotiation space" to explore mutually beneficial options.
        - When discussing hydropower, the BDS notes the range of indirect and additional benefits to be derived, and the need for attention to "detailed identification of impacts and of mitigation and benefit-sharing measures, [as well as] coordination between LMB countries on tributary dam operations, and with China on the Lancang dam operation."
        - To move toward sustainable development of hydropower on tributaries, the BDS notes the need for "evaluating benefit-sharing options, such as watershed development and management—benefiting hydropower generation pverall and funded by hydropower revenues".

All the above highlight the importance of BSM to sustainable forms of hydropower development and management, with regard to their scale (e.g. transboundary and national-to-local benefit sharing).

**Text Box 6.1 Background and Normative Frameworks – Key Aspects**

Compensation policies for dam projects in developing countries should ensure prompt and measurable improvement of the lives of affected people and communities. This is achieved by:

- Fostering the adoption of appropriate normative frameworks. The regulatory and institutional aspects associated with resettlement are often difficult to address. Changes to legislative or institutional frameworks require the active involvement and commitment of the governments concerned.
- Building required institutional capacities. This addresses the need for an institutionalised project planning process; the need to ensure the participation of all groups affected by the projects in the decision making process, and the need for reinforced local land management capabilities.
- Planning and implementing long-term integrated community development programs. Losses incurred by individuals and communities as a result of project activities should be directly replaced and, as far as possible, all compensation should be in kind. Economic sustainability requires market proximity, sound natural resource management and including host communities as beneficiaries in the resettlement scheme. Development assistance, such as land preparation, credit facilities, training or job opportunities, must be provided.

| | |
|---|---|
| Discussion topics | There are many normative frameworks (international and national) governing social impact assessment, involuntary resettlement, compensation and benefit-sharing. These are not always aligned. Using normative frameworks from your own country, identify key characteristics, and compare these to the key characteristics of international normative frameworks (for example, those of the World Bank, International Finance Corporation, the Asian Development Bank and the International Hydropower Association). |
| | Using examples of major infrastructure development in your country, discuss the application of international and national normative frameworks, focusing on the impact of their application on the livelihoods of people affected by involuntary resettlement. |
| | Drawing from the outcomes of the above two discussion topics, discuss potential approaches and measures that could be considered to improve compensation policies related to involuntary resettlement. |
| Exercises | Prepare a two-column table and under each column list monetary and non-monetary benefit-sharing mechanisms. |

## 6.2 Compensation Policy - Principles

| | |
|---|---|
| Purpose | The purpose of this session is to introduce participants to key principles underpinning compensation policy. |
| Objectives | • For participants to understand the key principles underpinning compensation policy |
| Preparatory reading | UNEP, 2007. *Dams and Development: A Compendium of Relevant Practices for Improved Decision-Making on Dams and their Alternatives*. Section 5: Compensation Policy (focus on benefit-sharing mechanisms). www.unep.org/dams |

The main common elements of international compensation policies and guidelines that apply to the displacement of people and livelihoods resulting from large-scale infrastructure projects, such as dams and hydropower facilities, are summarised below. These common elements can be found in safeguard policies put forward by the World Bank Group and other multilateral development banks, in the International Finance Corporation's (IFC) most recent Policy and Performance Standards, and in the recommendations of the World Commission on Dams. They are referred to by international bilateral aid agencies and financial institutions and are incorporated into national policy frameworks in a number of developing countries such as Brazil, Colombia, China and India.

### 6.2.1 Ensuring the improved livelihoods of affected people

Compensation policies and guidelines emphasise the need to ensure the improved livelihoods of all people affected by large-scale infrastructure projects, such as dams and hydropower facilities. In similar fashion to other international financial institutions, the World Bank's Operational Policy on Involuntary Resettlement (OP/BP 4.12) and the IFC's Performance Standard 5 on Land Acquisition and Involuntary Resettlement require that resettlement programs result in the 'improvement or at least restoration of the livelihoods and living standards of displaced persons'.

The World Bank's Operational Policy on Involuntary Resettlement specifies that 'displaced persons should be assisted in their efforts to improve their livelihoods and standards of living or at least to restore them, in real terms, to pre-displacement levels or to levels prevailing prior to the beginning of project implementation, whichever is higher'. An additional objective of the IFC's Performance Standard 5 on Land Acquisition and Involuntary Resettlement is that resettlement programs should result in the 'improvement of living conditions among displaced persons through the provision of adequate housing with security of tenure at resettlement sites'.

### 6.2.2 Implementation of developmental approaches

Compensation policies and guidelines emphasise the need for involuntary resettlement programs to be planned and implemented as fully-fledged development projects. Resettlement as development policy with supporting legislation (such as China's Reservoir Resettlement Act and Legislation on Post Resettlement and Rehabilitation Funds) involves a combination of land and non land-based sustainable livelihood support packages, strong community participation (including both displaced and host communities) and accountability and commitment from government and project developers.

The World Bank's Operational Policy on Involuntary Resettlement states that 'where it is not feasible to avoid resettlement, resettlement activities should be conceived and executed as sustainable development programs, providing sufficient investment resources to enable the persons displaced by the project to share in project benefits. Displaced persons should be meaningfully consulted and should have opportunities to participate in planning and implementing resettlement programs'.

Two basic strategies may be pursued when designing a resettlement program: land-based strategies and non-land-based strategies. Land-based strategies involve the design of specific project-funded activities such as land reclamation, irrigation schemes, agricultural intensification, tree crops development, fisheries, commercial or social forestry, vocational training, off-farm employment, and other kinds of lasting income-generating activities. The reconstruction of livelihoods on the basis of land-based strategies depends on the willingness of the government and the project developer to acquire and set aside land in sufficient quantity and quality to support such strategies.

Even when land is available in sufficient quantity and quality, alternative non-land-based strategies may be needed for some of the displaced people. The World Bank's Operational Policy on Involuntary Resettlement states that 'if land is not the preferred option of the displaced persons, the provision of land would adversely affect the sustainability of a park or of a protected area, or sufficient land is unavailable at a reasonable price, non-land-based options built around opportunities for employment or self-employment should be provided in addition to cash compensation for land and assets lost'.

People displaced by a large infrastructure project are compelled to relinquish rights to various immovable assets (such as housing, land and public services), access to economic opportunities (such as nearby jobs, fishing areas, irrigation works, standing crops and trees), as well as non-economic assets (such as shrines, cemeteries, communal public buildings, common forest areas, places of spiritual value[16], etc.). Therefore, the resettlement program normally includes the provision of infrastructure and services to ensure the long-term sustainability of displaced and host communities. The World Bank's Operational Policy on Involuntary Resettlement specifies that 'in new resettlement sites or host communities, infrastructure and services are provided as necessary to improve, restore, or maintain accessibility and levels of service for the displaced persons and host communities. Alternative or similar resources are provided to compensate for the loss of access to community resources (such as fishing areas, grazing areas, fuel, or fodder)'.

It is important to note that undertaking resettlement within a development paradigm requires the developer and government to consider the wider community within which this will occur. While this includes any host communities, it goes somewhat wider than only the host communities. This means that the wider community should also benefit from the planned investments and development interventions.

[16] It should be noted that, in most cases, it is virtually impossible to compensate for some non-economic assets, such as places of spiritual value, where no amount of cash compensation and/or alternative sites can replace the original that is being lost to a large-scale infrastructure project. This is a limitation of compensation that needs to be proactively addressed and agreed with affected persons/communities.

### 6.2.3 In-kind compensation in place of cash compensation

Compensation policies and guidelines emphasise the need for in-kind compensation rather than cash compensation for people displaced by large-scale infrastructure projects such as dams and hydropower facilities. In theory, cash compensation as replacement cost allows displaced persons to restore incomes and living standards. In practice, several obstacles have impeded conversion of cash into replacement assets (or alternative income-restoration measures). Most obviously, the amount of compensation may be insufficient. The timing of compensation (either too early or too late) can also reduce the likelihood of incomes being restored. Cash may not be convertible into productive assets if markets or opportunities are few. Furthermore, local practices may encourage the use of compensation to pay debts or for social reciprocities, rather than for purchasing replacement assets.

In similar fashion to other international financial institutions, the World Bank's Operational Policy on Involuntary Resettlement states that 'preference should be given to land-based resettlement strategies for displaced persons whose livelihoods are land-based. These strategies may include resettlement on public land, or on private land purchased for resettlement. Whenever replacement land is offered, re-settlers are provided with land for which a combination of productive potential, locational advantages, and other factors are at least equivalent to the advantages of the land taken. Payment of cash for lost assets may be appropriate in certain circumstances, for example:

- Where livelihoods are land-based but the land taken for the project is a small fraction of the affected asset and the residual is economically viable.
- Where active markets for land, housing, and labour exist, displaced persons use such markets, and there is sufficient supply of land and housing.
- Where livelihoods are not land-based. Cash compensation levels should be sufficient to replace the lost land and other assets at full replacement cost in local markets'.

### 6.2.4 Compensation of affected people without formal entitlement to the land

Compensation policies and guidelines emphasise the right to compensation of affected people without formal entitlement to the land. As OP 4.12 (the World Bank's Operational Policy on Involuntary Resettlement) recognises, the most devastating effects of displacement may be borne by individuals or groups who depend on open access to resources, whose customary rights are not recognised, or where resource use differs from dominant patterns.

In similar fashion to other international financial institutions, the World Bank's Operational Policy on Involuntary Resettlement and the IFC's Performance Standard 5 on Land Acquisition and Involuntary Resettlement require that 'displaced people who: i) have formal legal rights to the land they occupy; ii) do not have formal legal rights to land, but have a claim that is recognised or recognisable under national laws; and iii) who have no recognisable right or claim to the land they occupy', are all entitled to compensation. **Importantly, compensation or assistance is not required for those who encroach on the project area after the cut-off date for eligibility (which usually corresponds to the date set for the census of affected people).**

Physically displaced persons who have no recognisable right or claim to the land they occupy 'must be offered a choice of options for adequate housing with security of tenure so that they can resettle legally without having to face the risk of forced eviction. They must also be provided with relocation assistance sufficient for them to restore their standards of living at an adequate alter-

native site'. Economically displaced people 'should be compensated for lost assets (such as crops, irrigation infrastructure and other improvements made to the land) at full replacement cost and provided with transitional support and additional targeted assistance (for example, credit facilities, training or job opportunities) and opportunities to improve or at least restore their income-earning capacity, production levels and standards of living'.

#### 6.2.4.1 Enhancing participatory approaches

Compensation policies and guidelines emphasise the need to enhance participatory approaches and to involve affected people in the planning and implementation of Resettlement Action Plans and Indigenous Peoples Development Plans (IPDPs) (Section 8).

In similar fashion to other international financial institutions, the World Bank's Operational Policy on Involuntary Resettlement requires that 'displaced persons and their communities, and any host communities receiving them, are provided timely and relevant information, consulted on resettlement options, and offered opportunities to participate in planning, implementing, and monitoring resettlement. Appropriate and accessible grievance mechanisms are established for these groups'. The World Bank's Operational Policy (OP) 4.12 further requires that 'the displaced persons are…consulted on, offered choices among, and provided with technically and economically feasible resettlement alternatives'.

According to the World Bank's Operational Policy (OP) 4.12, a participation plan for re-settlers and host communities must include:

- A description of the strategy for consultation with and participation of re-settlers and hosts in the design and implementation of the resettlement activities.
- A summary of the views expressed and how those views were taken into account when preparing the resettlement plan.
- A review of the resettlement alternatives presented and the choices made by displaced persons regarding options available to them, including choices related to forms of compensation and development assistance, to relocating as individuals, families, or as parts of pre-existing communities or kinship groups, to sustaining existing patterns of group organization, and to retaining access to cultural property (for example, places of worship, pilgrimage centres, cemeteries).
- Institutionalised arrangements by which displaced people can communicate their concerns to project authorities throughout planning and implementation, and measures to ensure that such vulnerable groups as indigenous people, ethnic minorities, the landless, and women are equally represented.

#### 6.2.4.2 Prioritizing vulnerable groups[17]

Compensation policies and guidelines emphasise the need to prioritise vulnerable groups affected by large-scale infrastructure projects. According to the World Commission on Dams Report, 'the principle categories excluded from assessments (of people displaced by dams) include the landless (for example, those without land, legal title or legal status), downstream communities and indigenous peoples'. The WCD Report also makes the case that poor people, women and representatives of ethnic minorities or indigenous communities have borne a disproportionate

[17] Relatively recent additions to vulnerable groups are child-headed households or households headed by the elderly who are taking care of young children. This is usually the consequence of conflict or, in many cases, parents who have succumbed to the HIV/AIDS pandemic. These types of households are becoming more prevalent in Sub-Saharan Africa.

share of the social impacts of major dams in the past: 'Involuntary resettlement affects poor and vulnerable segments of populations more severely than those that are better off. World Bank project experience shows that the poor, women, children, the handicapped, the elderly, and indigenous populations are often susceptible to hardship and may be less able than other groups to reconstruct their lives after resettlement. However, the extent, nature, and severity of their vulnerabilities may vary significantly. Good practice, therefore, calls for careful screening in project design and attentive resettlement to help vulnerable groups improve or at least re-establish their lives and livelihoods'.

In similar fashion to other international financial institutions, the World Bank's Operational Policy on Involuntary Resettlement states that: 'To achieve the objectives of this policy, particular attention is paid to the needs of vulnerable groups among those displaced, especially those below the poverty line, the landless, the elderly, women, children, indigenous peoples, ethnic minorities, or other displaced people who may not be protected through national land compensation legislation'.

According to the World Commission on Dams Report, 'extensive research has documented gender inequality[18] in access to, and control of, economic and natural resources. In Asia and Africa, for example, women may have use rights over land and forests, but are rarely allowed to own and/or inherit the land they use…Where social services are provided as part of resettlement programs, these may represent an improvement for women compared to their pre-resettlement situation…Large dams and associated irrigation schemes can represent unique opportunities for reforms in areas such as land tenure'. By allowing and empowering women to become landowners, such reforms can lead to long-term improvements in women's livelihoods.

#### 6.2.4.3 Ensuring compliance with agreements

Compensation policies and guidelines emphasize the need for ensuring compliance[19] with agreements and commitments included in RAPs and IPDPs. The RAP provides the framework for compliance with the agreed roles and responsibilities of the various stakeholders, especially the resettlement implementation agency. The plan needs to be readily available and understandable to the affected people. The RAP describes the following:

- Details of the impacts of land acquisition and resettlement.
- Provisions for compensation.
- Arrangements for physical relocation and economic rehabilitation.
- Institutional arrangements for delivering entitlements and undertaking other development activities.
- Schedule of implementation and its linkage with construction of the infrastructure.
- Provisions for the continuing participation of displaced persons in the resettlement process.
- Costs and budgets and provision of funding.
- Resettlement performance indicators.

[18] Despite extensive and intensive efforts to the contrary, gender inequalities and imbalances remain in many parts of the world. For any particular project, these need to be identified and addressed within any programmes or plans designed to mitigate negative effects and to optimise opportunities arising from the proposed project. This is not always easy as these types of interventions may conflict with traditional and or customary practices. Nevertheless, gender sensitivity, as the act of being sensitive to the ways people think about gender, is important. Its focus is on ensuring that assumptions rooted in traditional/historical beliefs about the roles of woman and men do not prevail. Gender-sensitive planning uses methods and tools to provide females more opportunities for their participation in the development process and to measure the impact of planned activities on woman and men.

[19] Compliance is an extremely important aspect of all projects, and is the subject of a separate Training Manual being developed as part of the MRC – GIZ Cooperation Programme: Network for Sustainable Hydropower Development in the Mekong Countries.

- Arrangements for internal and external monitoring.
- Mechanisms for grievance redress.

In similar fashion to other international financial institutions, the World Bank's Operational Policy on Involuntary Resettlement states that: 'The borrower's obligations to carry out the resettlement instrument and to keep the Bank informed of implementation progress are provided for in the legal agreements for the project.…Mechanisms promoting compliance with the resettlement agreements and the use of an independent panel of experts are covered in the Bank's resettlement policy and are routinely resorted to in Bank-supported dam projects. However, governments are ultimately responsible for implementation, co-ordination, and oversight of resettlement programs. Good practice also suggests the use of trust funds to finance the ongoing obligations for monitoring and auditing, activities that must continue for the life of the project. Royalties from the dam itself could fund ongoing initiatives. If the dam is constructed by a private sector developer, the developer and the government need to reach an agreement on the developer's responsibility for implementing satisfactory resettlement and the government's responsibility regarding provision of support to acquire land and to provide staff for the schools and other facilities contracted under the resettlement program. Evolving good practice suggests that agreement between the developer and the government shall include a performance bond, supported by a financial guarantee to be triggered if the developer has not adequately fulfilled its resettlement responsibilities'.

Involuntary resettlement is dealt with in detail in Section 5.

| **Text Box 6.2 Compensation Policy Principles – Key Aspects** |
|---|
| Compensation policies for dam and hydropower projects in developing countries should ensure a prompt and measurable improvement of the lives of affected people and communities by:<br>• Ensuring the improved livelihoods of affected people.<br>• Implementation of developmental approaches.<br>• In-kind compensation in place of cash compensation.<br>• Compensation of affected people without formal entitlement to the land.<br>• Enhancing participatory approaches.<br>• Ensuring compliance with agreements. |

| | |
|---|---|
| Discussion topics | Compensation policies and guidelines emphasise the need for compensation in-kind rather than cash compensation for people adversely affected by dams. Discuss the possible obstacles that limit the usefulness of cash compensation in efforts to achieve the conversion of cash into replacement assets or alternative income restoration. |
| | Discuss institutional capacity in your own country and measures that need, could or should be put in place to effectively manage involuntary resettlement on a large infrastructure project. |
| Exercises | Using a selected case study, demonstrate how effectively or not the principles underpinning compensation policy have been applied. |

| | |
|---|---|
| | Identify situations that may arise from large infrastructure projects where cash compensation may indeed hold merit and be deserving of consideration within an overall basket of compensation to be applied to a project. |

## 6.3 Types of Compensation Mechanisms

| | |
|---|---|
| Purpose | The purpose of this session is to provide an overview of the various types of compensation mechanisms currently available and used. |
| Objectives | ❑ For participants to understand the nature of compensation mechanisms |
| Preparatory reading | UNEP, 2007. Dams and Development: A Compendium of Relevant Practices for Improved Decision-Making on Dams and their Alternatives. Section 5: Compensation Policy (focus on benefit-sharing mechanisms). www.unep.org/dams |

Compensation mechanisms applicable to dam and hydropower projects can be defined as mechanisms that aim to:

- Compensate project-affected populations for lost assets and lost access to resources.
- Restore and improve the livelihoods of project-affected populations living in the vicinity of a dam or hydropower development (through livelihood restoration and enhancement schemes, community development schemes, catchment development schemes and/or monetary benefit-sharing schemes).

Compensation mechanisms include:

- In-kind or monetary compensation for lost assets and loss of access to resources.
- Non-monetary and monetary benefit-sharing mechanisms.

Non-monetary benefit-sharing mechanisms are generally provided for in international normative frameworks related to compensation. Examples of such mechanisms are given in Guideline 20 of the WCD (2000) report and include:

- Those that are project benefit-related (access to irrigated land or to irrigation water, to power or to water supplies, etc.).
- Those that are project construction and operation-related (employment or financial and training support, etc.).
- Those that are resource-related (preferential access to, or custodianship of, catchment resources, etc.).
- Those that are community services-related (improved access to community infrastructure and services, income support, etc.).
- Those that are household-related (housing improvements, micro-credit, etc.).

In addition, various monetary benefit-sharing mechanisms have been developed and applied successfully to dam and hydropower projects, both in developed and developing countries.

The following types of compensation mechanisms are applied to involuntary resettlement:

- **In-kind or monetary compensation for lost assets and loss of access to resources.**

  This type of compensation is covered under national expropriation law and is specifically addressed in international normative frameworks, such as those of the World Bank Group. International guidelines normally require that compensation be paid out at market value for lost assets and/or loss of access to resources and that all land users are eligible to compensation irrespective of their land tenure status. For developing countries, they generally recommend that 'in-kind' or 'land-for-land' compensation strategies be preferred over monetary compensation strategies.

- **Livelihood restoration and enhancement.**

  This type of compensation is rarely provided for under national expropriation law but is specifically addressed in international normative frameworks, such as those of the World Bank Group. For developing countries, recommended livelihood restoration and enhancement strategies include:

  - The promotion of sustainable agricultural employment based on land-for-land options, irrigation schemes including access to pumped irrigation from the reservoir, land drainage schemes, cultivation in drawdown areas and other benefits from managed flows and floods and/or agricultural extension services including planting materials and other inputs.
  - The promotion of sustainable non-agricultural employment based on local employment during construction and operation, employment in services and industries, reservoir fisheries and/or skills training.

- **Community development.**

  This type of compensation is rarely provided for under national expropriation law but applied more generally to involuntary resettlement in developing countries. It is specifically addressed in international normative frameworks, such as those of the World Bank Group. For developing countries, recommended community development strategies include: the provision of new housing on titled lots, access to primary services (schooling, health-care and social services such as family support and income support, etc), access to financial services (such as interest-free loans or micro-credit), domestic water supply, roads and public transportation, rural electrification, markets and public and religious meeting places, and access to common resources (forests, grazing areas, etc).

- **Catchment development.**

  This type of compensation is rarely provided for under national expropriation law in developing countries but is specifically addressed in international normative frameworks, such as those of the World Bank Group. For developing countries, recommended catchment development strategies include: custodianship or management of catchment resources, reforestation, afforestation and planting of fruit trees and environmental enhancement for wildlife resources.

- **Monetary benefit-sharing.**

  Monetary benefit-sharing is based on the premise that dam and, specifically, hydropower, projects may generate a significant economic rent that can be shared with project-affected populations. Economic rent is the surplus return, which exceeds the normal return on capital. Such a rent arises because the company is exploiting a natural resource, whose development depends on site-specific hydraulic, topographical and geological conditions. In a number of countries, monetary benefit-sharing mechanisms provide funds to local and regional entities for infrastructure and development purposes. Such mechanisms provide a source of funding over the long-term, enable local and regional entities to set their own priorities and to minimise their dependency towards the developer and the state, and facilitate adaptive management. Text Box 6.3 summarises the main mechanisms to be considered within the general framework of compensation policy for involuntary resettlement.

It should be noted that catchment development schemes pursue both social and environmental objectives (for instance, the restoration of habitats such as wetlands can represent both an ecological benefit and a benefit for traditional hunters, trappers and fishermen). As a general rule, with the notable exception of monetary benefit-sharing schemes, the funding for compensation mechanisms for dams and hydropower facilities is considered as part of the project's costs. For large dam and hydropower projects, recommended policy is to separate the funding and management of compensation mechanisms from other capital costs to avoid leakage from one category to the other during project implementation.

In a number of countries, the funding of compensation mechanisms may be shared between the developer and a state government. This may include, for instance, funding by the state of an access road to the dam or of health-care facilities in the vicinity of the dam (which is typically the case in India or Sri Lanka)—or else funding by the proponent of community or transportation infrastructure that supports public infrastructure programs (which is typically the case in Brazil and Canada). While proponents or governments may welcome such cost sharing, it frequently raises jurisdictional conflicts related to the maintenance or long-term operation of government-funded or developer-funded infrastructure and services.

**Text Box 6.3 Main Compensation Policy Mechanisms for Involuntary Resettlement**

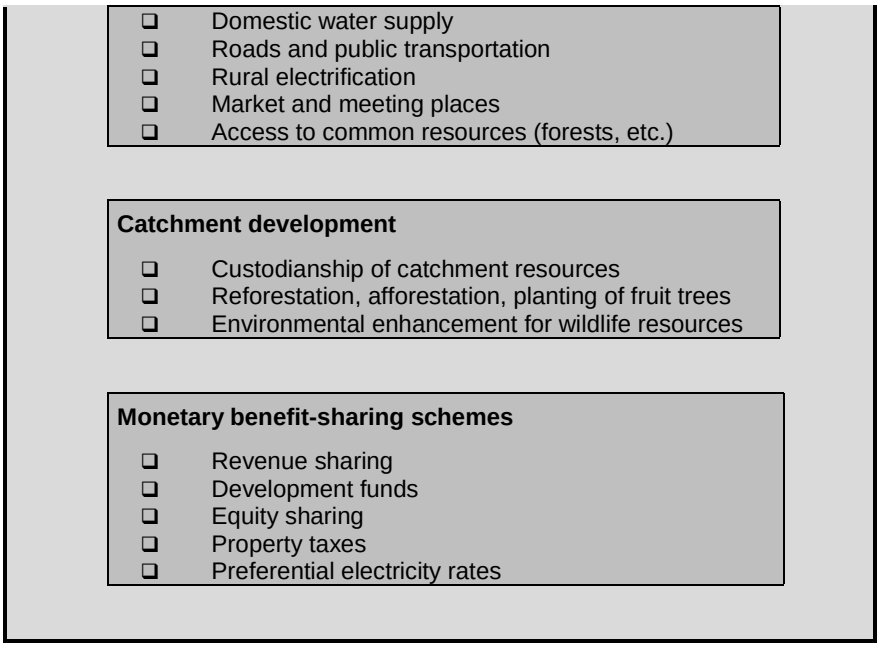
**In kind or monetary compensation for lost assets and loss of access to resources**

**Livelihood restoration and enhancement**

- Sustainable agricultural employment
- Sustainable non-agricultural employment

**Community development**

- Housing
- Access to primary services (schools, health-care, etc.)
- Access to financial services




**Text Box 6.4 Types of Compensation Mechanisms – Key Aspects**

Compensation mechanisms applicable to dam and hydropower projects can be defined as mechanisms that aim to compensate project-affected populations for lost assets and lost access to resources, and to restore and improve the livelihoods of project-affected populations living in the vicinity of a large infrastructure development. They include the following types of measures:

- Monetary compensation for lost assets and loss of access to resources.
- Non-monetary benefit-sharing (including livelihood restoration and enhancement; community development; and catchment development).
- Monetary benefit-sharing.

| | |
|---|---|
| Discussion topics | Discuss the various compensation mechanisms for the restoration and improvement of livelihoods for project-affected communities. |
| | Compensation policy applicable to dam projects is often implemented through mechanisms that aim to:<br>• Compensate project-affected populations for lost assets and lost access to resources.<br>• Restore and improve the livelihoods of project-affected populations.<br>Discuss the range of mechanisms for addressing issues of compensating for lost assets and restoring and improving the livelihoods for project-affected populations. |
| Exercises | Using a case study from your own country, evaluate how successfully or not the various types of compensation mechanism were applied. |
| | Using the same case study from your own country, assess the outcomes of the different types of compensation mechanisms that were applied. |

## 6.4 Non-Monetary Benefit-Sharing Mechanisms

| | |
|---|---|
| Purpose | The purpose of this session is to provide insights into the nature and forms of non-monetary benefit-sharing mechanisms. |
| Objectives | • For participants to understand the nature and form of non-monetary benefit-sharing mechanisms |
| Preparatory reading | UNEP, 2007. Dams and Development: A Compendium of Relevant Practices for Improved Decision-Making on Dams and their Alternatives. Section 5: Compensation Policy (focus on benefit-sharing mechanisms). www.unep.org/dams |

**Non-monetary benefits** cover a range of resource access privileges awarded to local communities to enable them to enhance their resource-based livelihoods and social welfare by local action. One aim is to offset, or replace, some or all of the lost access to resources, due to the hydropower project. Often this requires some form of government regulation, or an explicit permit, issued at the local, municipal or provincial level.

- Non-monetary measures include resource access rights for families, communities, or groups who may be adversely affected by hydropower projects. The measures most appropriate depend on the local situation. They must be based on preferences of local communities themselves.
- When combined with financial support from revenue sharing, communities are better able to restore and extend livelihoods.
- To illustrate, measures for enhancing natural resource access in the project area may include extending entitlements, permissions or rights, as necessary, to:
    - intensify or extend agro-forestry and animal husbandry;
    - improve forest access for gathering forest products and develop or maintain community managed forestry;
    - facilitate arrangements between local communities and state forest enterprises for sustainable harvesting of timber products, as often embodied in forest laws but not acted upon;
    - establish reservoir fisheries programs and activities such as patrolling, stocking etc., subject to approval of hydropower enterprises with land and water rights;
    - establish aquaculture activities in feasible areas.

- Similarly, measures for enhancing livelihood opportunities may include extending entitlements, permissions or rights, as necessary, to:
    - extend vocational training for new livelihoods, job skills, and income diversification;
    - start-up local enterprises and businesses, based on ecotourism, as well as other opportunities created from reservoir formation and new wetland areas;

    - enable ecosystem services that benefit sustainable hydropower and livelihoods;
    - help with market access to sell locally produced goods and services; and
    - otherwise facilitate community-defined actions that enable communities to improve their quality of life through local action.
- Non-monetary benefits are particularly important for people living in subsistence and low-income situations, who rely heavily on natural resources for their day-to-day livelihoods, health, and culture. Under BSM arrangements, these are long-term (essentially permanent in nature);

International literature shows that many countries already have laws and regulations to help local communities with enhanced resource access. Too often, however, the laws that would help are not applied locally, or not given systematic support. This is due to various reasons including lack of awareness, monitoring and follow-up, or limited local government capacities.

Non-monetary benefit-sharing mechanisms reflect the development strategy of a compensation policy. Until recently, few developing countries had put into place the requisite normative frameworks for involuntary resettlement and compensation. Therefore, over the years, international development agency guidelines have played an important role in many development-induced resettlement programmes. More recently, international financing institutions, such as the World Bank Group, have also played an important role in the development of national compensation and resettlement normative and policy frameworks. An increasing number of national governments are formulating resettlement guidelines. The World Bank's involuntary resettlement normative framework has been particularly influential in shaping the policies of other donors. The World Bank Group's guidelines on involuntary resettlement (including those of the International Finance Corporation) are often used as a reference by potential public and private sector investors in dam and hydropower projects (although it should be noted that these guidelines are not without criticism and shortcomings).

### 6.4.1 Theoretical/conceptual model

The types and examples of benefits arising from a watercourse or basin are illustrated in Figure 6.1, which is a conceptual 'benefit wheel', comprising eight categories of benefits. These include:

- Physical (e.g., the physical well-being of the watercourse).
- Trade (e.g., trade in agricultural products with partners in and outside of a basin).
- Economic (e.g., agriculturally-driven economic growth within and outside a basin).
- Environment (e.g., protection measures to conserve the environmental integrity of the watercourse and basin).
- Agriculture (e.g., the beneficial use of water for productive and sustainable agricultural activities).
- Social (e.g., improved socio-economic conditions and food security through the beneficial application of available water).
- Political (e.g., political stability and good will between basin states through shared benefits accruing from a shared watercourse/basin).
- Hydrology (e.g., improved hydrological flow regimes to the benefit of the co-basin states).

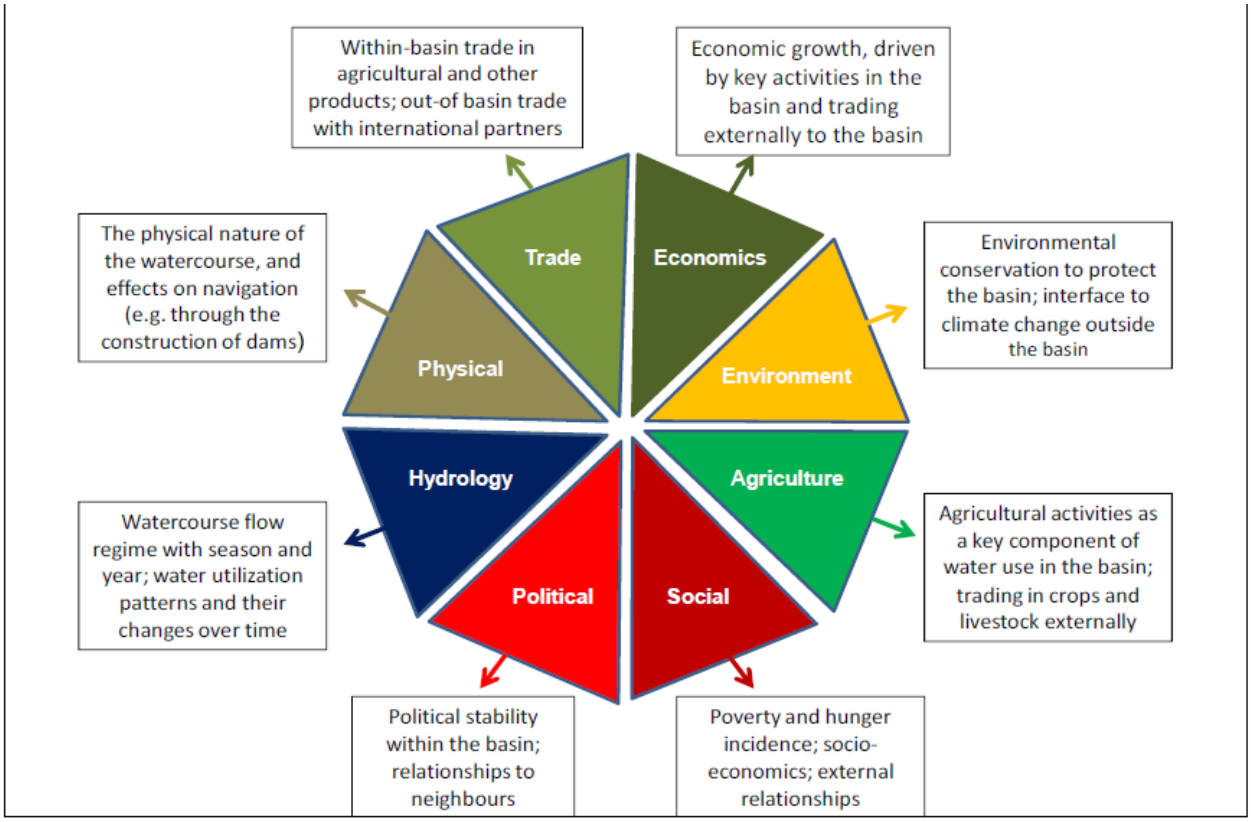



Figure 6.1 Types and examples of benefits arising from a large dam project (SADC, undated)

The theoretical ‘benefit wheel’ can be applied at different levels within a shared watercourse or basin—more specifically, at a basin, sub-basin or smaller geographical area. This enables a tiered approach to analysing the use of fresh water, which is particularly useful in unpacking and repacking complex relationships that exist within and between tiers. It should be stressed that this is a theoretical model; nevertheless, it provides a mechanism, via which different countries, sectors and stakeholders are able to visualise and understand the needs, impacts and opportunities of others. This is illustrated in Figure 6.2, which shows the theoretical application of the ‘benefit wheel’ at basin and sub-basin levels. What is immediately apparent is that different sectors at different tiers have different needs, impacts and opportunities. The balance is not the same at the basin and sub-basin tiers, nor between the upper- and lower sub-basins. This is to be expected and is illustrative of the many opportunities that water resources offer as well as the many benefits that can be shared within a watercourse or basin. Similarly, through consultative planning, it is possible to mitigate adverse impacts as many opportunities are not limited. Underpinning all of this must be a willingness between countries, sectors and stakeholders to negotiate ‘win-win’ solutions.

### 6.4.2 Case study examples

Table 6.1 lists examples of non-monetary benefit-sharing mechanisms applied to a number of major water infrastructure projects.

A review of examples where non-monetary benefit-sharing mechanisms were applied reveals a number of interesting points. For example, the oldest case, the Arenal Dam in Costa Rica, commissioned in 1980, did not benefit from a sophisticated normative framework for defining compensation and economic redevelopment requirements. Instead, the project benefited from the strong commitment of government and power utility authorities, and from the support of Inter-American Development Bank. Resettlement planners were prepared to experiment with a variety of solutions to ensure displaced persons were eventually better off than they were before the project.

At the other end of the spectrum, the more recent Latin-American cases involving the Salto Caxias Dam in Brazil (commissioned in 1998) and the Urra 1 Dam in Colombia (commissioned in 2000) illustrate the benefits offered by clear and forward-looking national normative frameworks for involuntary resettlement in the electricity sector in both countries. Both projects resulted in successful outcomes for affected people without requiring significant involvement by outside parties, such as international development banks. In the case of the Salto Caxias Hydroelectric Project, compensation and resettlement programs were established on the basis of a multi-stakeholder consultation forum--an approach that was also later successfully adopted for the Ghazi Barotha Hydroelectric Project in Pakistan.

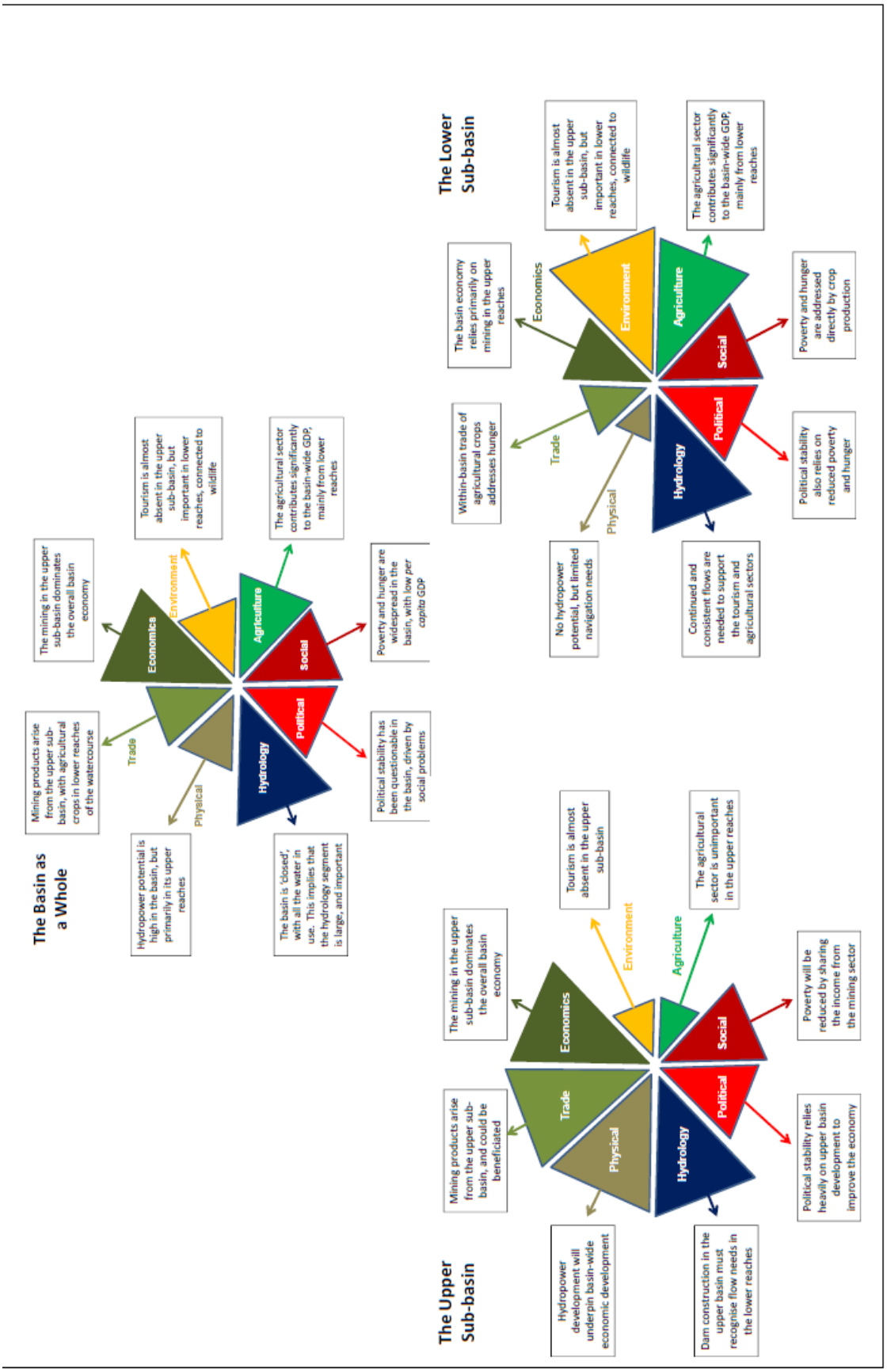



Figure 6.2 Theoretical application of the benefit wheel at basin and sub-basin levels (SADC, undated)

Table 6.1 Non-Monetary Benefit-Sharing Mechanisms

| **Normative Frameworks (Policy/Legal)** | **Examples of Implementation** | **Livelihood Restoration and Enhancement** | **Community Development** | **Catchment Development** |
|---|---|---|---|---|
| Costa Rican expropriation law and Inter-American Development Bank requirements for development projects during the 1970s | Arenal Dam, Costa Rica (1980) | Sustainable agricultural employment | | |
| Brazilian environmental legislation (1981, revised in 1986 and 1988) and Second Master Plan for the Protection and Improvement of the Power Sector Works and Services (1990) | Salto Caxias Dam, Brazil (1998) | Sustainable agricultural and non-agricultural employment | | |
| Resettlement Policy of the Electricity Sector in Colombia (1992) | Urra 1 Dam, Colombia (2000) | Sustainable agricultural employment | | |
| Opimiscow-La Grande (1992) Agreement between Hydro-Québec and the Grand Council of the Crees-Eeyou Ischtee, the Cree Regional Authority and the Cree Nations of Chisasibi and Wemindji | Laforge-1 Dam, Canada (1994) | | | Environmental enhancement of catchment resources |
| Hydro-Québec's Integrated Enhancement Program for local communities (1994) and participatory approach on partnerships with indigenous communities | Sainte-Marguerite-3 Dam, Canada (2002) | Local employment during construction and operation | | |
| Indonesian expropriation law (1961) and World Bank Operational Manual on Social Issues Associated with Involuntary Resettlement (1980) | Saguling and Cirata Dams in West Java, Indonesia (1988) | Reservoir fisheries | | |
| Draft Chinese Regulation for Land Acquisition and Resettlement for the Construction of Large and Medium Size Water Conservancy Projects (1991) | Shuikou Dam, China (1996) | Sustainable agricultural and non-agricultural employment | | |
| Indian Land Acquisition Act (1894), NHPC Resettlement and Rehabilitation Package (date unknown) and CIDA and SIDA requirements for bilaterally-funded development projects during the 1990s | Chamera (1994) and Uri (1997) Dams, India | | Roads, schools and health services | |
| Treaty for Joint Development and Utilisation of the Resources of the Komati Basin between Swaziland and South Africa (1992) and Maguga Resettlement and Compensation Policy Document (1996) | Maguga Dam, Swaziland (2002) | Commercial irrigated agriculture | Roads, schools and health services | |
| Pakistani Land Acquisition Act (1894) and World Bank Operational Directive OD 4.30 on Involuntary Resettlement (1990) | Ghazi Barotha Dam, Pakistan (2003) | Sustainable agricultural and non-agricultural employment | | |

KEY:

| | |
|---|---|
| Compensation Policy Mechanism Applies | |
| Most Relevant Illustration of Compensation Policy Mechanism | |

**Text Box 6.5 Salto Caxias Dam, Brazil**

The Salto Caxias Hydroelectric Power Plant was built by Companhia Paranaese de Energia (COPEL), between 1995 and 1999, on the Iguacu River. Reservoir impoundment involved the flooding of 1,120 rural properties in nine municipalities and the relocation of 1,200 families, among which 900 were either owners of small properties or landless families. Following opposition to the project from the local population, in 1992, COPEL set up a Multidisciplinary Studies Group (GEM CX) composed of different levels of government authorities and of non-governmental organisations, which provided a democratic forum to discuss indemnity rights and resettlement. GEM CX discussions led to the signing of agreements with representatives of the affected people. The Agreement of 1993 defined the guiding principles and approaches of the Indemnification and Resettlement Program that was to be developed. It was elaborated upon in consultation with affected people representatives and was composed of two aspects:

- Indemnification of land owners at market value as established after a survey carried out by a mixed commission.
- A Resettlement Program offered to small farmers and to landless workers, which provided for collective resettlement or for a letter of credit for individual resettlement.

Its implementation resulted in the successful relocation and livelihood rehabilitation of a total of 626 families. The other 232 eligible families settled for individual projects. This represented a significant impact for the economy of the nine municipalities, which had been relatively stagnant since the 1980s. COPEL convinced the affected municipalities to devote 10% of the royalties they were receiving from the project to implement a regional economic development plan. In 2000, Municipal Development Funds helped to create 50 new small businesses with more than 300 direct jobs.

The two Canadian examples, the Laforge-1 and the Sainte-Marguerite-3 Dams in Québec (commissioned in 1994 and 2002, respectively) involved the use of lands traditionally used by indigenous communities for hunting, trapping and fishing activities. As a form of compensation for lost habitats and wildlife resources, both projects led to the negotiation of agreements that enabled indigenous communities to contribute actively to the planning and implementation of environmental remediation and enhancement activities for wildlife in the dams' watersheds. The Sainte-Marguerite-3 Dam also adopted an Integrated Enhancement Program as well as innovative project implementation practices to optimise local economic spin-offs, and training and employment benefits for local communities.

**Text Box 6.6 Laforge-1 Hydropower Generating Station, Canada**

The Laforge-1 Hydroelectric Project is part of the La Grande Complex, developed from the 1970s to the 1990s by Hydro-Québec, in the James Bay territory in Northern Québec. The La Grande Complex development led to the 1975 signing of the James Bay and Northern Quebec Agreement (JBNQA) between the developers and the Cree indigenous communities inhabiting the area. Subsequent agreements were later signed, such as the Opimiscow-La Grande Agreement (1992) providing for the construction of the Laforge-1 Project (among others). The Laforge-1 Dam, located on the Laforge River, was built between 1989 and 1994 by the James Bay Energy Corporation (JBEC). The project did not involve any acquisition of private land but flooded prime hunting and trapping grounds, creating significant navigation and access problems for Cree families in the area. The 1992 agreement provided:

- A community fund dedicated to the use of the Cree communities.
- A Remedial Measures Fund dedicated to carry out remedial works.
- A fund aimed at supporting hunting and trapping activities, which are culturally important for the Cree. The remedial works were to be carried out by JBEC and the Opimiscow–Sotrac Companee, a joint non-profit organisation.

The Opimiscow-Sotrac Companee developed an efficient project development framework based on consultation with the affected persons.

Monitoring studies showed that the improvement of access to the territory resulted in an increased number of Cree camps in the area and that the success of measures aimed at improving wildlife habitat was variable but that the number of waterfowl in the area had substantially increased.

The two Indonesian cases, based on the Saguling and Cirata Dams, commissioned in 1988 in West Java, are extensively studied examples of the implementation of an early version of the World Bank's Involuntary Resettlement Guidelines (1980). These also provide an example of the use of reservoir fisheries as an alternative means of restoring incomes in displaced communities.

The Chinese case, based on the Shuikou Dam, commissioned in 1996, constitutes an example of successful implementation both of new Chinese resettlement regulations for large and medium sized dams (1991) and, to a lesser extent, of a later version of the World Bank's Involuntary Resettlement Guidelines (1990). The successful restoration of incomes in communities displaced by the Shuikou Dam was largely due to the willingness of Chinese authorities to stimulate the development of sustainable agricultural and non-agricultural employment opportunities in the project area through a flexible and adaptive process.

**Text Box 6.7 Shuikou Dam, China**

The Shuikou Hydroelectric Dam, located on the Min Jiang River, was built by the Fujian Provincial Electric Power Bureau (FPEPB), between 1987 and 1996. The Shuikou resettlement planning occurred early in the 1980s in the context of an emerging legal and regulatory framework in China. Following mounting pressure from people relocated by the construction of some 70,000 dams, including 300 large scale dams, over a 40 year period, new policies were adopted to restore the incomes of affected people.

The Shuikou Project caused the relocation of about 15,600 rural families (67,239 persons) and 20,000 urban-based people, mainly in Nanping. The Fujian Shuikou Resettlement Planning Team, set-up by the FPEPB, prepared a Resettlement Plan following extensive consultations with affected leaders. The Resettlement Plan was adapted over time to the new regulations, Integrated Chinese Resettlement Regulations and, to a lesser extent, a 1990 version of the World Bank's Involuntary Resettlement Guidelines. The Resettlement Plan provided two relocation choices for affected people: in consolidated villages or dispersed settlements. Displaced persons were given serviced lots and were responsible for building their own houses using compensation payments. Compensation for buildings was based on replacement cost and compensation for lost production was based on pre-established rates. The Resettlement Plan also included an Economic Rehabilitation Plan, aimed at creating new production systems for affected people.

The implementation of the Shuikou Resettlement Plan coincided with a period of rapid economic development in the province of Fujian. This facilitated the economic rehabilitation of resettlers, but the inflationary environment necessitated that the resettlement budget be revised.

The two Indian cases, based on the Chamera Stage-1 and Uri Stage-1 Dams in northern India (commissioned in 1994 with CIDA funding and in 1997 with SIDA funding), exemplify the implementation of the National Hydroelectric Power Corporation Resettlement and Rehabilitation Framework, emphasising the development of community services (schools, health facilities and roads), as well as local employment to, assist in restoring incomes in displaced communities.

The case of the Maguga Dam in Swaziland (commissioned in 2002), whose development was linked to the signing of a Treaty for the Joint Development and Utilisation of the Resources of the Komati Basin between South Africa and Swaziland (1992) is of particular interest as it involves an irrigation dam, built to support commercial agricultural ventures for the purposes of alleviating poverty in rural areas. The successful implementation of the Maguga Dam Resettlement and Compensation Policy (1996) was largely based on the development of sustainable agricultural employment.

**Text Box 6.8 Maguga Dam, Swaziland**

Resettlement and compensation for the Maguga Dam was guided by the Resettlement and Compensation Policy Document, signed in 1996, by both countries, and implemented through the Environmental Impact Assessment/Compensation Management Plan. The Maguga Dam was built by the Komati Basin Water Authority (KOBWA) between 1998 and 2002. The Maguga Dam affected 125 homesteads, of which 35% had to be relocated. The compensation policy involved three types of resettlement packages: free choice resettlement, resettlement in the same chiefdom, and resettlement in a host area. Compensation for loss of structures was calculated at replacement value plus 10 - 20%, depending upon the type of compensation. The two last packages of compensation involved land-for-land compensation. As stated in the Compensation Management Plan, KOBWA put into place a participation structure, the Ekuvinjelweni Resettlement Committee (ERC) that represented the affected people.

In the host area, KOBWA provided roads, electricity, and educational and health services (most of the affected people did not have access to good educational and health services before the project). Fruit trees were replaced by the planting of saplings, and a 97 hectare irrigated sugarcane field was also planted. Additional measures were taken to improve livestock production at the host area. A total of 65 homesteads have been constructed in the host area. At the ERC's request, the affected people were put in charge of completing the construction of housing for the Free Choice and the Host Area Packages, which they did successfully. They were also awarded the fencing contract and the sugarcane planting contract, as well as construction of the community church and agricultural shed. KOBWA provided the affected people with training and technical support for three years following project completion. The hiring of labour for the dam was restricted to residents of the project area, and many types of infrastructure were planned to enhance livestock production in the dam area.

The case of the Ghazi Barotha Hydroelectric Project, commissioned in 2003 in Pakistan, constitutes another example of implementation of a relatively recent version of the World Bank's Involuntary Resettlement Guidelines (1990). This example is also of interest as it addressed outstanding compensation claims from the Tarbela Dam, built 7 km further upstream on the Indus River.

It is also noteworthy that a few of the cases reviewed (Chamera Stage-1 and Uri Stage-1 Dams in India, Saguling and Cirata Dams in Indonesia, and Ghazi Barotha Dam in Pakistan) did not demonstrably result in overall positive outcomes with respect to compensation. This illustrates the long way yet to go with implementing involuntary resettlement that achieves objectives, outlined in governing normative frameworks.

**Text Box 6.9 Non-Monetary Benefit-Sharing Mechanisms – Key Aspects**

The types of non-monetary benefit-sharing mechanisms that can be applied for involuntary resettlement related to large infrastructure projects include:

- Livelihood restoration and enhancement.
  - Sustainable agricultural employment.
    - Land-for-land options.
    - Irrigation schemes, including access to pumped irrigation water from the reservoir.
    - Drainage.
    - Cultivation in drawdown area and other benefits from managed flows and floods.
    - Agricultural extension services, including planting materials and other inputs.
- Sustainable non-agricultural employment.
  - Local employment during construction and operation.
  - Employment in services and industries.
  - Reservoir fisheries.
  - Skills training.
- Community development.
  - Housing on titled lots.
  - Access to primary services: schooling, health-care and social services (such as family support and income support).
  - Access to financial services (such as interest-free loans and micro-credit).
  - Domestic water supply.
  - Roads and public transportation.
  - Rural electrification.
  - Markets, and public and religious meeting places.
  - Access to common resources (forests, grazing areas, etc).
- Catchment development.
  - Custodianship or management of catchment resources.
  - Reforestation, afforestation and planting of fruit trees.
  - Environmental enhancement for wildlife resources.

| | |
|---|---|
| Discussion topics | The main classes of non-monetary benefit-sharing mechanisms include livelihood restoration and enhancement, community development and catchment development. Discuss ways to ensure that decisions on non-monetary benefit-sharing mechanisms are taken in the context of related development processes and institutional capacities. |
| | Examples show that non-monetary benefit-sharing mechanisms often provide preferential access to resources, such as contracts, employment and catchment resources, to people from project-affected communities. Discuss the challenges of using the concept of project-affected communities assisting to define the boundaries of who is entitled to preferential access to resources. |
| Exercises | Describe cases where non-monetary benefit sharing is inappropriate on a large infrastructure project. |

| | |
|---|---|
| | Using a shared watercourse or basin from your own country as an example, develop a conceptual 'water wheel' of benefits that may accrue in the main-, upper- and lower-basins. Elaborate on possible constraints to realising shared benefits and mechanisms, via which these may be overcome. |

## 6.5 Monetary Benefit-Sharing Mechanisms

| | |
|---|---|
| Purpose | The purpose of this session is to provide insights into the nature and forms of monetary benefit-sharing mechanisms. |
| Objectives | ❑ For participants to know the monetary benefit-sharing mechanisms that are available as part of the compensation and mitigation package |
| Preparatory reading | UNEP, 2007. Dams and Development: A Compendium of Relevant Practices for Improved Decision-Making on Dams and their Alternatives. Section 5: Compensation Policy (focus on benefit-sharing mechanisms). www.unep.org/dams |

Monetary benefit-sharing mechanisms involve affected communities sharing part of the monetary flows generated from the operation of the dam or hydropower project. It is important that monetary benefit-sharing mechanisms are geared in such a way that they actually benefit those negatively affected by a project. The mechanisms can be used as a means for the developer to establish a partnership with local populations, including project-affected people. These mechanisms can also be a means to establish a regional economic development fund. Monetary benefit-sharing mechanisms can, therefore, be implemented even in cases where there are no project-affected people. Interests in such mechanisms emanate from their potential to support long-term beneficial partnerships between developers and concerned communities.

The three main objectives of monetary benefit-sharing schemes are to:

- Provide additional long-term compensation for project-affected populations.
- Establish long-term regional economic development funds.
- Establish a partnership between developers and local communities.

**Sharing of monetary benefits** means sharing the economic and financial gains from hydropower that normally accrue at the national level with communities and residents of river basins. In economic terms, it means sharing a portion of the "economic rent" that investments in hydropower generate.[20] As noted earlier, revenue sharing is perhaps the most

[20] Economic rent is a term that economists use. For hydroelectric it may be defined as the "competitively determined electricity price minus the marginal cost of producing the hydroelectric power". For revenue sharing to be viable, there must be an economic surplus, where the cost of all factors of electricity production is less than the tariff. In practice, Mekong governments set electricity tariffs (often ceilings).

recognized form of sharing monetary benefits in the hydropower sector, as well as other sectors, such a mining and forestry.[21]

- Revenue sharing mechanisms may transfer portion monetary benefits to provincial, municipal or local levels. Different approaches are use to transform the money to actual benefits. The two main approaches are:
    - funding an annual increment in the local development budget of communities in the project area (e.g. the Nepal model), and
    - funding a local benefit sharing Trust, Community Development Fund (CDF), or or similar local development fund (e.g. the India model, adopted in many counties world-wide).
- Other mechanisms commonly used to capture and spread monetary benefits include equity sharing. Communities, local municipalities, or the province may take an equity share in the special project company that develops and operates the project.
    - In some countries this equity share may be self-financed—by provinces, for example. In other cases, the central government may provide the equity financing on behalf of the local community, or a basin resident fund.
    - This share derives an annual revenue of anywhere from about 10-20 percent return on equity, which may then be spent through programmes, using criteria the communities establish themselves (e.g. one of several financing mechanisms on the Columbia Basin Trust in Canada).
- Countries often choose to share a portion of the revenue that hydropower generates, between different levels of government, down to the community level.
    - During the November 2010 MRC visit to the La Plata River Basin in Latin America, MRC participants saw first-hand how Brazil shares revenue among its central government, provinces and municipalities, where hydropower projects are located. [22]
    - A fixed percentage goes to each level described above and applies applies to all existing and new hydropower projects in the country.
    - In the case of Argentina, all revenue generated from bi-national hydropower projects is given to Provinces, where the projects are located, taking into account the extent of the reservoir. It is not sent to the central government.
    - The national benefit in Argentina's case was seen to be more secure and at lower cost for national electricity consumers, In addition, the country avoided importing expensive fossil fuels for thermal power generation.
    - Estimates provided by Argentinean officials on the MRC visit to the 1,890 MW Salto Grande power complex on the Uruguay River (forming the international boundary between Argentina and Uruguay) indicated that Argentina avoided $US 50 billion in imported fuel purchases since 1979, using its 50% share of output from the Salto Grande project.[23]
    - In Nepal, since 1999 national laws have stipulated that 1% of revenue from projects above 1 MW are collected by the national electricity regulator (the Electricity

[21] Revenues sharing mechanism are essentially tariff-based measures; that is they are directly (or indirectly) taken from the revenue stream of hydropower projects. As per the previous section revenue sharing is thus fundamentally a relationship between electricity consumers (who pays) and local communities and basin residents who host projects. Revenue sharing reflects the user pay principle in IWRM that treats water as an economic good.

[22] MRC Study Visit Report To Transboundary River Basins And Binacional Projects In The La Plata River Basin In Latin American November 2010, MRC Initiative for Sustainable Hydropower, Dec 2010

[23] That gross estimate of national economic benefit was based on the actual year-by-year accumulated fuel import savings from Argentina's 50% share of the Salto Grande project output, recognizing also that all project debt for the Salto Grande project was retired on schedule by 1994 and year to year international energy prices.

Development Department) and credited to pay for electrifications. A percentage of royalties is also allocated to development budgets of districts and communities where the hydropower projects are located. The amount has been progressively increased since over time[24].

- A final point is that some monetary benefits, realized at the national level, are easily quantifiable. Others are more difficult to quantify precisely. The national-level benefits generally include:
  - Those realized by electricity consumers connected to electricity grids, who see more stable long-term tariffs by avoiding volatile international energy markets.
  - Lower electricity tariffs longer-term, especially after project debt is retired, regardless of its financier(s).
  - Revenue inflow to national accounts from royalties, water utilization or other fees, as well as income taxes and duties, which hydropower companies pay.
  - For hydropower projects that generate export earnings, additional national economic gains accrue in relation to balance of trade and foreign exchange earnings.
  - Less quantifiable benefits, such as the economic value of ancillary services unique to hydropower that lower required national investments in power generation and grids (and ultimately consumer tariffs); energy security (using native, renewable resources); and the benefits of avoided GHG emissions from thermal generation and/or avoided air pollution, health and crop hazards from thermal power.

All of these factors have monetary value and overall national benefit.

[24] See discussion on the Nepal legislation in Section 2.2.1 and in the article in Volume 5 in the Knowlege Based-CD of MRC's ISH program.

### 6.5.1 Providing additional long-term compensation for project-affected populations

'*Proper socio-economic re-establishment requires more than paying the full market value of the condemned land… the stream of benefits created by the project should also be tapped to provide direct benefits and resources for resettlers'* (Van Wiclin, 1999).

Research shows that, in the case of dam-induced forced population displacement, compensation for lost assets alone is insufficient to secure the productive and enduring re-establishment of those displaced.

Benefit-sharing mechanisms are required—particularly in light of the failure by existing guidelines to capture the full social costs of displacement-related impacts. Such mechanisms are considered to be one of the most important means for complementing cash compensation and other measures conceived within the framework of a compensation policy. As such, a key element to be taken into account in compensation policies is the sharing of part of the benefits generated by the dam or hydropower operation with project-affected communities. This measure is recommended by the WCD, the International Energy Agency guidelines on hydropower and the environment, and the International Hydropower Association's sustainability guidelines.

The need to provide additional compensation to project-affected people is recognised in the legislation on revenue transfers from hydropower projects in countries such as Norway, Nepal and Brazil.

| **Text Box 6.10** | **Norwegian Legislation Relating to Taxes and License Fees** |
|---|---|
| Norwegian legislation comprises a number of mechanisms that ensure benefit-sharing from water management and hydropower projects with regional and local communities. These mechanisms fall under three categories: (a) provisions included in licences pursuant to the 1917 Water Regulation Act; (b) taxes paid to regional and local authorities; and (c) revenues received by counties and municipalities in the form of dividends. Such mechanisms explicitly recognise that project-affected people, as part of the populations of municipalities in which water resources are exploited, must receive a share of the project benefits, over and above mitigation and compensation measures that are included in project design. However, at least in the Glomma-Laagen region, such revenues represent a relatively small percentage of the revenues of the municipal sector. Moreover, the tax system in Norway implicitly does not recognise that municipalities with more hydropower installations within their territory should receive more tax revenues from power companies, since larger tax revenues are compensated by lower state subsidies. | |

### 6.5.2 Establishing long-term regional economic development funds

In poorer regions with untapped water resources, dam projects can be planned as part of regional economic development. A regional plan can include all natural resource potential, as opportunities created by the reservoir, and by access roads built for the construction of the dam and power plant. These opportunities may include reservoir fisheries, irrigated agriculture, better access to markets and/or improved navigation.

Part of the funding to implement the regional economic development plan may be provided by channelling a proportion of benefits from the dam project to local and regional communities by means of, for example, a development fund. Development funds can also be set up to provide long-term compensation to project-affected populations.

| **Text Box 6.11** | **Chinese Legislation on Post Resettlement and Rehabilitation Funds** |
|---|---|

The 1991 Chinese regulation establishing post-resettlement and rehabilitation funds (revised in 1996) recognises that, even with well-planned resettlement, remedial measures still have to be taken beyond the end of the resettlement period to address outstanding issues.Under this legislation, hydropower projects and water conservancy projects must set up a later-stage support fund to help resettlees develop new production systems and resolve outstanding problems. The fund is established for 10 years and is financed from power sales, with funding provided on the basis of the maximum allowed rate.

The latest post-resettlement support regulation was issued in 2006. For those displaced before June 30, 2006 could get the subsidy at CNY 600 per capita per year(AboutUS$100) for 20 years. The number of the resettlees before this date will be confirmed once by the national government and will be fixed. Local government will identify the persons entitled for the subsidy. For the resettlees to be displaced after July 1, 2006 will get the subsidy at the same price for 20 years since the date of their displacement. The subsidy could also be used for development projects with detailed post-resettlement support project planning based on wide consultation.

### 6.5.3 Establishing a partnership between developers and local communities

Possibly the most innovative form of benefit-sharing is the establishment of partnerships between developers and local communities. Partnership agreements can take various forms, depending on the development priorities of local communities. Agreements may involve part or full community ownership of the dam or hydropower project, or community development funds.

For the developer, a partnership provides assured local acceptance of the project—reducing risk, the cost of lengthy feasibility studies, and authorisation processes. For local communities, a partnership is recognition of their entitlements to a share of the economic rent generated by the dam, as well as a voice in managing water resources.

- Partnerships:
    - Provide a source of funding over the long-term.
    - Enable local and regional entities to set their own priorities and minimise their dependency on the developer and the State.

- o Facilitate adaptive management.

| Text Box 6.12 | The Minashtuk Hydroelectric Project: Hydro-Québec's Partnership Approach with Aboriginal Communities |
|---|---|

Hydro-Québec is an electricity producer and a major North American distributor, owned by the government of the province of Quebec in Canada. Under Hydro-Québec's 1998–2002 strategic plan, three essential conditions must be met for Hydro-Québec to undertake any new project: (a) the project must be profitable under market conditions; (b) the project must be environmentally acceptable, according to the principles of sustainable development; and (c) the project must be well received by local communities. The Minashtuk Hydroelectric Project, commissioned in 2000 on the Mistassibi River, illustrates this approach. The project was developed mainly for hydropower generation and constitutes an equity-sharing type of benefit-sharing mechanism, used in partnership-agreement between the Montagnais community of Lac Saint-Jean and Hydro-Québec. A determining factor of success for this type of mechanism is the capacity of the local community to invest and borrow funds. In the Minashtuk case, the Hydro-Québec's commitment to buy all of the electricity generated under a 20-year contract was a key factor for the local community to borrow and invest.

#### 6.5.3.1 Types of monetary benefit-sharing mechanisms

Types of monetary benefit-sharing mechanisms include revenue sharing, development funds, equity sharing (including full ownership), property taxes and preferential electricity rates.

##### REVENUE SHARING

Revenue sharing through taxes on revenues or royalties has often been used to capture some of the economic rent derived from dam and hydropower projects. Since the exact measurement of such rent is often difficult, revenue sharing attempts to capture at least some of the rent without explicitly measuring it.

Revenue sharing mechanisms may result from negotiations between local or regional authorities and dam/hydropower promoters/operators. The mechanisms may also be defined in legislation. In the latter case, the percentage of revenues that would be transferred to regional or local beneficiaries, and the destinations of the proceeds, is generally specified.

##### DEVELOPMENT FUNDS

Development funds financed from, for example, power sales and water charges, may be established to provide seed money for fostering economic development in the project-affected area.

#### EQUITY SHARING OR FULL OWNERSHIP

A variety of mechanisms may allow local or regional communities to partly or fully own a dam or hydropower project. Local authorities thus share both the risks and profits of a venture. In addition, local authorities may, in certain cases, gain a degree of control over the design and operation of the project.

#### PROPERTY TAXES

Two main types of taxes paid to regional or local authorities can be considered. In some countries, the state allows local or regional authorities to directly tax dam owners on the dam's property value or other basis. Taxes to be paid to regional and local authorities can also be defined in state legislation, sometimes as a percentage of project sales or net income. In the latter case, the mechanism is similar to revenue sharing.

#### PREFERENTIAL ELECTRICITY RATES

This mechanism is a form of revenue sharing, since it results in less revenue for the dam owner and avoided costs for beneficiaries.

In order to affect fair and transparent benefit-sharing, stakeholders should be identified early in the planning and development approval process—and their legitimate interests acknowledged and taken into account in the financial and economic evaluation processes. This requires the following:

- Balanced commercial agreements in the case of privately funded projects.
- Reasonable returns on equity, consistent with the risk profile and international norms.
- Transparency in procurement processes.
- Directly negotiated contracts to be subject to independent audit.
- Ongoing auditing/monitoring of economic performance against projected benefits. (International Hydropower Association, Sustainability Guidelines, February 2004).

#### 6.5.3.2 Case studies of monetary benefit-sharing mechanisms

Table 6.2 lists examples illustrating monetary benefit-sharing mechanisms applied to a number of major water infrastructure projects. The boxes in the table with comments correspond to examples with particularly informative explanations.

| **Text Box 6.13** | **Monetary Benefit-Sharing Mechanisms – Key Aspects** |
|---|---|
| Monetary benefit-sharing mechanisms involve affected communities sharing part of the monetary flows generated from dam operation. Three main objectives of monetary benefit-sharing schemes are to:<br>• Provide additional long-term compensation for project-affected populations.<br>• Establish long-term regional economic development funds.<br>• Establish a partnership between developers and local communities. | |

| | |
|---|---|
| Discussion topics | Discuss the advantages and disadvantages of partnerships between developers and local communities. |
| | Discuss opportunities and constraints associated with monetary benefit-sharing. |
| | Analyse your country's legislation and discuss whether or not there are provisions that would allow monetary benefit-sharing to occur in your country and under what circumstances. |
| Exercises | From the monetary benefit-sharing schemes presented in this module, select three examples and describe their characteristics. |

Table 6.2 Case studies of monetary benefit-sharing mechanisms

| Normative Framework | Dam Project | Revenue Sharing | Development Funds | Equity Sharing | Property Taxes | Preferential Electricity Rates |
|---|---|---|---|---|---|---|
| Legislation on Revenue Transfers (Brazil) | Itaipu (1980s) | | | | | |
| Legislation on Revenue Transfers (Colombia) | Urrá 1 (2000) | | | | | |
| PROHA (Ecuador) | Jondachi (Planning Stage) | | | | | |
| Legislation on Energy and Water Resources (Norway) | Glomma and Laagen (1970s), Tokke (1960) | Variety of mechanisms: license fees, tax on profit, etc. | | | | Delivery of part of electricity production to local authorities at cost |
| Columbia Basin Trust (Canada) | Duncan (1968), Keenleyside 1969) and Mica (1975) | | Explicit measurement of economic rent. Involvement of community organisations | | | |
| Hydro-Québec Approach on Partnerships (Canada) | Minashtuk (2000) | | | Local community is majority shareholder. Long term power purchasing agreement | | |
| Hydro-Québec Approach on Partnerships (Canada) | Toulnustouc (2005) | | | | | |
| Paix des Braves Agreement (Québec, Canada) | Eastmain-1, Eastmain -1A and Rupert Diversion (2011) | | | | | |
| Post Resettlement Development Funds (China) | Shuikou (1996) | | Legislation enacted since 1981 | | | |
| Western Region Development Program (China) | Dongping, Najitan, Songshuling and Xiakou (Hubei) (First Unit: 2005) | | | | | |
| Legislation on Revenue Transfers (Nepal) | Kali Gandaki (2002) | | | | | |
| Lesotho Fund for Community Development | Lesotho Highlands Water Project (2004) | | | | | |

KEY:
Benefit-Sharing Mechanism Applies
Most Relevant Illustration of Benefit-sharing Mechanism

## 6.6 Economic Rent and Financial Constraints

| | |
|---|---|
| Purpose | The purpose of this session is to draw attention to aspects relating to economic rent and financial constraints. |
| Objectives | • For participants to understand how economic rent arises in specific circumstances and how this introduces economic constraints |
| Preparatory reading | UNEP, 2007. Dams and Development: A Compendium of Relevant Practices for Improved Decision-Making on Dams and their Alternatives. Section 5: Compensation Policy (focus on benefit-sharing mechanisms). www.unep.org/dams |
| | Égré, Dominique, Vincent Roques, and Carine Durocher (2008) Benefit Sharing to Supplement Compensation in Resource Extractive Activities: The Case of Dams, in Cernea, M.,M and Hari Mohan Mathur (eds.) Can Compensation Prevent Impoverishment? Reforming Resettlment through Investments and Benefit- Sharing (pp.317-356). Oxford University Press. |

Monetary benefit-sharing is based on the premise that dams and other projects may generate significant economic rent, which can be shared with project-affected populations. Economic rent is the surplus return that exceeds the normal return on capital. Such a rent arises, because the company is exploiting a natural resource, whose development depends on site-specific hydraulic, topographical and geological conditions. Where such natural resources are considered public goods, governments, acting on behalf of the public, may try to capture the rent through royalties, fees or other mechanisms—thereby delivering benefits back to the public.

Economic rent is common practice in the oil and gas, mining, forestry and fishing sectors, but is rare in the hydroelectric power sector. In this sector, governments typically regulate tariffs in such a manner that the resulting rent flows to electricity consumers in the form of lower tariffs. Those who consume more electricity will get more of the rent. Depending on conditions in the export goods market, some of the rent can even go to foreign customers.

Similar situations apply to cases of other water uses, made possible by dams. Irrigation, water supply, and navigation fees reflect, at best, the actual cost of the dam. In the case of flood control, populations benefiting from reservoir storage capacity generally do not pay for this benefit.

Ethical considerations may justify that part of the rent be channelled to project-affected populations. Indeed, in many cases, project-affected people sacrifice their access to and use of local natural resources that contribute to project development.

The sharing of economic rent can also be used to finance long-term regional economic development funds and to establish partnerships between developers and project-affected

communities. In this way, the sharing of the economic rent becomes additional compensation for the foregone use of natural resources by project-affected populations.

The economic rent from dam projects is difficult to measure, and monetary benefit-sharing mechanisms generally capture some of the rent without explicitly measuring it. However, the prerequisite to benefit-sharing is the very existence of such a rent—the measurement of which forms the basis for determining what can be shared with the project-affected population. Even if the existence of an economic rent can be demonstrated and measured, it does not mean that monetary flows from dam operation allow for benefit redistribution—independent of other circumstances. This may occur in situations such as regulated electricity rates, which do not cover the actual supply cost of generating power, benefit transfers based on a percentage of revenues that result in financial losses for the dam owner, or irrigation fees that do not recover capital costs. Government subsidies may be used to balance financial flows when they can be justified on the basis of an economic analysis; for instance, when it can be demonstrated that flood control benefits (which do not accrue to the dam owner but are real, and possibly major, for the society) exceed dam capital and operation costs. The sum of profits accruing to the dam owner, benefits accruing to local communities, and taxes on profit or water-use fees collected by the government should not exceed the economic rent. In practice, there are few examples of an explicit measurement of the economic rent. Revenue transfers through taxes on revenue or royalty regimes implicitly or explicitly recognise the existence of an economic rent. Equity sharing, in turn, does not require the explicit measurement of the economic rent but the design of this mechanism is based on the assumption that the project will generate profits that reflect at least part of it.

| **Text Box 6.14 Economic Rent and Financial Constraints – Key Aspects** |
|---|
| • Economic rent is the surplus return that exceeds the normal return on capital.<br>• Such a rent arises because the company is exploiting a natural resource, whose development depends on site-specific hydraulic, topographical and geological conditions.<br>• Where such natural resources are considered public goods, governments, acting on behalf of the public, may try to capture the rent through royalties, fees or other mechanisms—thereby delivering benefits back to the public.<br>• Ethical considerations may justify that part of the rent be channelled to project-affected populations. Indeed, in many cases, project-affected people sacrifice their access to and use of local natural resources that contribute to project development. |

| | |
|---|---|
| Discussion topics | Economic rent arises because a company is exploiting a natural resource, whose development depends on site-specific hydraulic, topographical and geological conditions. Where such natural resources are considered public goods, governments, acting on behalf of the public, may try to capture the rent through royalties, fees or other mechanisms, thereby delivering benefits back to the public. Discuss the distinction between delivering benefits ‘back to the public’ and ‘sharing benefits with project-affected communities’. What are the implications of emphasising one approach over the other? |
| Exercises | Identify examples from your own country where economic rent could have or has been applied to a large infrastructure project. |

## 6.7 Efficiency, Participation and Accountability

| | |
|---|---|
| Purpose | The purpose of this session is to outline the issues of efficiency, participation, and accountability, with respect to major infrastructure development, such as dams and hydropower facilities. |
| Objectives | • For participants to understand the main management principles related to compensation and benefit-sharing |
| Preparatory reading | UNEP, 2007. Dams and Development: A Compendium of Relevant Practices for Improved Decision-Making on Dams and their Alternatives. Section 5: Compensation Policy (focus on benefit-sharing mechanisms). www.unep.org/dams |

WCD Guideline 20 on 'Project benefit-sharing mechanisms' states that these mechanisms are based on the principle that adversely affected people are entitled to share in project benefits. In this regard, governance principles underpinning benefit-sharing need to ensure the following:

- The reconciliation of the goals of stakeholders.
- The efficiency of monetary benefit-sharing redistribution.
- The involvement of local communities in defining provisions of the benefit-sharing mechanism.
- The accountability of agencies entrusted with the distribution of benefits.

### 6.7.1 Reconciling the goals of stakeholders

Defining benefit-sharing mechanisms is a complex task that involves reconciling interests, goals and values of the following four categories of stakeholders:

- **Developers**. Developers bring capital, as well as technical and managerial expertise, to build and operate the project. Hydroelectric projects require a high level of investment. They require a long lead time before entering into operation, and their period of use typically extends over several decades (50 to 100 years). Payback periods are, thus, much longer than for most other electricity generation projects. Under such conditions, benefit-sharing mechanisms that may lower the risk of long-term social, institutional and political unrest will be highly valued by developers. Developers will also favour reaching a consensus with project participants over project design and project benefits early on in the planning process so as to avoid unnecessary expenditure and effort.
- **Project beneficiaries**. Dam projects are often multi-purpose projects that generate significant benefits over and beyond issues related to benefit-sharing with affected populations. Most project beneficiaries are generally located far away from the dam site and expect to benefit from the services provided by the dam at the lowest price or fee possible, or even for free. Most beneficiaries have little or no knowledge of local and regional impacts related to dam construction and operation.
- **Local communities, project-displaced and other affected people**. Dam construction and operation affect, to various degrees, the uses of water and other resources, as well as ways of life for regional and local populations. In addition, project-affected

people form heterogeneous groups with regards to occupations, revenues, values, education, social organisation, etc.; thus, several subcategories can be generally defined in relation to expectations and issues raised by a dam or hydropower project. Local communities can claim entitlements to a share of project benefits as they contribute to project development by sacrificing (voluntarily or not) the access to or use of natural resources in the project-affected area.

- **The state**. Many institutions are concerned by dam projects, such as land use and resource management, workers' agencies, health or economic development agencies. Furthermore, the state has the responsibility to establish legal guidelines for the use of natural resources and, when required, for solving dilemmas raised by projects that exploit such resources.

### 6.7.2 Ensuring the efficiency of monetary benefit redistribution

With particular regard to legislation establishing revenue-sharing mechanisms through taxes or royalties, the process used to transfer revenues to project-affected populations may contain steps, provisions and safeguards to ensure that goals of the mechanism are achieved. This applies particularly to mechanisms aimed at providing additional long-term compensation to project-affected populations:

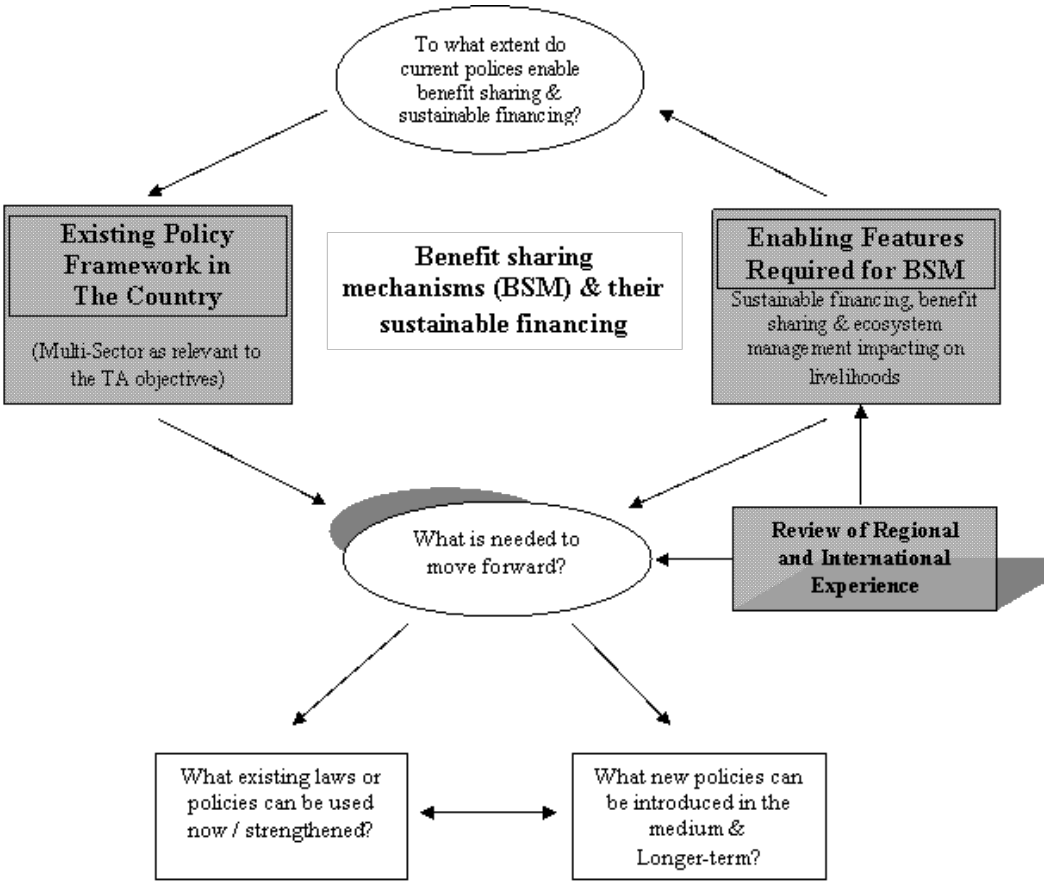
- Clearly stated goals can help define possible uses of the funds.
- Separate budgets may be established for each category of use.
- Local community governments, which are sometimes ill-equipped to manage large sums of money and complex procedures, can be assisted to strengthen their institutional capacity.

In practice, legislation on revenue transfers does not ensure that those affected by dams actually benefit from transfer payments as some of the requisite conditions are often not met. The Lesotho Fund for Community Development is such an example. The Columbia Basin Trust, by contrast, exemplifies several approaches that maximise the efficiency of benefit-sharing mechanisms. These mechanisms relate particularly to a wide range of economic, environmental and social objectives, all contributing to sustainable development in the project-affected area. The efficiency of benefit-sharing mechanisms, other than equity sharing, generally depends on the existence of a strong and sophisticated public administration system, such as in the case of Norwegian legislation, pertaining to taxes and licence fees.

| **Text Box 6.15** | **Columbia Basin Trust, Canada** |
|---|---|

The Columbia Basin Trust was created in 1995 to address outstanding environmental and social issues of existing dams in the Canadian part of the Columbia River Basin. This followed repeated claims from project-affected people and was made possible by the existence of a significant rent generated by the projects, built under the Columbia River Treaty, signed between Canada and the United States in 1961. Part of this rent is used to finance the Columbia Basin Trust. The Trust exemplifies several approaches that maximise the efficiency of benefit-sharing mechanisms, particularly several provisions providing for the active involvement of community organisations in the project-affected area.

Figure 6.2 illustrates how Viet Nam set out to systematically raise awareness about benefit sharing with local communities adversely affected by hydropower projects in an ADB-supported TA in 2006. This addressed three questions, namely: (i) what does international experience offer as lessons for Viet Nam; (ii) to what extent do current policies and laws enable benefit sharing; and (iii) what is needed to move forward?



Structuring awareness raising around a concrete or results-oriented activity, like a policy review, is important for several reasons. In Viet Nam's case, the review demonstrated that:

- National legislation in Viet Nam already called for benefit sharing in other sectors; therefore, legal precedents existed, especially for revenue sharing. It was not "new" in that sense.
- Introducing benefit sharing was specifically consistent with national laws for sustainable development of the power sector (as contained in the Electricity Law and cross-referenced in other Laws).
- The best way to introduce benefit sharing was to develop a Decree Law (long term), similar in structure to the Decree Law for resettlement compensation (short term).
- The institutional arrangements to deliver benefits needed to be placed under the Provincial-Level Peoples' Committee jurisdiction, with guidance from the State level Ministries.
- The best approach to handle benefit sharing on rivers shared between two or more Provinces in Viet Nam was clarified, based on precedents in other sectors.

This policy review was presented to an inter-government Steering Committee, then to a national level multi-stakeholder workshop. These steps actually went a long way to raise awareness of not only the opportunity but also consensus on how to proceed. One outcome was instead producing general guidelines for BSM in subsequent phases of the, TA the "guidelines" took the form of a Draft Decree Law.

### 6.7.3 Ensuring involvement of local communities

Project-affected populations need to be meaningfully involved in defining fair provisions of the benefit-sharing mechanisms. These populations are best placed to decide what constitutes an improvement in their quality of life, as they know, first-hand, local and regional potentials and constraints.

- Benefit-sharing thus needs to allow for the involvement of concerned populations in the design of the benefit-sharing mechanism.
- Benefit-sharing also needs to allow for involvement of concerned populations in decisions on the use of their share of the benefits from the dam project.
- Meaningful participation in decision-making by concerned stakeholders contributes to ensuring that a project gains public support.

### 6.7.4 Ensuring the accountability of agencies entrusted with the distribution of benefits

Substantial sums of money may be involved in benefit-sharing with local communities. This raises concerns that the money may not be used in the manner intended by agreement or by relevant legislation. There are also concerns about possible embezzlement and corruption. The accountability of implementing agencies entrusted with the redistribution of benefits is, therefore, a fundamental requirement.

A transparent process involving all stakeholders, with public disclosure of how benefits are invested, as well as independent audits, would provide greater assurances that proceeds are effectively spent on projects that truly benefit project-affected communities.

| **Text Box 6.16 Efficiency, Participation and Accountability – Key Aspects** |
|---|
| • WCD Guideline 20 on 'Project benefit-sharing mechanisms' states that these mechanisms are based on the principle that adversely affected people are entitled to share in project benefits.<br>• Delivery of benefits is the responsibility of the mitigation and development office.<br>• Project-affected populations need to be meaningfully involved in defining provisions of the benefit-sharing mechanism.<br>• Substantial sums of money may be involved in the transfers to local communities, raising concerns over possible misuse of the money and/or embezzlement and corruption. The accountability of implementing agencies entrusted with the redistribution of benefits is, therefore, a fundamental requirement. |

| | |
|---|---|
| Discussion topics | In light of concerns over the possible misuse and/or embezzlement of substantial sums of money transferred to local communities, as well as the likelihood of corruption, discuss the prerequisites and challenges to ensuring the accountability of implementing agencies entrusted with the redistribution of benefits at the local level, particularly in emerging economies. |
| Exercises | A key governance principle is that project-affected populations should be meaningfully involved in defining provisions of the benefit-sharing mechanism. Identify and write down a list of the practical challenges to ensure that the views of all project-affected people are heard. |

## 6.8 Experiences in the Mekong Countries on Benefit Sharing

There is, by now, quite some experience with national-to-local forms of benefit sharing for MRC Member Countries, and it is useful to start exchanging them. The following is a quick overview of the current situation on monetary benefit sharing by country. This can be updated in discussions with Member Countries.

**Cambodia and Lao PDR**

- As present, there is no information on formal consideration of a draft legislation or regulation on BSM in either Cambodia or Lao PDR. As noted earlier in Section 1.2.2, which describes the types of benefit sharing, Cambodia and Lao PDR have been implementing indirect forms of local and regional benefit sharing (meaning regional within the country) and taking steps to enhance additional benefits of hydropower projects.
- However, no overall framework yet exists, and arrangements tend to be negotiated project-by-project. There is considerable experience with various measures that

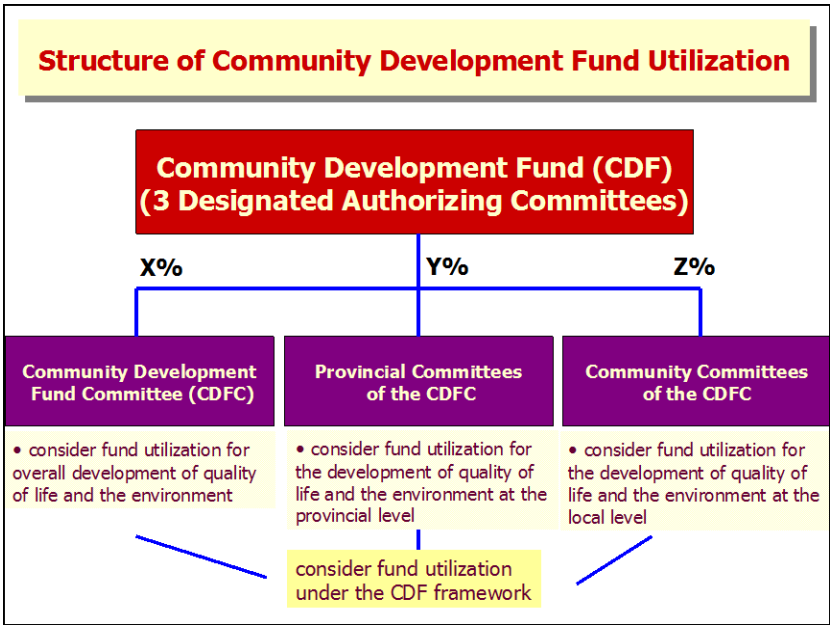
would be part of a comprehensive benefit sharing approach on projects that involve IFI development partners.

- Presently, Lao PDR is conducting studies under a TA for Capacity Development in Hydropower and Mining Sector. As noted in the World Bank's Appraisal Report (PAD) for the component dealing with hydropower, the TA offers capacity building in support for sustainable hydropower development in Lao PDR and specifically notes the need for more attention to benefit sharing at the local level.

**Thailand**

- Thailand has moved toward benefit sharing by introducing Community Development Funds (CDFs) on all EGAT power generation projects. A Cabinet resolution on June 19, 2007 approved the establishment of a 3-tiered CDF system in Thailand that aims to raise capital to improve the quality of life of people and the environment in the vicinity of power plants. Pending the establishment of the funds, the Cabinet resolution in 2007 stipulated that EGAT would be responsible for paying into the fund and later recovering the costs from revenues.
- Information available suggests CDFs are for a fixed and limited period of time. CDFs establish the principle of local and regional revenue sharing from power projects in Thailand.
- A strategy document prepared by Thailand's Energy Policy and Planning Office (EPPO) of the Ministry of Energy indicates that EGAT is responsible for implementing CDFs in vicinities of power projects. The document indicates the money to capitalize CDFs will come from levies on power plants greater than 1.0 MW installed capacity. The framework for authorization of expenditures by the CDD Fund mechanism is divided into 3 categories, or levels, namely:
    - Category 1: For overall development of quality of life and the environment, the authorization is under the Community Development Fund Committee (at the national level);
    - Category 2: For the development of quality of life and the environment of the people in the provinces where power plants are located, the authorization (expenditure) is entrusted to the respective Provincial Committees; and
    - Category 3: For the development of quality of life and the environment of the people in the localities where power plants are located, the authorization (expenditure) is entrusted to the respective Community Committees.

  The graphic below illustrates the 3-tiered system (extracted from the EPPO Strategy Document in the KB-CD Volume 2 of MRC's ISH program).




- In 2008 EGAT documents reported that a total of 102 power plants, located in 39 provinces, including 26 power plants of EGAT, would pay into the CDF.
- EGAT noted that beneficiaries of the fund were to be communities living in a 5-km radius surrounding a power plant and other nearby areas as prescribed by the fund management committee.
    - Proceeds from the fund will be allocated to the communities for the purposes of development of livelihood and quality of life, supporting activities related to education, religion, culture, sports and music,
    - In addition to the above, proceeds will also support public health and environmental activities, renewable energy development, immediate aid to alleviate damage resulting from any impact caused by the power plant, and others as prescribed by the committee.
- The top five CDF Funds reportedly established in 2008 (by capitalization) included:
    - Lampang Province Community Development Fund (328 million baht/yr)
    - Mab Ta Phut Industrial Estate Community Development Fund (261 million baht/yr)
    - Ratchaburi Electricity Generating Company Community Development Fund (280 million baht/yr)
    - Gulf Cogeneration & Gulf Power Generation Community Development Fund (99 million baht/yr)
    - Bang Pakong Power Plant Community Development Fund (97 million baht/yr)
- In 2009, Thai media articles suggested that experience with CDFs was growing. For example, the Nation reported in Dec. 2009 on the first two years of Ratchaburi Power Project CDF as follows:
    - “The two-year-old Community Development Fund (CDF) for areas surrounding power plants has proved successful, although to what degree is yet to be measured. The CDF of Ratchaburi Power Project is reportedly the second largest in Thailand …. and has Bt280 million per year”.

  - (This means just under $US 10 million per year is allocated to revenue sharing from this project).
  - Ratchaburi is Thailand's largest thermal power complex (3,625 MW) located outhwest of Bangkok. It consists of two plants: one, a conventional dual fuel (oil and gas) thermal plant (2,125 MW,) commissioned in 2002; and the second a 1,400 MW combined cycle plant (two units), commissioned in 2008.
- Media reports in 2010 indicated that decisions on the future of CDFs were pending with the EPPO.
- As part of the MRCS work, it would be helpful to verify the status of CDFs, whether they are established on existing hydropower, and any implications for power import projects.

**Viet Nam**

- Vietnam has been developing and trialling BSM for local communities adversely affected by hydropower projects since 2006, through a series of Technical Assistance (TA) Projects, supported by the ADB. A draft Decree Law on benefit sharing is available now. If formally adopted, the law would apply to all existing and new hydropower projects, where there is a legal requirement to undertake an EIA. This would generated approximately $US 20 million per year for local development funds on all existing hydropower projects in Viet Nam and those coming on line.
- The current BSM TA is being executed by the Electricity Regulatory Authority of Viet Nam (ERAV) reporting to the Ministry of Industry, Trade and Telecommunication (MITT):
- The initial policy review that kicked-off the process in Viet Nam in late 2006 was illustrated earlier in the graphic in Section 1.4.1 of this Volume. It started with three questions: (i) what does international experience offer as lessons for Viet Nam; (ii) to what extent do current policies and laws enable benefit sharing in Viet Nam; and (iii) what is needed to move forward?
- It is important to note the policy review to begin discussions on how BSM considered the range of policies, law and regulations in Viet Nam in the following nine categories,:
  - The State Constitution
  - The Power Sector
  - The Water Resources Sector
  - The Environment Sector
  - The Forest Sector
  - The Fisheries Sector
  - The Finance Sector including Land Administration (i.e. resettlement policy)
  - The Social Sectors including Ethnic Minorities
  - International Conventions and Agreements Ratified by Viet Nam
- The initial TA (completed in December 2008) produced a first version of a draft Decree Law, with an accompanying workplan to pilot test its provisions, on the 210 MW A'Vuong hydropower project in the Central Highlands of Quang Nam Province.
- Subsequently, the first phase of that pilot (funded by ADB, in cooperation with WWF) was completed in 2010. This was implemented by ERAV, working in close cooperation with the Provincial Peoples' Committee (PPC) of Quang Nam Province, who appointed a Benefit Sharing Council (BCS) and Fund Management Board (FMB). This

overall arrangement (having ERAV at the State level and the PPC at the Provincial level) reflected the division of responsibility in the draft Decree Law:

i. ERAV and the provincially based MOITT facilitated power sector linkages (in particular, the revenue transfer mechanisms, which put money from consumer tariffs into the Benefit Sharing Fund).
ii. Quang Nam Provincial PPC, primarily responsible for development in the Province, through its appointed Benefit Sharing Council BSC. The PPC would oversee application of funds made available by ERAV/MOITT mechanisms, as well as the implementation of all other aspects of BSM, including resource access, equitable sharing of project services aspects, targeting to support poverty reduction goals, etc.

- In the first phases of the TAs in 2007-2008, ERAV used a multi-stakeholder dialogue process to solicit views and inputs on draft provisions Decree Law. This involved national NGOs, mass organizations, other Ministries, Provincial representatives and Viet Nam's Development Partners in three one-day workshops over nearly 14 months. These consultations proved important and necessary as they elicited widespread support for benefit sharing—particularly, support from Vietnamese provinces and civil society.
- ERAV, as process manager /owner for the BSM, was supported by an intergovernment steering committee, consisting of national line agencies and EVN representatives. The draft Decree Law was updated as part of the Pilot Trial on A'Vuong in 2010, and is understood to be used for a second phase of the A'Vuong project pilot, reportedly set to proceed with ADB financial support in 2011.
- In the Viet Nam process, the wider consensus on the objectives of benefit sharing was reflected in Article 4 of the Draft Decree Law—the objectives of which are:
  i. To advance sustainable forms of hydropower development and management.
  ii. To provide stable, long-term mechanisms to maximize the socio-economic contribution of hydropower for the benefit of all citizens in-line with State electricity development policy.
  iii. To reinforce national efforts to close the income gap between urban and rural populations in a period of accelerated growth and modernization and boost local development in minority areas and areas of difficult socio-economic conditions, where many hydropower projects are located;
  iv. To support the implementation of relevant domestic law and international commitments to advance sustainable land and water resource management practices, in which managing hydropower projects are highly relevant;
  v. To ensure the protection of State interests and the rights and benefits of relevant organizations and individuals and the ecological environment in rural areas;
  vi. To promote equitable electricity access to people living in remote areas affected by hydropower development, including a large portion of ethnic peoples; and
  vii. To enhance entitlements for natural resource access and ensure local communities have financial support to take advantage of local development and entrepreneurial opportunities that hydropower projects offer.
- Viet Nam, for several years, has applied a water resource utilization fee (2% of gross revenue from hydropower projects) allocated to provincial budgets. In June 2010, Viet Nam also adopted a Law on payments for ecological services (PES), in which different economic enterprises (e.g. forest enterprises, ecotourism industries, and

hydropower projects) would contribute revenue for (PES), including distribution of payments to households who participate in activities to manager ecological services locally. There are different PES formulas for each sector. The PES payment level for hydropower plants, using water as a production input, was set at 20 VND (0.125 cents) per kilowatt hour of electricity produced. For water supply companies, it was 40 VND (0.25 cents) per one cubic meter (m3) of water supplied.

- Some confusion exists among various Funds, which are increasingly applied for resource management. It is important to closely coordinate these forms of revenue sharing, which are for complementary, yet for different purposes, such as water resources protection, environment protection, livelihood restoration or benefit sharing.

**China**

Since the 1980's, China has introduced various forms of benefit sharing, and more recently, reinforced and integrated BSM with policies to promote sustainable hydropower.

On the MRC visit to Lancang-Mekong hydropower projects in June 2010, theses aspects were discussed with China's ESCIR and the HydroLancang Power Company.

The background is as follows:

- China has built almost half the world's large hydropower projects (over 22,000 large dams). Historically, China has been a pioneer on introducing new approaches for benefit sharing with local communities.
- Since the 1980's a portion of the hydropower revenue from the Danjiangkou dam—which created the largest man-made lake in Asia when it was built in 1966—was placed in a "remaining problems" fund. This fund financed livelihood restoration for people living around the reservoir perimeter, who had fallen behind development in other areas. Measures to rectify social problems associated with previous project phases were introduced after local political pressure.
- Reservoir Maintenance Funds for Hydropower Projects were first set up in China in 1981 (over 30 years ago), when the Ministries of Finance and Electric Power co-issued a decree establishing guidelines for these Funds, using revenue from electricity sales. The aim was to assist all people resettled in reservoirs, who were lagging behind average rural incomes. Local political pressure was exerted to address "remaining problems" on many dams, and the Danjiangkou experience proved positive. These funds were financed on the basis of 0.001 Yuan/kWh (or 0.012 US cents/kWh) for the life of the hydropower plant.
- These Funds are managed by local county resettlement offices and hydropower plant authorities. The laws stipulate that the Funds are to be used for:
    - maintaining reservoir facilities;
    - maintaining infrastructure for irrigation and drinking water and transportation infrastructures benefiting people that were resettled;
    - Providing economic support to the populations displaced by the reservoir.
- There have been several innovations and adjustments over time, as well as new approaches. One example is where the Hubei Hydropower Development Authority (in 2002) established a partnership agreement, based on equity sharing with local governments—plus revenue sharing to target poverty alleviation in the project area. In a major update of policies, in 2007 the PRC introduced regulations to provide uniformi-

ty in revenue management and revenue transfers from the power sector to regional and local authorities. The stated policy aims at that time were:

- To boost regional development around hydropower projects;
- To provide long-term infrastructure financing for reservoir areas, including areas where dam affected people were resettled; and
- To provide long-term and retroactive compensation to dam resettled populations.

- Two main thrusts were: (i) the establishment of a national resettlement fund, which offers 600 Yuan per year for 20 years to each household member (This is awarded on top of the statutory one-time compensation payment for land or property recovered by the State.), and (ii) updating and standardizing long-term and permanent reservoir area infrastructure improvement funds for hydropower projects started in 1981.
- Both of these measures are funded by hydropower revenues. The long-term Fund, named the Reservoir Area Reconstruction and Development Fund, is applied to hydropower projects on the Lancang-Mekong by Yunnan Province and is based on national guidelines.
- Money placed in this Fund is used for various local infrastructure and development investments in the reservoir area; although it is understood the Fund does not support communities in downstream areas. It is important to note that China also has a range of other financing mechanisms, including municipal taxes applied to hydropower that support development in the reservoir area and other areas. Decisions on whether these monies support affected people upstream and downstream are made locally with Provincial oversight.

# 7 OUTSTANDING SOCIAL ISSUES

Although there does not appear to be a common understanding of what constitutes 'outstanding social issues,' these can be defined as social issues related to:

- The economic, institutional and socio-cultural sustainability of involuntary physical and economical resettlements.
- The loss of cultural heritage assets.
- Boom-town formation, including problems related to the integration of construction townships into broader regional development frameworks.
- Long-term liabilities.
- Changes affecting downstream populations.
- Other issues.

These were:

- Addressed in the project-specific Environmental and Social Management Frameworks (ESMF), based on project-specific Environmental Impact Assessments, Resettlement Action Plans, Indigenous Peoples Plans, and Community Development Plans; however, mitigation measure dids not achieve the desired outcomes.
- Not addressed in the project-specific ESMF but which are claimed based on evidence.
- Not addressed in the project specific ESMF but which are claimed without providing evidence.
- Not addressed and have not been claimed, but which can be verified.

By implication, the subject coverage is wide.

## 7.1 Introducing Outstanding Social Issues

| | |
|---|---|
| Purpose | The purpose of this session is to introduce the subject and rationale of addressing outstanding social issues. |
| Objectives | ❑ For participants to understand and appreciate why it is important to address outstanding social issue |
| Preparatory reading | UNEP (2007). Dams and Development: A Compendium of Relevant Practices for Improved Decision-Making on Dams and their Alternatives. Section 4: Dealing with social aspects (Section 4.2 – Addressing outstanding social issues). www.unep.org/dams |

### 7.1.1 Reasons to address outstanding social issues

There are three main reasons why private companies, governments and financial institutions expend significant funds and energy to address outstanding social issues that were not resolved in the original framework, or which became visible only at a later stage:

- Public acceptance.

  The main role-players are private companies, governments, development banks and agencies who, without any legal obligation to do so, address outstanding social issues in order to reduce the risk of lengthy and costly project planning, authorization and licensing processes, which often arise from community resistance, resulting from outstanding social issues associated with earlier projects and/or the absence of mechanisms to address additional social issues associated with the new project. There are two main methods:

  - Comprehensive remedy funds.
    These are established to provide project affected people or local governments with the means to address outstanding social issues under their own management. Effectively, this transfers the responsibility to address outstanding social issues to the affected communities and provides them with the funds to do so, thereby empowering communities' governance at a local level. Comprehensive remedy funds have been established in Canada, Norway and the Peoples' Republic of China.
  - Ombudsman.
    An ombudsman enhances and qualifies the communication between stakeholders and assists the affected people and communities to voice their grievance in the right format and at the relevant institutions. An ombudsman role was created when disputes arose on the lignite opencast mines in Garzweiler, Germany. This enhanced the chances to recognise and address outstanding social issues at an early stage, sometimes even before they had aged to the extent that they could be considered as 'outstanding', which has had the added benefit of reducing criticism of the project.

- Compliance with the right to remedy.

  The right to remedy goes back to Section 8 of 'The Universal Declaration of Human Rights', which states that 'everyone has the right to an effective remedy by the competent national tribunals for acts violating the fundamental rights granted him by the constitution or by law'. This right has been further specified by the 'International Covenant on Civil and Political Rights', which has been ratified by 132 states, and which declares that 'each State Party to the present Covenant ensures that any person whose rights or freedoms as herein recognized are violated shall have an effective remedy, notwithstanding that the violation has been committed by persons acting in an official capacity'.

In some Mekong ,countries, such as Vietnam, land scarcity for certain ethnic group remains an outstanding issue as shown in text box below:

**Tex Box 7.1: Land Scarcity and Lack of Arable Land**

Ressetlement planning does not always ensure enough land—or land fit for cultivation. In the example of the Ban Ve hydropower project, resettled people of Kim Lien villages relocated to Thanh Chuong,,where villagers were forced to go to the forest for bamboo, or search for renters as an extra means of income. People from Huong Linh (Rao Quan project), and Loc Bon villages (Ta Trach project) were provided 1ha of land per; however, as the land was unfit, 30% of resettled people returned upstream of the reservoir and the remaining population moved elsewhere.

**Conflict between host people and new resettlers**:

In certain places, resettlement had created conflict between resettled people and host people, due to competing demands for resources. This was the case of Hien Luong commune (Da Bac district), and Hoa Binh province. Initially, neighboring villagers were sympathetic and welcoming, helping newcomers move into Luong Phong village; however, as the numbers grew, this increasingly affected Mai and Ngu host villages as forest resources and land available for agriculture grew exhausted. In the Mai village, the depletion of forest resources caused shortage in supplementary food and income sources; villagers responded by overharvesting the forest in order to store as much as possible before there was nothing left. The relationship worsened among Luong Phong, Mai and Ngu people as even larger numbers of people resettled in Luong Phong than anticipated. Mai villages even shot Luong Phong farmers' buffaloes, which had trespassed into their cropland.

In the case of large dams and hydropower facilities, obligations established in project funding agreements, which often have the status of treaties and/or international agreements, create a legal responsibility for remedy.

Remedy/reparation is defined by international law as an action or process that repairs, makes amends, or compensates for damages. There are three generally recognized forms:

- Restitution.

This is designed to put the offended party back in the position it would have been, if the violation had not occurred. For example, as part of South Africa's land reform, particularly its land restitution process, the Makuleke community, which had been displaced from the Kruger National Park in 1969, were returned all of their land (albeit with agreements surrounding its use and appropriate tourism development).

- Indemnity/compensation.
  This involves the payment of money to the offended party for any lost profit, value or property. In large infrastructure projects, compensation typically refers to payments to project-affected peoples to compensate for the loss of assets and property. A project, agency or state might also provide post-project remedy funds to address outstanding social issues related to non-compliance with guidelines and/or international laws and, for example, to redress those people, who were displaced while overstepping the agreed proceedings and guidelines. In the Peoples' Republic of China, Guatemala, Pakistan and Thailand, the World Bank (together with its partners the Asian Development Bank and the Inter-American Development Bank and the national governments, which had adopted the World Bank policy on involuntary resettlement for a specific project in view to qualify for financial support) made voluntarily significant remedy funds available to address unsolved social issues of earlier projects.

**Text Box 7.1 Comprehensive Remedy Funds – Norway**

In Norway, the licence process requires that all projects are accepted by the majority of the population. To receive a licence for the development of the *Glomma and Laagen River Basin (GLRB),* the Glommen's and Laagen's Water Management Association (GLRM) established a remedy fund.

The GLRB in southeast Norway covers about 13% of Norway's total land area (41,971 km²). 422 km² (1%) of the basin is in Sweden; and about 14.5% of Norway's population lives in the basin area, which includes some of the country's most fertile agricultural lands. The GLRB has a total of 40 dams/reservoirs with a total reservoir capacity of 3,580 m³ and an annual hydropower production of approximately 10 TWh, about 8% of Norway**'**s electricity production. The hydropower reservoirs in the GLRB are mainly natural lakes with low levels of storage. The larger dams are in the mountains, which reduces their social impacts as these areas are sparsely populated. Another factor, which reduces negative impacts on human habitations and livelihoods is the limited area affected by the dams. Despite the vast area covered by the GLRB, the total inundated land from reservoirs encompasses only 45.8 km² (0.1%). The GLRM operates reservoirs, watercourse diversions, and hydropower stations in the basin. The ultimate aim for GLRM is to optimise a set of parameters over the entire basin level, rather than for any single facility. As with most of the dams and water facilities in Norway, the GLRB has been set up mainly for hydropower purposes but also offers flood protection, irrigation, water supply and the recreational use of the impounded water. About 620,000 people (14.5% of Norway's population) live in the GLRB area. However, no resettlement has been carried out in the GLRB, as the reservoirs affecting the largest areas are located in sparsely populated mountainous areas. Since 1917, the Watercourse Regulation Act required developers to carry out mitigation measures, such as the building of community centres/village halls, covering medical expenses, supplying workers and their families with satisfactory housing and establishing remedy funds through benefit-sharing schemes (annual fees and the compulsory delivery of electricity to the local municipalities). An unsolved social problem was the lack of a regulation to compensate for reduced fisheries income– traditionally an important source. Historically, commercial fishing in the lower parts was the most important inland fishing area in southern Norway. The fishery was considered highly valuable, and a complex system of fishing rights had evolved over centuries. The impounded lakes and regulated rivers hindered fish migration and reduced fish production and related income opportunities. The negative impacts were partly mitigated through the economic boom in Norway, which offered new income opportunities in other sectors, as well as stocking, habitat improvement, the release of minimum water flows, and the construction of fish ladders. All of these initiatives were financed through the remedy funds. Generally, there has been an ongoing discourse between different stakeholder and interest groups about the effects of hydropower and the effects of the different mitigation actions. During the last 10-15 years, GLRB, environmental authorities, and landowners have co-operated to solve outstanding social issues in the domain of fisheries. The aim of this work has been to identify the optimal use of resources to improve the conditions for fish production and angling. The work includes test fishing, registration of fish migrations in fish ladders, catch statistics and dates to evaluate mitigation measures, as well as implementation of various mitigation measures such as fish stocking, habitat improvement, fish ladders and minimum water flows.

- Satisfaction.
  This includes nearly every other form of reparation and is meant to address any non-material damage through formal apologies, etc. In the case of dam and hydropower projects, where obligations have not been met because funds were misallocated, satisfaction might include criminal proceedings, public acknowledgements and formal apologies to those who experienced harm. Successful resistance and/or claims for restitution and compensation are also obvious forms of satisfaction[25].

To provide reparations for outstanding social issues requires considerable political will, not only from national governments, but also from international agencies and financial institutions. While the demands for reparations, retroactive compensation, and remedies are many—and articulated in the 1994 Manibeli Declaration,the 1997 Curitiba Declaration, and the Final Declaration from the November 1999 Southern African Hearings for Communities Affected by Large Dams—responses are few:

- The Peoples Republic of China was possibly the first country to put in place a legally binding framework to systematically address outstanding social issues through its 1986 Post Resettlement and Rehabilitation Fund for Irrigation Projects, which aimed to improve living conditions of an estimated 5 million resettlers across 46 resettlement areas.
- In 1994, the USA Congress responded to claims for reparations made in 1951 by a confederation of Native Americans, who had lost homes, lands and Salmon runs due to the establishment of the Grand Coulee Dam and the Columbia River Basin; however, only after a court of law decided in favour of the indigenous peoples.

- Financier pressure.

  Arising from the debate around large dams and hydropower facilities are sensitivities within international financial institutions to 'do things the correct way and to be seen to be doing things in the correct way'. In this context, applications for financial assistance and/or loans are assessed and evaluated in the context of previous projects. This may lead to the financial institutions placing pressure on national governments to address outstanding social issues from previous projects within the current project. This occurred in a southern African state, where the government was seeking finance to upgrade electrical infrastructure and transmission lines. The loan from the international financial institution was conditional on addressing long outstanding social issues arising from a previous large dam project.

[25] In this context, care must be taken concerning the degree of satisfaction: certainly it is questionable whether death penalties for Chinese government officials who misappropriated resettlement funds during the Three Gorges Project can be considered as satisfaction.

**Text Box 7.2 The Later Stage Support Fund for New Hydropower and Water Conservancy Projects, Peoples' Republic of China**

China has over 22,000 large dams and is one of the most active dam building countries in the world. An estimated 12 million people have been resettled from reservoirs and construction sites. Prior to 1980, people were resettled without proper planning or participation, with insufficient compensation, shortage of farm land, and often unsuitable resettlement sites. In 1989, the Poverty Relief Office acknowledged that an estimated 70% of the reservoir resettlers were still living in extreme poverty.

Since 1980, resettlement regulations gradually developed and focused more on environmental and social issues. The most recent government initiative in this domain is the Land Administration Law of the Peoples' Republic of China (1986, revised in 1996). It ensures the need not only to compensate affected people but also to provide for adequate subsidies to rehabilitate livelihoods. The law requires that the State Council approves the standards of compensation schemes and makes provision for stakeholder participation in the formulation of mitigation measures. Despite this general improvement, various social problems continued to appear within projects (lower fertility of lands in the resettlement areas, difficulties of farmers to adjust to jobs in urban areas, and a general degradation of traditional social networks). To address these issues, which appeared in nearly all projects, but could not be mitigated in the initial Resettlement Plans and Social Frameworks, the State Planning Commission decided to use two policy frameworks:

- Unsolved social issues in existing irrigation projects are addressed through a Post Resettlement and Rehabilitation Fund for Irrigation Projects at national level.
- For new projects, a Later Stage Support Fund (LSSF) at project level should address those issues, which could not be foreseen in the initial planning, but might appear after the construction phase.

LSSFs are required for all hydropower projects that were commissioned between 1986 and 1995 as well as for all new hydropower and water conservancy projects cleared for construction after 1996. The LSSFs are generally established for 10 years and financed through power sales. The budget of the LSSF is determined by the number of resettlers multiplied by US$ 30 to 50 per year for each resettler. The regulation foresees that the project should earmark between US$ 0.00015 and 0.0005 for each kWh produced for the LSSFs. All funds within a province are managed by the Provincial Resettlement Bureau. Combined with a stronger focus on trial resettlement, the training of peasants, increased dialogue and stakeholder participation and more decentralized implementation, the remedy funds for new projects should mitigate unforeseen social issues.

| **Text Box 7.3 Introducing Outstanding Social Issues – Key Aspects** |
|---|
| Outstanding social issues are those arising from previous developments, which were never addressed but which still require attention. These can occur for a variety of reasons, including:<br>• Public acceptance, via:<br>  o Comprehensive remedy funds.<br>  o Ombudsman.<br>• Compliance with the right to remedy, via:<br>  o Restitution.<br>  o Indemnity/compensation.<br>  o Satisfaction.<br>• Financier pressure. |

| | |
|---|---|
| Discussion topics | In many developing economies, governments face several developmental challenges requiring significant financial investment, mostly sourced from stretched national budgets. Discuss accessing funding to address outstanding social issues where governments sometimes believe the outstanding social issues merely represent normal socio-economic developmental challenges not deserving of special consideration. |
| | Discuss how one avoids project-affected people taking advantage of a project by ever-increasing demands for development—framed within the context of addressing outstanding social issues. |
| Exercises | Identify large infrastructure developments in your country where outstanding social issues remain. What are these issues, and how could they be addressed? |
| | Elaborate on whether or not projects should be on fixed time lines—where, at its expiration, no further project impacts will be considered for compensation or rectification. What are these advantages and disadvantages? |

## 7.2 How Outstanding Social Issues are Addressed

| | |
|---|---|
| Purpose | The purpose of this session is to outline current mechanisms whereby outstanding social issues are addressed. |
| Objectives | • For participants to understand the main mechanisms available to address outstanding social issues |
| Preparatory reading | UNEP (2007). Dams and Development: A Compendium of Relevant Practices for Improved Decision-Making on Dams and their Alternatives. Section 4: Dealing with social aspects (Section 4.2 – Addressing outstanding social issues). www.unep.org/dams |

Four main instruments are available to address outstanding social issues.

### 7.2.1 Remedy funds and other forms of compensation

These are perhaps the easiest and most logical instruments by extending guaranteed livelihood restoration, as agreed in all contemporary RAPs. These also address issues, not originally noted in the plans. Given that all stakeholders agree that nobody should be negatively affected by a dam or other large infrastructure project, it is logical to provide the necessary funds to ensure this is also the case for original compensation and mitigation plans.

A shortcoming, voiced by affected people and NGOs, is their lack of claim to compensation from the funds, as well as lack of remedy. In this context, to deliver evidence, affected people must request something from the project; in the first instance, it was the project, which requested something from them, and which did not fulfil its obligations. Therefore, many relevant NGOs believe that addressing outstanding social issues should not be limited to or based upon claims of affected people—rather on a more effective monitoring and evaluation system, which independently verifies whether compliance has been achieved or whether additional issues need to be addressed before the construction process officially closes. Remedy funds are implemented in three forms:

- Cash compensation (lump sum).

  A lump sum payment is easier to manage, has low transaction costs, and provides recipients with the freedom to spend at will. However, there is the risk that the funds are unsustainably used and/or might not guarantee long-term economic and social wellbeing of all project affected people. This, in turn, could creates its own outstanding social issues. While some lump sum payments are made to individuals, others are handed over to organisations representing project affected people—commissions representing stakeholders, local governments or national governments. Importantly, each case is different, and customised approaches and solutions are required.

  In the case of the Pak Mun Dam, the payment of lump sum settlements for reduced income, due to shrinking fish stocks, was well received when the Thai economy boomed, but heavily criticised when investments made with cash compensations did not provide long-term incomes. This is one of the reasons why most policies and legal frameworks advise against lump sum compensation. However, risks can be mitigated; for example, by extending the lump sum payment through annual instalments,

so that unsolved social issues, created by the remedy fund, can be addressed at a later stage with new funds.

- Cash compensation (annual instalments).

  This form of remedy fund, which is mostly follow up from and in addition to a lump sum settlement, shares the advantages of a lump sum payment, but reduces the risk that the funds are unable to solve all outstanding social issues. The most common way of stocking this fund is through benefit-sharing mechanisms. The Peoples' Republic of China has introduced a simple system, by making sure that for each kW produced, a certain amount is transferred into the remedy funds. A similar approach is used in Norway; while in the USA and Canada, agreed annual instalments are paid into the remedy funds. The negative aspect related to annual instalments is the need to establish a structure to manage the remedy funds. There are many options for how and by whom such funds can be managed (associations of project affected people, local governments, commissions representing stakeholders, insurance companies, and similar groups), which all have advantages and shortcomings. Again, there is no single solution, and customised solutions need to fulfil the specific requirements of different social settings.

- Support to livelihood systems.

  Policies and frameworks governing involuntary resettlement emphasise the need to restore livelihoods, preferably on a land-for-land basis. This same principle has been adopted to address outstanding social issues. However, it would appear that most outstanding social issues have occurred when a project or government has been unable to compensate land-for-land (i.e. fishing/hunting-ground-for-fishing/hunting-ground). This is because it is becoming increasingly difficult to find and/or obtain replacement land to restore farmers', hunters', and fishers' livelihoods, without negatively affecting other people. This transforms rehabilitating livelihoods from a technical problem (how to find similar assets) to a more complex issue, requiring project-affected people to fundamentally change their livelihoods. Examples show this is not easy—and a primary cause of outstanding social issues.

  Furthermore, in developed economies, this method seems to collide with the variety of interests of project-affected people. In Norway, voluntary cash compensation has entirely replaced the restoration of livelihoods. Conversely, project-affected people in Germany need to appeal to a commission if they do not want to benefit from collective mitigation measures and rather receive individual cash compensation.

| **Text Box 7.4 Pak Mun Dam, Thailand** |
| --- |
| The Pak Mun Dam, near the border between Thailand and Laos, was constructed in a different location, approximately 1.5 km away, from its intended position. According to the RAP, 1,700 households, from 31 villages, lost their homes, land or both. Other studies reported higher figures in these regards. The original RAP, prepared in accordance with the then applicable World Bank Involuntary Resettlement Procedures (to enable the Thai Government |

to qualify for World Bank funding), was updated in haste for the new location of the dam. A consequence of this was its inadequacy in addressing social issues, providing perfunctory results and leaving behind many unsolved social issues, which in turn created significant resistance to the project.

The principles of compensation at replacement costs and livelihood restoration, adopted by the Thai Government to qualify for funding from the World Bank, also applied to the new site and to all affected people. The project proponent, Electrical Generating Authority Thailand (EGAT), 'committed itself to improve the living standards of affected households, to provide a range of options, and to implement resettlement with the participation of the affected people'. The issue was how to establish fair compensation, despite its being clear that the outstanding social issues far outnumbered anticipated social benefits. From a technical perspective, a lack of baseline data posed a key problem.

EGAT enhanced its compensation offers several times, including a five-fold increase in the land compensation rate. The World Bank downplayed its role and stated that the enhancement of compensation packages 'was largely due to extensive protests by resettlers and NGOs against the base policy rate. EGAT opted to pay much higher rates to quell increasing complaints, which succeeded in overcoming resistance'.

An outstanding social issue, which gained much recognition, was compensation for income losses of fisher-folk outside the resettlement area during the construction period. These losses were neither addressed in the RAP nor officially recognised before the end of construction. When the dam became operational in 1994, the issue had still not been resolved, and it took a full year until an agreement was achieved. In a first round of compensation in 1996, 3,000 households were compensated and—later in 1999, a further 3,000 households were compensated.

A second outstanding social issue was reduced income from fishing, due to reduced fish migration, resulting in reduced fish stocks. On the basis of the World Bank policy and procedure, EGAT detailed a land-based compensation strategy (as it was unable to find alternative fishing grounds). In 1997 EGAT decided to offer significant cash compensation to affected households; however, in 1998 payments were suspended, when the Thai Prime Minister withdrew the offer, arguing that compensation could not be paid for a project which had already been completed (effectively saying that outstanding social issues could not be addressed). This decision resulted in renewed resistance, during which 5,000 protesters stormed the dam in March 1999 and remained there until 2001.

In June 2001, the Thai Government opened the dam sluice gates for one year to conduct studies on fisheries, social impacts, and the relevance of the dam for electricity supplies. Based on the results of these studies, which were contested, in June 2002, the government decided to close the sluice gates and to get the dam back into operation. To mitigate the outstanding social issues, EGAT agreed to open the sluice gates for four months a year to allow fish migration. This mitigation remains contested.

A third outstanding social issue, which is even more contested, are cases in which dam-affected people have invested their cash compensation unwisely, and who lost most of their assets during the late 1990s economic crisis in southeast Asia. While some resettlers and NGOs consider this as an outstanding social issue of the Pak Mun Dam, EGAT, in line with the position of the Thai Government and the World Bank, refused responsibility and no further compensation was paid.

The overall cost of the project was estimated in 1999 to be US $ 260 million, with a compen-

sation and resettlement budget of US $ 44 million (17%). This is substantially higher than for most projects. On average, household 'incomes have increased primarily due to spontaneous actions on the part of the resettlers rather than organised options designated by EGAT, the Thai Government or the World Bank. The rapid growth of the Thai economy made this possible'. The positive outcomes have been attributed to three mains factors:

- A boom in the Thai economy in the early and mid 1990s, which enabled many resettlers to find jobs outside their traditional sectors.
- Political preparedness and the financial ability to address outstanding social issues in a timely manner.
- Flexibility by EGAT in terms to responding to the demands of the resettlers, managing to rectify the situation leaving people broadly satisfied with the eventual outcomes of resettlement.

In summary, due to the influence of the World Bank and its policies and procedures, the project addressed most outstanding social issues.

### 7.2.2 Grievance processes

Within the provisions of governing normative frameworks and policies, the purpose of these processes is to provide project-specific mechanisms to address grievances. This is because it has become obvious that legal frameworks are too slow and complicated to provide timely results. However, it is also true that projects mostly do not have the capacity to reflect critically on their own work and offer a fair judgement on claims. Therefore, it has become necessary for independent persons to be involved in the grievance process; for example, an ombudsman. An ombudsman assists project-affected people to voice their grievance in a required format and with the relevant structures; is independent and encourages, facilitates and quickens addressing outstanding social issues, while enhancing communication and understanding among various stakeholders. A key challenge is to the ombudsman is finding the right person to fill such a demanding position at reasonable costs.

### 7.2.3 Restitution

On large dam and hydropower projects, restitution is possible only after the decommissioning of the infrastructure. It also requires significant government will to carry out restitution as, in most cases, it is difficult to establish a clear cut-off line. This also requires government commitment to publicly declare that a previous decision was incorrect. However, actions can be implemented; for example, project-affected people could receive rent from impounded or developed land, and receive back the land in full when the infrastructure has been decommissioned.

### 7.2.4 Legal processes

Recourse to a country's legal system is available; however, experience suggests that the process is slow. This is detrimental to the project-affected people, as well as to the project itself—and, if the process takes too long, may result in social hardships, possibly conflicts. Nevertheless, in most countries, recourse to the legal system to have outstanding social issues addressed is the default fall-back position, should all other means fail.

| **Text Box 7.5 How Outstanding Social Issues are Addressed – Key Aspects** |
|---|
| There are four main instruments available to address outstanding social issues.<br>• Remedy funds and other forms of compensation<br>  o Cash compensation (lump sum).<br>  o Cash compensation (annual instalments).<br>  o Support to livelihood systems.<br>• Grievance processes.<br>• Restitution.<br>• Legal processes. |

| | |
|---|---|
| Discussion topics | Discuss the advantages and disadvantages of cash compensation, either as a lump sum or in annual instalments. |
| | Discuss the applicability of restitution processes on large infrastructure projects that have a long economic lifespan and which are seldom decommissioned. |

| | |
|---|---|
| Exercises | Using a case study from your own country, elaborate on the best approaches to addressing outstanding social issues in a manner that meaningfully assists project-affected communities to restore and improve their livelihoods. |
| | Prepare and present a proforma grievance mechanism. |

# 8 STAKEHOLDER PARTICIPATION

## 8.1 Background, Definitions and Key Concepts

| | |
|---|---|
| Purpose | The purpose of this session is to provide a background for and definition of stakeholder participation. |
| Objectives | ❑ For participants to understand key concepts related to stakeholder participation |
| Preparatory reading | UNEP (2007). Dams and Development: A Compendium of Relevant Practices for Improved Decision-Making on Dams and their Alternatives. Section 3: Stakeholder participation. www.unep.org/dams |
| | www.iap2.org |

### 8.1.1 Definition and discussion of concepts

As previous sections of this Training Manual have illustrated, stakeholder participation (or public involvement/participation) is central to undertaking this processes, be it in the form of environmental impact assessments, social impact assessments, resettlement programmes, the formulation of compensation policies and packages, and/or benefit-sharing.

IAP2 is an international association for public participation, which defines stakeholder participation as 'any process that involves stakeholders in problem-solving or decision-making and uses stakeholder input to make better decisions'. By implication, therefore, stakeholder participation is a process or series of actions—rather than one single activity.

The ultimate aim of stakeholder participation is better decisions—those that are better informed, more sustainable, owned by stakeholders, and implementable. In this regard, stakeholder participation does not strive to achieve consensus; rather, it builds on the diversity of opinions to achieve better decisions.

Importantly, stakeholder participation does not involve or result in a reduced decision making role for governments; rather, stakeholder participation focuses on using variegated stakeholder input to support governments.

As an extension of this definition, IAP2 identifies three foundations on which effective stakeholder participation is built.

- **Values-based.** Stakeholder participation is most effective when the proponent (whether government or the private sector) and the practitioner recognise, acknowledge, and validate stakeholder values when designing a participation process. While good factual data is necessary for informed decision making, good decisions will incorporate both accurate and relevant data, as well as the values, principles or standards of stakeholders in that decision.

- **Decision-orientated.** Effective stakeholder participation supports robust decision making. Stakeholder participation is not undertaken in a vacuum—for its own sake or as a way to 'sell' a decision already made—but specifically to influence and improve decisions. 'Better decisions' are those that are better informed, better understood, more sustainable, or more implementable—because they are owned by those who truly have a stake in its outcome.
- **Objectives-driven.** It is important to manage expectations of the participation process and be clear about the role of stakeholders in making decisions. When stakeholder participation is planned to achieve specific and shared objectives, such as to provide balanced and objective information, establish and maintain relationships, gather stakeholder comments, or seek new ideas or to facilitate participative decision making; it is more likely that mechanisms or techniques will be selected and implemented in such a way as to achieve these objectives. There are many participation techniques that practitioners can use. Selecting the most appropriate technique requires a clear understanding of what stakeholder participation plans to achieve.

### 8.1.2 IAP2 concepts

IAP2 concepts include Core Values, a Code of Ethics and a Public Participation Spectrum.

The Core Values describe seven attributes of stakeholder participation that the association suggests are minimum standards to deliver a fair and ethical process.

- Stakeholders must have a say in decisions about actions that affect their lives.
- Stakeholders' contributions must genuinely influence decisions.
- The process must aim to achieve sustainable decisions by meeting the needs of all participants, including decision-makers'.
- The process must seek out and facilitate the involvement of those potentially affected.
- The process should involve participants in defining their type and level of participation.
- The process, via the practitioner, must provide stakeholders with relevant information in an understandable manner so they can participate in a meaningful way.
- The process must communicate to stakeholders how their input has influenced the decision.

The IAP2 Spectrum of Public Participation recommends that participation can be effective at five different levels: inform, consult, involve, collaborate and empower. The goal of participation, the 'promise' to the public and the techniques used, will be different at each level.

- At the **inform** level:
    - The goal is to provide balanced and objective information to stakeholders.
    - The promise is to keep stakeholders informed throughout the decision making process.
    - The techniques likely to be used are communication tools, such as written information or websites, and communication activities, such as information sessions, site visits, and open days.

      At this level, the stakeholders have power as observers of a transparent decision making process, which allows them to hold decision makers accountable.
- At the **consult** level:
    - The goal is to seek feedback from stakeholders on proposals.

  - The promise is to listen to aspirations and concerns and communicate how stakeholder input influenced a decision.
  - Techniques are surveys, interviews, meetings, submissions and public hearings.

  At this level, decision makers seek feedback from stakeholders so that information gathered, criteria generated, and alternatives considered can be reviewed and commented on by stakeholders.

- At the **involve** level.
  - The goal is to engage with stakeholders to generate new ideas through dialogue.
  - The promise is to work directly with stakeholders during each stage of the decision making process to ensure that aspirations and concerns are directly reflected in the decision making process.
  - Techniques are meetings, workshops and deliberative mechanisms.

  At this level, decision makers seek information and ideas from stakeholders, while making the actual decisions themselves.

- At the **collaborate** level.
  - The goal is to partner with stakeholders at each stage of a decision, including developing criteria and alternatives, and identifying a preferred solution.
  - The promise is to look to stakeholders for advice and innovation, and incorporate this into the decisions to the maximum extent possible.
  - Techniques are advisory groups, stakeholder panels and participatory decision-making.

  At this level decision makers seek to share decision making power and responsibility with stakeholders.

- At the **empower** level.
  - The goal is to place decision making in the hands of the stakeholders.
  - The promise is to implement what the stakeholders decide.
  - Typical techniques are citizen juries, referenda and delegated decisions.

  This level is unlikely to be appropriate in national and international hydropower projects where government will be the ultimate decision maker.

Managing the expectations of both decision makers and stakeholders is challenging. When decision makers intend only to **inform** or **consult** stakeholders, as is often the case in decision making on large projects, including hydropower facilities—and stakeholders seek to **collaborate**, there is a mismatch of expectations.

Therefore, it is important to obtain clarification of, and commitment to, the role that stakeholders can play in decision making. Once this is clarified, it should be clearly communicated and explained to stakeholders. The stakeholder participation goal can then be clearly established as a guide to practitioners and decision makers, and a **promise** to stakeholders clearly articulated.

### 8.1.3 The DAD model

IAP2 also recognises that there is a model of stakeholder relations that is often confused with stakeholder participation. IAP2 uses the acronym DAD to describe this model, which stands for **Decide, Announce, Defend.** When DAD is used, a decision is made by the proponent, announced to the public, then defended, should stakeholder response to the decision be negative. At times, if the negativity is sufficiently articulated or it is politically expedient, the decision is changed. It is important to note that this does not fit into the IAP2 definition of stakeholder participation.

The DAD model rarely results in better decisions crafted as a result of the discussion and consideration of many perspectives. Rather, it more frequently results in 'knee-jerk' reactions, which can be costly to the decision maker and increase stakeholder cynicism about the transparency and authenticity of the decision making process.

### 8.1.4 Decision making during the project lifecycle

With regards to hydropower projects, the project lifecycle comprises several stages:

- Policy and strategic planning.
- Integrated river basin planning.
- Dam/hydropower facility project planning.
- Dam/hydropower facility construction.
- Dam/hydropower facility operation.
- Dam/hydropower facility decommissioning.

The decisions in which stakeholders can participate are likely to be different at different stages. During **planning** (including policy and strategic planning, river basin planning and project planning) stakeholders may participate in a wide range of decisions. Indeed, the World Commission on Dams suggests there are six sustainability elements to be considered: engineering, environmental, social, economic, financial and decision making. For each of these elements, there are a number of factors relating either to water resource management or normative frameworks, and decisions may need to be made about each of them.

During **management** (including dam/hydropower facility construction, operation and decommissioning), decisions will continue to be made regarding normative frameworks.

Table 8.1 provides examples of indicative questions that may require stakeholder participation.

Table 8.1 Examples of indicative questions which may require decision making at different stages of the project lifecycle

| Stage in Project Lifecycle | Example Decision in which Stakeholders can Participate |
|---|---|
| Policy and strategic planning | The vision for providing water and energy to improve the lives of people in the area or community and strategies to achieve the vision |
| Integrated river basin planning | How the resources of a river basin can be used to provide water and energy for communities, while retaining the health and flow of the river and tributaries |
| Project planning | What alternatives exist in a catchment to supply water and energy to communities? Is dam storage the most sustainable alternative to achieve the required outcomes? What will be the social, environmental and eco- |

| Stage in Project Lifecycle | Example Decision in which Stakeholders can Participate |
|---|---|
| | nomic impacts and how can they be effectively and fairly mitigated? Is there a process in place to ensure adequate compensation? |
| Construction | How can a dam be constructed cost effectively to provide sustainable water or energy supplies for the next 50 years while protecting the natural environment and improving the welfare of communities at the project site and downstream? |
| Operation | How can a dam be operated to provide a sustainable water or energy supply as well as to meet the commercial, employment, recreational and social needs of the community while protecting public health and the natural environment? |
| Decommissioning | How can a dam be decommissioned in a cost-effective manner and the area rehabilitated to meet the needs of the local community and to reinstate natural habitats for local flora and fauna? |

It is important to recognise that decisions made at a later stage are dependent on decisions made at an earlier stage. Early decisions often become 'givens' or 'non-negotiables' for subsequent decisions. For example, a decision may be made to build a hydropower facility, irrespective of understood impacts, based on perceived broader national interests; this then has consequential implications for the scope of discussion on mitigation measures and compensation. Similarly, a decision not to engage a community early on in a process may lead to a lack of understanding of the rationale for earlier decisions; inadequate data on which to base a decision; and cynicism and distrust by the community. Sometimes, stakeholders participating in later decisions are not aware of the reasons behind earlier decisions and want to revisit them or renegotiate them. This can cause confusion and create conflict.

Therefore, being clear on the decision that is to be made, the context in which it is being made, the people who will make the decision, and the role of stakeholders in the decision making process are important starting points to stakeholder participation planning and the effective implementation of the stakeholder participation plan.

**Text Box 8.1: Public participation in Trung Son Project, Vietnam (WB funding)**

Consultations on environmental and resettlement plans were held with affected communes, beginning January 19, 2010. Inputs from local stakeholders, representatives of People Committees, and feedback from others, including independent observers, have been received. The draft EAI/EMP/RLDP are available at information centers in Vietnam and Washington, as well as on this website and that of EVN.

To promote positive NGO involvement in the project, the World Bank participated in a workshop at the request of Vietnam River Network in September and invited NGOs to a project update discussion in late October. A meeting between the TSHMPB and NGO representatives was held in December, following which NGO representatives attended the village consultations as observers.

**Hanoi Consultation:**

The Trung Son Hydropower Management Board and The World Bank met on March 3, 2010, with over a hundred members of civil society organizations, think tanks and academic

institutes at La Thanh Hotel, Hanoi, for a public consultation on the Trung Son Hydropower Project in Thanh Hoa. The meeting was also attended by district and village representatives, including a group of minority women from project affected areas, who took active part in the discussions.

Director for the Centre for River Basin Water Resources and Environmental Management conducted the nearly three hour panel discussion that followed presentations on the Resettlement and Livelihood Development Plan and the Environment Impact and Management Plans.

The audience received a report on consultations carried out by PMB in 53 villages in January-February 2010. This was followed by a presentation from a Vietnamese NGO group led by Ms Nguy Thi Khanh, representing the Center for Water Resources Conservation and Development (Warecod) and Vietnam Rivers Network (VRN). The group had earlier attended the village consultations as independent observers.

### 8.1.5 Gaining public acceptance as an outcome of stakeholder participation

Gaining Public Acceptance is one of the WCD Strategic Priorities. However, good stakeholder participation does not necessarily equate to public acceptance. Public acceptance does not result merely from good stakeholder participation processes, and care must be exercised not to equate participation with acceptance. Providing accurate information to carefully identified stakeholders and encouraging their informed participation in a decision may lead to public acceptance, if the benefits to stakeholders outweigh the disadvantages. However, it may also lead to conflict between the public and the decision maker because stakeholders do not see a benefit for them in the proposal. Alternatively, it may lead to agreement by all parties, including the developer, that the project is not acceptable.

**Text Box 8.2 Project Aqua, New Zealand**

As an example of stakeholder participation leading to non-acceptance of a project, a dam project in New Zealand, known as Project Aqua, was proposed and, under the New Zealand Resource Management Act of 1991, was the subject of a public consultation process. The project generated a considerable amount of stakeholder dialogue, discussion and, in some cases, outrage--both locally and nationally. In 2005, the proponent of the project, Meridian Energy, decided not to proceed.

At the time, CEO of Meridian Energy Keith Turner said that a combination of circumstances meant that it was no longer prudent or responsible for the company to continue with the project. The relevant circumstances included geotechnical information that adversely affected project economics, decisions made in the High Court around the nature of ‘water rights’, the length of time it would take to resolve the uncertainties concerning resource consents, the costs of compliance with consent requirements, including community and environmental mitigation, and the need to be decisive and reduce uncertainty. Meridian’s 2004 Annual Report states that the company lost NZ $38.7 million on the project.

### 8.1.6 Other relevant issues

Other issues relevant to stakeholder participation and public acceptance include:

- The willingness of decision makers to use stakeholder input. Many decision makers do not accept that stakeholders can provide useful input, especially if they are not highly educated. Another common outcome is that proponents decide that a 'greater community or national good', from their perspective, should prevail.
- The willingness of technical experts to engage with a range of stakeholders, particularly vulnerable groups. Many technical experts believe there is one 'correct' solution, do not see the relevance or value of other perspectives, or are constrained in considering alternatives.
- Transparency of decision making processes, even to decision makers themselves. Many decision makers do not have a clear idea of the process they are using to make a decision—or how stakeholders could be of support.
- The need to invest in building stakeholders capacity (Text Box 8.2) is significant, due to commonly lower levels of literacy or access to technology.
- The need to use techniques tailored to diverse stakeholders; in particular, facilitating 'grassroots' engagement (Text Box 8.3).
- The need for good practice standards for stakeholder participation by decision makers, particularly elected representatives. Political realities affect the way decisions are made. They may also affect the potential to seek, value, and use stakeholder input. In many cases, political risk can be reduced through stakeholder participation.

Ultimately, community participation and consultation strives to achieve a range of processes and project outcomes as illustrated in Figure 8.1.

**Text Box 8.3 Capacity Building**

The United Nations Development Programme has defined 'capacity' as 'the ability of individuals, institutions and societies to perform functions, solve problems, and set and achieve objectives in a sustainable manner. Thus, 'capacity building,' or 'capacity development,' describes the task of establishing human and institutional capacity. Examples of this include training of community workers, strengthening of local government delivery, and the establishment of research and policymaking bodies. In recent time capacity building has become inseparable from development strategies.

'Specifically, capacity building encompasses the country's human, scientific, technological, organisational, institutional and resource capabilities. A fundamental goal of capacity building is to enhance the ability to evaluate and address the crucial questions related to policy choices and modes of implementation among development options, based on an understanding of environment potentials and limits and of needs perceived by the people of the country concerned' (Capacity Building - Agenda 21's definition, Chapter 37, UNCED, 1992). Capacity building includes:

- Human resource development – the process of equipping individuals with the understanding, skills and access to information, knowledge and training that enables them to perform effectively.
- Organisational development – the elaboration of management structures, processes and procedures.
- Institutional and legal framework development – making legal and regulatory changes to enable organisations, institutions and agencies at all levels and in all sectors to enhance their capacities.

**Text Box 8.4 Grassroots Engagement**

Community engagement refers to the process by which community benefit organisations and individuals build ongoing, permanent relationships for the purpose of applying a collective vision for the benefit of a community. Organising a community involves the process of building a grassroots movement, involving communities, while community engagement primarily deals with assisting communities to move through a process of change.

Marginalised people exist in many societies, due to a variety of reasons, including: low levels of education, poverty, limited access to resources, disabilities, elderly and/or sick populations, remote living, oppressive societal norms, language barriers, and other reasons. In most cases, marginalised people and communities have limited access to information and resources. Most often, this precludes or hinders their participation in public participation and consultation exercises, such as those undertaken for large dam and hydropower projects. Not only do these people lose the opportunity to contribute to development proposals—the development proposals lose by not harnessing local knowledge. Therefore, it is important to identify marginalised communities and recognise prevailing constraints in order that public participation practitioners can make special efforts (often utilising grassroots communities) to engage them.

There are many ways to facilitate grassroots engagement, all of which start with identifying the need for this engagement. These include building relationships, based on trust with the particular persons/communities, implementing capacity building to aid understanding, and organising persons/communities into groups, through which they can be engaged. Engagement means dialogue, which involves listening and understanding what people are saying—as well as imparting information. Much front-end effort is required with marginalised communities, prior to actual engagement about specific subjects, such as dam and hydropower development proposals. Indeed, these should be introduced only once there are relationships of trust and persons/communities have been aided to understand the material about which they are encouraged to participate.

This engagement needs to be ‘taken to the people’, in regular and on-going one-on-one or group meetings. These meetings must be respectful of local customs, traditions and language, organised at times that suit the grassroots communities, facilitated in a gender sensitive manner (for example, when engaging women’s groups, employing a female facilitator), mindful of community dynamics, and non-intrusive on daily household chores or other rituals. Where necessary, project information needs to be simplified to facilitate the grasp of concepts, magnitude and implications.

There is no substitute for on-going engagement: large projects, such as dam and hydropower facilities, have long incubation periods. Without regular engagement, people either forget about the project or become anxious, hindering progress and causing unnecessary stress. Therefore, even if project progress is slow, it is important to maintain communication.

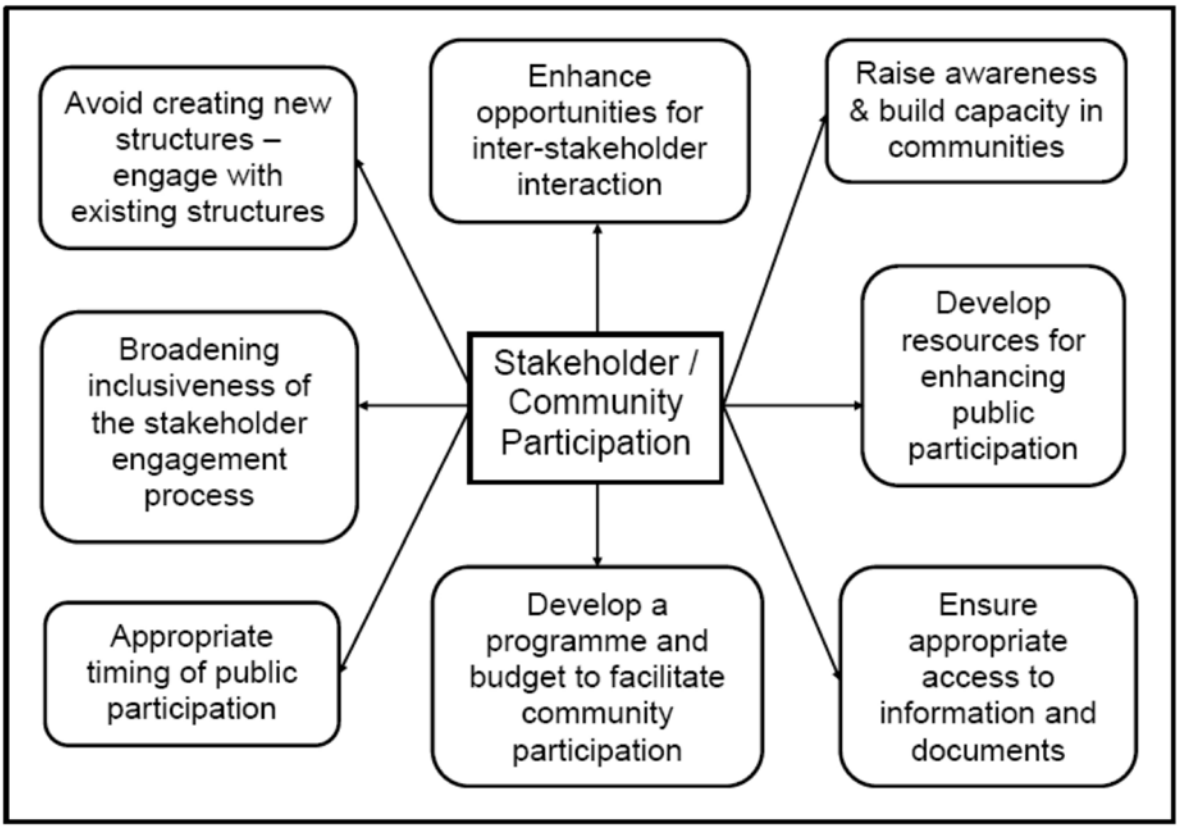



Figure 8.1 Process and project outcomes of stakeholder/community participation

| **Text Box 8.5 Background, Definitions and Key Concepts – Key Aspects** |
|---|
| • IAP2 defines stakeholder participation as 'any process that involves stakeholders in problem-solving or decision-making and uses stakeholder input to make better decisions'.<br>• IAP2 identifies three foundations on which effective stakeholder participation is built: values-based, decision-oriented and objectives-driven.<br>• The IAP2 Spectrum of Public Participation recommends that participation can be effective at five different levels—at the inform, consult, involve, collaborate and empower levels. The goal of participation, the 'promise' to the public, and the techniques used are different at each level.<br>• Avoid the DAD model (Decide, Announce, Defend), which does not constitute stakeholder participation.<br>• Stakeholder participation should be undertaken for all stages of the project lifecycle, at varying, appropriate levels of intensity.<br>• Gaining public acceptance of a proposed project, while desirable, is not an objective of stakeholder participation. A diversity of opinions is what leads to stronger, more sustainable decisions.<br>• Other key considerations for stakeholder participation include:<br>o The willingness of decision makers to use stakeholder input.<br>o The willingness of technical experts to engage with and listen to stakeholders.<br>o Engaging grassroots communities.<br>o Transparency of decision making processes, even to decision makers.<br>o The need to invest in building capacity in stakeholders or providing support to enable participation in decision making.<br>o The need to use techniques tailored to the diversity of the stakeholders.<br>o The need for good practice standards for stakeholder participation by decision makers, particularly elected representatives. |

| | |
|---|---|
| Discussion topics | The IAP2 definition of stakeholder participation arises essentially from developed economies. Discuss the applicability and ability to apply stakeholder participation in this context in your country. |
| | Elaborate whether or not, and how, community participation can be effected in your country to better improve decision-making. |
| Exercises | Identify examples of large infrastructure projects in your country where stakeholder/community participation was undertaken, and evaluate the contributions of stakeholders to improved decisions. |
| | What are the constraints to stakeholder/community participation in your country and how can these be overcome? |

## 8.2 Participation Mechanisms

| | |
|---|---|
| Purpose | The purpose of this session is elaborate on stakeholder participation mechanisms. |
| Objectives | ❑ For participants to understand what stakeholder participation mechanisms are available and how they are applied |
| Preparatory reading | UNEP (2007). Dams and Development: A Compendium of Relevant Practices for Improved Decision-Making on Dams and their Alternatives. Section 3: Stakeholder participation. www.unep.org/dams |
| | www.iap2.org |
| | The Citizen Science Toolbox<br>http://www.coastal.crc.org.au/toolbox/index.asp. |

The following are important aspects for consideration:

- Stakeholder identification.
- How to identify and reach those people affected by or interested in the outcome of a decision.
- Access to information.
- How to provide access to information to identified stakeholders.
- Informed participation in decision-making.
- How to facilitate stakeholder participation in the decision making process.

IAP2 has developed concepts to identify stakeholders, identify and communicate key messages, gather data from stakeholders, and process the data to provide useful information to decision makers. These concepts also encourages practitioners and decision makers to ensure that all stakeholders understand how their input has influenced a decision.

The following discussion is a characterisation of stakeholder participation, based on the perspective of IAP2's leading international experience with stakeholder participation. The discussion deals with mechanisms and institutional approaches, financing, timing, level and scope of participation, and participation plans. For the purposes of this Training Manual, the critical elements are the mechanisms for participation, and the institutional approaches to implementing them.

### 8.2.1 Stakeholder analysis and participation plans

A precursor to deciding on mechanisms for consultation is to identify stakeholders, analyse their interests and needs for participation, and, if possible, engage stakeholders in identifying their own preferred mechanisms.

| | | | | | | |
|---|---|---|---|---|---|---|
| | Project | Project | Project | Project | Project | Project decision |

**Table 8.1: Thailand - Public Participation Techniques in Project Development Stages**

| | initiation | design | planning | monitoring | Evaluation | for future |
|---|---|---|---|---|---|---|
| Public forum | • | | | | | • |
| Unofficial meeting | • | | | • | • | • |
| Working group for data exchange | • | | • | | • | |
| Workshop | • | • | • | • | • | • |
| Consultancy group | • | • | • | • | • | • |
| Individual Interview | • | | | | • | • |
| Focus group | • | • | • | | • | • |
| Opinion through Web-site | • | | | • | • | • |
| Opinion survey | • | | • | • | • | • |
| Emergency/Direct line | • | | | • | • | |
| Public hearing | • | | | | • | • |
| Document evidence | • | | • | • | • | • |
| Newsletter | • | | | • | • | |
| Study report | • | • | • | | • | |
| Video | • | | • | • | • | |
| Information center | • | | • | • | • | |
| News publishing | • | • | | | • | • |
| Information presentation forum | • | | • | • | • | • |
| Radio communication | • | | | • | • | • |
| Seminar to mass media | • | | • | • | • | |
| Community broadcast tower | • | | | • | • | |
| Study tour | • | | | • | • | |
| Presentation | • | • | • | • | • | • |
| Reporting in the official meeting | • | • | • | • | • | • |

Sources: Manual of Public participation, Executive Public Administration Foundation, Thammasat University, 2003 (in Thai)

For example, stakeholders who are directly affected may wish to be on a committee to remain engaged throughout the process. Other stakeholders may have a general interest in ensuring that appropriate processes are followed and/or good science is considered. These stakeholders, therefore, may only wish to receive newsletters, with the proviso that they can

approach a participant manager or communications officer if they have concerns or wish to contribute more actively.

A consultation plan should be developed early in the process, incorporating outcomes of the stakeholder analysis. It can be used in the following ways:

- To gain agreement from decision makers on the stages, purpose, and timeframe for participation.
- To be transparent about the decision making process for participants.
- To identify appropriate techniques for the different categories of stakeholders.
- To identify resources needed and the length of time for each stage of the process.

A consultation plan can be provided to possible participants for feedback on how they would like to be engaged, and/or whether certain stakeholders have been overlooked. Seeking feedback on a consultation plan is important as it is the first contribution of stakeholders to the participation process. In some cases, a consultation plan can be signed off as a formal agreement between parties.

There are five key steps in designing and planning a participation process:

- Gaining internal commitment.
- Learning from the public (or stakeholders).
- Selecting the level of participation and clarifying participation goal, objectives and promise.
- Clarifying decision processes and participation objectives at each step.
- Designing a participation plan.

Implied above is the need to clarify the scope of the decision and the decision process to be used in order to identify decision makers, as well as the level of influence stakeholders can have. This also implies understanding stakeholders' issues before determining participation methods and tools. Participation plans should be in place at the start of the participation process, and should be sufficiently flexible to respond to the needs of stakeholders..

### 8.2.2 Techniques and tools

There are many mechanisms for engaging stakeholders in decision-making. IAP2 suggests three formats generally used to achieve objectives:

- There is a range of techniques and tools that allows balanced and objective information to be shared.
- There is also a range of techniques that supports the gathering of data from stakeholders that then needs to be aggregated and processed into useful information for decision makers.
- Finally there are techniques for bringing people together so they can engage with information, provide feedback, generate new ideas, interact with other stakeholders, or participate in decision making.

Techniques[26] should be selected, based on the stakeholder participation objectives, stakeholders' preferences, the languages and cultures of stakeholders, resources available (including money, time and skills), and the size and complexity of the project. The choice of technique or mechanism should not drive the process. Rather, techniques should be chosen after the decision is made and participation objectives sought.

Tools most often used by those proposing major projects (such as dams and hydropower facilities) are identified in Table 8.2 and detailed below, with practical examples.

- **Newsletters, posters, displays, brochures, and websites.**
  These are common ways of informing communities about a project, project progress, stages of consultation, and how stakeholder feedback is being used.
- **Surveys to gather information and views.**
  These techniques have been applied on projects such as the Upper Kotmale resettlement (Sri Lanka), Andhikhola (Nepal), Ribble River Basin (United Kingdom), and Thai Baan (Thailand) community-led assessments. The Andhikhola project began its stakeholder participation with a 'baseline' survey to ascertain the needs and attitudes of stakeholders. The Thai Baan project used 'grassroots people's research' to identify issues and document facts. For the Upper Kotmale resettlement project, a socio-economic survey was conducted with affected communities. Ribble River Basin Planning administered a questionnaire survey of perceptions. Providing a feedback questionnaire is commonly used as part of an information package to obtain input, as per Coquitlam. It should also be noted that many participatory data gathering methods exist (for example, participatory rural appraisal) and they provide a useful entry point to engagement with affected communities.
- **Computer-aided technology.**
  While computer-aided technology has proved useful in large scale TVA consultation, it may be impractical or unaffordable in other situations. This process required a specialist IT firm to develop and manage interactive tools for gaining participant input, along with a suite of computers. The approach was appropriate to the TVA project because of the large scale of the stakeholder engagement process.

[26] While selecting appropriate techniques for particular stakeholder groups is important, it is equally important that the appropriate staff on a stakeholder participation team are employed for particular activities. For example, a female enumerator is more likely to constructively and fruitfully engage women's groups around subjects of interest and importance to women than would a male enumerator. Similarly, a male enumerator is likely to have more success engaging male groups, for example, members of communal farmers' associations.

**Table 8.2 Tools used most often by those proposing major projects (such as dams and hydropower facilities)**

| Tools to share information | Tools to gather and aggregate data | Tools to enable interaction |
|---|---|---|
| Media advertising | Surveys | Workshops |
| Newsletters | Comment forms | Discussion/focus groups |
| Open days and displays | Interviews | Public meetings |
| Web sites | Focus groups | Stakeholder committees |
| Briefings | Public hearings | Community meetings |
| Public exhibitions | Review panels | Dedicated project communication staff |
| Project offices/local resource and/or information centres | | |

- **Committees and working groups.**
  These are established to facilitate interaction of representatives for the duration, or a phase, of a project. These groups build trust, exchange ideas, jointly gather and analyse data, cooperate and collaborate. Such groups are often used for resettlement projects; for example, Nam Theun 2, Upper Kotmale, and the Salto Caxias Hydropower Projects. On other projects, the scope of the working groups was expanded to include training and capacity building, for example, at Eastmain A1/Rupert. At Andhikhola, the scope was expanded to involve permanent Users Organisations in planning, construction and management. While such groups are efficient and effective in engaging knowledgeable representatives in discussions, they should not be seen as a substitute for broader community engagement—either by the representatives or by the project team.
- **Dedicated consultation officers.**
  Dedicated project consultation officers were effectively utilised in the Coquitlam, Wivenhoe, Eastmain AI/Rupert, TVA and Olifants projects, where they contributed to the overall success of stakeholder participation plans. A characteristic of less well-resourced processes is that project managers, without specific consultation skills, are responsible for stakeholder participation. This was initially the case on the Nam Theun 2 project. The project then tried to address this shortcoming through a capacity building approach.

- **A local resource centre.**
  These were the locus of contact with stakeholders in the Coquitlam, Nam Theun 2 and Eastmain AI/Rupert projects, where displays and other information were placed. In some cases, these became a base for dedicated consultation officers.
- **Ability to engage participants in appropriate local languages.**
  This is essential on any project, as illustrated in the Olifants, Eastmain AI/Rupert, Upper Kotmale and Nam Theun 2 projects.

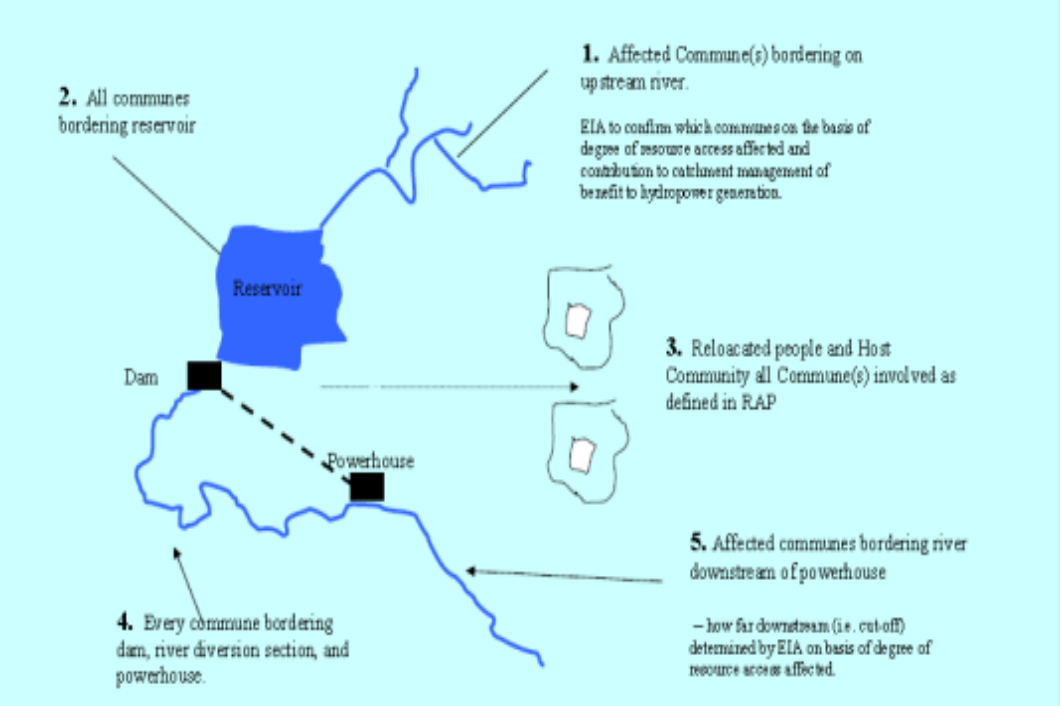
Other mechanisms that have proven useful on large dam and hydropower projects, especially in the context of emerging economies, are as follows:

- Radio and television.
- Flyers.
- Information hot line.
- Community liaison committees.
- Field visits.
- Direct mailings.
- Use of local researchers.

| **Text Box 8.6** | **Case study from Vietnam: the A'Vuong hydropower project** |
|---|---|

The A'Vuong hydropower project, which became operational in 2010, was developed (and is operated) by EVN. In the first phase of the project in 2007-2008, ERAV used a multi-stakeholder dialogue process to solicit views and inputs on draft provisions Decree Law. This involved national NGOs, mass organizations, other Ministries, Provincial representatives and Viet Nam's Development Partners in three one-day workshops over a period of about 14 months. These consultations proved highly important and necessary, bringing out wide-spread support for and participation in benefit sharing—particularly support from the Provinces and mass organizations (civil society) in Viet Nam. The project was reportedly set to proceed with ADB financial support in 2011.

*The figure below shows the process identification of participation.*




**Text Box 8.6 Participation Mechanisms – Key Aspects**

- The following are important aspects for consideration:
  - Stakeholder identification (how to identify and reach those people affected by or interested in the outcome of a decision).
  - Access to information (how to provide access to information to identified stakeholders).
  - Informed participation in decision-making (how to facilitate stakeholder participation in the decision making process).
- Stakeholder participation needs to be preceded by the identification and analysis of stakeholders and the formulation of customised participation plans.
- Some techniques and tools include:
  - Newsletters, posters, displays, brochures, and websites.
  - Surveys to gather information and views.
  - Computer-aided technology.
  - Committees and working groups.
  - Dedicated consultation officers.
  - A local resource centre.
  - Ability to engage participants in appropriate local languages.

| | |
|---|---|
| Discussion topics | From your own experiences, what are the most effective stakeholder participation mechanisms in your country? Furthermore, elaborate on which mechanisms should be avoided and why. |
| | In what way should stakeholders be empowered to effectively engage in stakeholder participation processes? |
| | Discuss the advantages and disadvantages of dedicated project communications staff and the establishment of project communication offices within project-affected areas. |
| Exercises | Prepare the framework of a stakeholder participation plan for application on a large infrastructure project in your country. |
| | Populate the framework with the most appropriate stakeholder participation mechanisms available to effectively engage with the project-affected people in the context of your own country. |

## 8.3 Institutional Frameworks

| | |
|---|---|
| Purpose | The purpose of this session is to provide a background to normative frameworks governing stakeholder participation. |
| Objectives | ❑ For participants to be aware of what normative frameworks are available and what is required for good practice in stakeholder engagement |
| Preparatory reading | UNEP (2007). Dams and Development: A Compendium of Relevant Practices for Improved Decision-Making on Dams and their Alternatives. Section 3: Stakeholder participation. www.unep.org/dams |

The analysis focuses on the institutional frameworks, including international and national frameworks applicable to dam and hydropower projects. These will need to be elaborated on at the country-specific level.

### 8.3.1 International

The importance of stakeholder participation in international water resources planning increased in the 1970s and continued through the 1990s, into 2000, and beyond.

A notable 'international framework' with a legal basis referring to participation is the Aarhus Convention and the EU Water Directive Framework and its pilot program for testing participation processes. The work of the WCD and UNEP's Dams and Development Programme also provide useful frameworks.

International funding and development bodies such as the World Bank, Asian Development Bank, the Inter American Development Bank, the Overseas Private Investment Corporation, the African Development Bank, the European Bank for Reconstruction and Development, the Canadian International Development Agency, and the International Hydropower Association have incorporated stakeholder participation into policy making and planning procedures

for impact assessment, management of catchments, river flows, water resources, environments and energy supply. Some include policies on vulnerable peoples or indigenous participation.

In most cases, funding is contingent on the firm application of existing participation principles, which influences the way participation is carried out in some countries, particularly where there has been little commitment to consultation in the past (e.g. Nam Theun 2).

### 8.3.2 National

Stakeholder participation is an increasingly accepted component of natural resources and environmental planning processes, primarily in developed economies. However even in these countries, there is little legal definition of the meaning of stakeholder participation and no defined standards for this should be achieved or measured.

In Canada, the Canadian Environmental Assessment Act is the Federal Act that governs the approval of projects, which have the potential to affect the environment. This Act includes in its definitions 'interested parties' meaning 'any person or body having an interest in the outcome of the environmental assessment for a purpose that is neither frivolous nor vexatious'. It defines proponents as 'the person, body, federal authority or government that proposes the project'. It offers no definition of 'public' or 'stakeholder'. It requires 'public consultation' 'where…the responsible authority shall ensure public consultation with respect to the proposed scope of the project for the purposes of the environmental assessment, the factors proposed to be considered in its assessment, the proposed scope of those factors and the ability of the comprehensive study to address issues relating to the project'. There is no further reference in the Act to any required process for or outcome from public consultation. This is typical of many pieces of environmental legislation worldwide and leads to proponents undertaking the minimum 'consultation' possible—typically advertising of the project, public exhibitions of the environmental assessment report, and receipt of submissions.

In the USA, stakeholder participation has been codified in environmental planning legislation as the Administrative Procedure Act and the National Environmental Policy Act.

In Australia, the planning and development assessment legislation in most states requires a proponent to consult with stakeholders, including government and the local community, and usually includes a minimum period for the public review of documents. However, once again no legal definition of consultation exists in either Federal or State legislation.

New Zealand is one of the few countries that does have a legal definition of 'public consultation'. This definition came from a case brought by the local community in 1992 against Wellington Airport. Essentially, any proponent who consults the public about a proposal must do so 'with an open mind' and be prepared to change the proposal as a result of public input. Recent legislation in New Zealand that requires public consultation includes the Resource Management Act of 1991, the Local Government Act of 2002 and the Land Transport Management Act of 2004. The Resource Management Act applies to dam projects in New Zealand.

South Africa also has well developed legislation governing public participation, underpinned by the Constitution of the Republic of South Africa Act, 1996 and the Bill of Rights therein. The Constitution is the supreme law of South Africa, and it provides a framework within which all other laws of the country, including environmental law, must be formulated and interpreted.

It states that 'Everyone has the right (a) to an environment that is not harmful to their health or well-being; and (b) to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that (i) prevent pollution and ecological degradation; (ii) promote conservation; and (iii) secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development'.

South Africa's National Environmental Management (NEMA) Act, 1998 provides overarching environmental legislation, with its primary objectives to provide for co-operative environmental governance by establishing principles for decision-making on matters affecting the environment, institutions that will promote co-operative governance, and procedures for co-ordinating environmental functions exercised by organs of state.

The Act provides for the right to an environment that is not harmful to the health and well-being of South African citizens; the equitable distribution of natural resources; sustainable development; environmental protection; and the formulation of environmental management frameworks. NEMA contains a set of principles that govern environmental management, and against which all environmental management plans and actions are measured. Sustainable development requires the consideration of all relevant factors, including the following (only ones relevant to stakeholder participation have been included):

- Environmental management must place people and their needs at the forefront of its concern, and serve their physical, psychological, developmental, cultural and social interests equitably.
- The participation of interested and affected parties in environmental governance must be promoted, and all people must have the opportunity to develop the understanding, skills and capacity necessary for achieving equitable and effective participation, and participation by vulnerable and disadvantaged persons must be ensured.
- Decisions must take into account the interests, needs and values of all interested and affected parties, and this includes recognising all forms of knowledge, including traditional and ordinary knowledge.
- Community well-being and empowerment must be promoted through environmental education, the raising of environmental awareness, the sharing of knowledge and experience and other appropriate means.
- Decisions must be taken in an open and transparent manner, and access to information must be provided in accordance with the law.
- The vital role of women and youth in environmental management and development must be recognised and their full participation therein must be promoted.

The actual achieving of the principles is underpinned by the following which are supported by separate Acts, the two most important of which are the promotion of Administrative Justice Act, 2000 and the Promotion of Access to Information Act, 2000:

- Access to information.
  Section 32 of the Constitution provides that everyone has the right of access to any information held by the State or another juristic person, and that is required for the exercise or protection of any rights.
- Fair administrative action.
  Section 33 of the Constitution provides the right to lawful, reasonable and procedurally fair administrative action.
- Enforcement of rights and administrative review.

> Section 38 of the Constitution guarantees the right to approach a court of law and to seek legal relief in the case where any of the rights that are entrenched in the Bill of Rights are infringed or threatened.

The South African Government ensures its Acts are implemented by way of regulations, which prescribe what must be achieved and how. In support of this, departments produce guidelines such as the Department of Environmental Affairs' EIA Guideline 4: Public Participation Process (2006).

While participation details are often not spelled out in legislation, many countries have extensive guidelines prescribing how participation should take place.

In the Mekong Basin, voices have been raised with increasing intensity over the past decades about the un-democratic and unaccountable nature of the basin's water resource menagement. In addition, participation has been enhanced mostly within the MRC's own structure and member states, without being extended for meaningful engagement with critical NGOs or local communities. The level of civil society and community participation varies by country; Thailand has the most active and effective advocacy groups and networks, while Laos and Vietnam have limited space for CSOs. In all four countries, struggles over large-scale water development projects have occurred (e.g controversies over Pak Mun Dam in Thailand; dams on the Sekong, Sesan and Srepok rivers in Cambodia; Son La Dam in Vietnam; and Nam Theun 2 Dam in Lao PDR). These struggles have attempted to increase grassroots participation in development processes, with an additional push from aid agencies or donors to those civil societies (Dore and Kate 2009)[27].

The recent approval of PNCP is also requires riparian countries to inform, discuss and seek agreement before moving ahead with any water project construction on the Mekong mainstream or transbounary tributaries. In addition, public participation is also required the legal EIA framework .

### 8.3.3 Corporate

Important factors for instigating and implementing good consultation practice are corporate policies of companies or specific agencies involved in dam and hydropower developments. Hydro Quebec, BC Hydro, SEQ Water, GIZ, TVA, and Meridian Energy stand out in this regard. Without their commitment to building good relationships with communities, good participation practice would not have been achieved. These companies have found from experience that public participation can provide long term benefits for their agency. In many cases, they have developed their own guidelines for participation.

The Equator Principles are based on the IFC Performance Standards. As of the 1st January 2012, the revised IFC Performance Standards also took effect for the Equator Principles Association Members.

The Equator Principles (EPs) is a credit risk management framework for determining, assessing and managing environmental and social risk in project finance transactions. Project finance is often used to fund the development and construction of major infrastructure and

[27] Dore and Kate (2009) De-marginalizing the Mekong River Commission, In Molle, F., Tira.F., and Mira.K (Eds.) Contested Waterscapes in the Mekong Region: Hydropower, Livelihoods and Governance. Earthscan, UK.

industrial projects. The EPs have been adopted by 76 financial institutions in 32 countries, and are applied where total project capital costs exceed US $ 10 million. The EPs are primarily intended to provide a minimum standard for due diligence to support responsible decision-making concerning risk.

The EPs are based on the International Finance Corporation Performance Standards on social and environmental sustainability and on the World Bank Group Environmental, Health, and Safety Guidelines (EHS Guidelines). In terms of the IFC, the relevant Performance Standards are as follows:

- IFC Performance Standards on Environmental and Social Sustainability (effective January 2012):
    - IFC Performance Standard 1 – Assessment and Management of Social and Environmental Risks and Impacts (2012)
    - IFC Performance Standard 2: Labour and Working Conditions (2012)
    - IFC Performance Standard 3: Resource Efficiency and Pollution Prevention (2012)
    - IFC Performance Standard 4: Community Health, Safety, and Security (2012)
    - IFC Performance Standard 5 – Land Acquisition and Involuntary Resettlement (2012)
    - IFC Performance Standard 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources (2012)
    - IFC Performance Standard 7: Indigenous Peoples (2012)

Equator Principles Financial Institutions (EPFIs) commit to not providing loans to projects where the borrower will not or is unable to comply with their respective social and environmental policies and procedures.

In summary, basic legislative or regulatory frameworks generally provided a minimum basis for consultation. In all cases of sound practice, participation went well beyond these frameworks.

| **Text Box 8.7 Institutional Frameworks – Key Aspects** |
|---|
| • The importance of stakeholder participation in international water resources planning is steadily increasing.<br>• A notable 'international framework' with a legal basis referring to participation is the Aarhus Convention and the EU Water Directive Framework. The work of the WCD and UNEP's Dams and Development Programme also provide useful frameworks.<br>• International funding and development bodies have incorporated stakeholder participation into policy making and planning procedures for impact assessment, management of catchments, river flows, water resources, environments and energy supply.<br>• At a national level, stakeholder participation is also receiving increasing attention, but more often than not, legislation and regulations are not well developed.<br>• An important factor for instigating and implementing good consultation practice is the policy of specific agencies or corporations involved in dam and hydropower developments. Corporations have found from experience that public participation can provide long term benefits for their agency. In many cases, they have developed their own guidelines for participation. |

| | |
|---|---|
| Discussion topics | Discuss normative frameworks governing stakeholder participation in the context of legislation and/or regulations in your own country. |
| | Is there a need for improved normative frameworks governing stakeholder participation and why? |
| Exercises | Elaborate on the key principles underpinning stakeholder participation that should serve as a minimum when undertaking large infrastructure projects. |

## 8.4 Other Aspects and Considerations

| | |
|---|---|
| Purpose | The purpose of this session is to deal with other aspects and considerations that are important to understand when undertaking stakeholder participation. |
| Objectives | ❑ For participants to understand aspects related to timing, the level and scope of stakeholder participation, financial considerations key concepts related to stakeholder participation, and aspects that contribute to good practice |
| Preparatory reading | UNEP (2007). Dams and Development: A Compendium of Relevant Practices for Improved Decision-Making on Dams and their Alternatives. Section 3: Stakeholder participation. www.unep.org/dams |

### 8.4.1 Timing

Stakeholder participation mechanisms involve three important activities:

- The provision of information to stakeholders.
- The gathering and aggregating of stakeholder input.
- Providing feedback on how stakeholder input affected a decision.

Recognition already exists on the importance of early access to information by stakeholders. There needs to be a minimum timeframe of at least six months to enable stakeholders to process the information—and sufficient time to enable people to effectively and meaningfully participate.

Good practice would support the early provision of information on the scope of the decision to be made. It is more effective to provide information early, even when the details of the proposal are incomplete. This is not to say that unsubstantiated information should ever be provided; rather, it is better to provide information as early as possible, even if that information is an acknowledgement that much remains unknown. Often developers and political decision makers hold back on providing information until their proposal is completely researched and finalised. This practice can increase stakeholder cynicism, because stakeholders, particularly vulnerable groups, see no potential for their input to be used and, therefore, they never enter, or later withdraw from, the participation process. This approach also reduces the opportunity to take advantage of local knowledge, which can be considerable.

Stakeholders need information throughout the entire project lifecycle. They are more likely to be able to process that information if it is provided in small amounts on a regular basis rather than as one complete document at the end.

It is important to provide sufficient and timely opportunities for stakeholders to engage with the information and discuss it with people they trust. Legislative or regulatory frameworks in countries such as Australia, New Zealand, UK, Canada and South Africa often require a minimum period of 28 days to allow stakeholders to submit comments. In reality, in many consultation processes, much longer time is allowed. (28 days is usually insufficient for vulnerable groups to work together to understand the information and to provide an agreed response on a major proposal).

### 8.4.2 Level and scope of participation

Stakeholder participation is frequently undertaken using the 'inform' or 'consult' levels on the IAP2 Spectrum of Public Participation. While one cannot state that stakeholder participation undertaken at any level is 'better' than stakeholder participation at another level, proponents are encouraged to engage stakeholders at the level that decision makers believe will result in the best, most sustainable decisions.

Typically, in major infrastructure projects like dams and hydropower facilities, stakeholder participation is undertaken at the 'inform' or 'consult' level at most stages in the development process. Organisations prepared to spend additional time and resources to work with stakeholders to gain their trust, expertise and their advice, often achieve more sustainable decisions and greater public acceptance of those decisions.

It is not often that decision makers are willing to seek new ideas from non-technical people to help them make what they see as technical decisions. It is even rarer for decision makers to allow stakeholders to sit at the decision making table (work at the 'collaborate' level).

### 8.4.3 Financing

Experience in working with organisations undertaking stakeholder participation processes is that there are many constraints on budgets for this work. This is evident in the reluctance of most project managers to disclose the budget set for the stakeholder participation activities.

Most dam and hydropower projects cost between US $ 45 million and US $1 billion to develop. In many cases, less than 1% of the project cost was spent on stakeholder participation activities, where budgets typically range between US $ 8,000 to US $ 350,000 over three years. When the ability to deliver a project relies on good stakeholder participation, it is surprising that so little is allocated for this purpose. Unpublished research among practitioners into participation budgets indicates that budgets are established in several ways:

- There is an increasing tendency to establish a budget, particularly for stakeholder participation in major infrastructure projects, such as dams and hydropower facilities, on a percentage of the total project budget. For instance, if a project has an overall budget of US $100,000,000, a stakeholder participation budget of approximately 1% or 2% of this might be established.
- A budget may be set once a stakeholder participation plan has been developed, based on the estimated amount required to deliver the plan.
- Sometimes no specific budget for stakeholder participation exists, and all activities must be funded directly from the project budget, resulting in competition for funds with the participation process.
- Sometimes no specific budget for stakeholder participation exists, because an international donor has agreed to fund a project only after it is approved. As a result, an agency must allocate its existing overstretched resources to stakeholder participation during the EIA and approval processes.

Good practice requires a realistic budget to be set during the scoping stage for any large infrastructural project that, as a minimum, covers the following activities:

- Participation planning.

- The development and distribution of effective communication materials.
- Some deliberative activities that enable stakeholder engagement with the technical information.
- Data gathering from stakeholders.
- Processing data into useful information for decision makers.
- The provision of ongoing feedback to stakeholders on how decision makers used the information.

When negotiating project finance, it would be appropriate to ensure sufficient funding is allocated for adequate stakeholder participation—to be undertaken by people with appropriate skills or to include time and resources to build necessary capacity. The advantages of this can be seen in the case of Nam Theun 2, where capacity building in participation improved the resettlement outlook.

Some data are available from specific projects:

- Wivenhoe Dam Upgrade: AUD $ 913,850 was spent on stakeholder participation, from a construction budget of AUD $ 70 million.
- Manapouri Power Scheme: The cost of stakeholder participation was of the order of 10% of the total cost of the review.
- Upper Kotmale Hydropower Project: It is estimated that over the six year period, stakeholder participation cost approximately US $ 60,000 (0.25% of the total project cost).
- Resettlement planning for the Salto Caxias Hydroelectric Power Plant. The total cost of this project was US $1 billion, with almost US $ 250 million going toward the mitigation of social and environmental impacts.

### 8.4.4 Criteria for good stakeholder participation practice

Key criteria for good practice stakeholder participation include:

- Mechanisms and institutional approaches.
    - The use of appropriate techniques that support genuine understanding of relevant project information, which enables informed stakeholder participation.
    - A basic regulatory framework of principles, supported by detailed guidelines.
    - Implementing stakeholder participation with transparent intent, effective listening skills, and respect for diverse opinions.
    - Willingness and skills to work through conflict[28] resulting from diverse views.
    - An effective process to gather data from stakeholders.
    - Appropriate aggregation of data to provide useful information to decision makers.
    - Decision makers who use the information to increase their knowledge and make better decisions.
    - Feedback to participants regarding how their contribution influenced the decision.
    - An effective evaluation process that facilitates new learning and improved practice.
- Financing.
    - Sufficient resources, including money, time and skills to achieve the stakeholder participation objectives.
- Timing.
    - Stakeholder participation that begins as early in the process as possible, including acknowledging questions yet to be answered.
- Participation planning.
    - Effective planning and the development of a stakeholder participation plan, which is separate from but supports the project plan. This includes stakeholder identification and analysis, as well as input from stakeholders on how they would like to be involved.
    - A commitment by decision makers to inclusiveness in participation.

These criteria can be used as a checklist when preparing for participation or as a basis for evaluating basic characteristics of a participation process.

[28] Conflict management is an integral component of stakeholder participation. Conflict management is the process of planning to avoid conflict, where possible, and organising to resolve conflict where it does happen, as quickly and smoothly as possible. Conflict management is a specialised discipline requiring the inputs and services of professionals specifically trained in conflict management. These professionals should be part of a stakeholder participation team to be deployed on a needs basis.

| **Text Box 8.8** | **Other Aspects and Considerations – Key Aspects** |
|---|---|

These include:

- The importance of timing for stakeholder participation and activities.
- The level and scope of stakeholder participation to be appropriate for particular projects and applied via customised plans.
- Financing, in particular, to ensure that stakeholder participation plans are adequately resourced for task and activities at hand.
- Defining criteria for good stakeholder participation practice.

| | |
|---|---|
| Discussion topics | There is always debate surrounding budgets and how much money should be spent to achieve the desired level of stakeholder participation. Discuss what you feel is adequate financing and what the desired outcomes should be for this level of resourcing. |
| Exercises | Using examples from your own country, identify six projects and evaluate the adequacy of stakeholder participation in the context of when it was initiated and how well the process was resourced. |

# 9 KEY REFERENCES

*Note: all case studies are taken from the UNEP (2007) Compendium on Dams and Development, unless otherwise mentioned.*

Asian Development Bank. (1998). Summary of the Handbook on Resettlement. A Guide to Good Practice. Asian Development Bank, Manila, Philippines.

Casley, D.J. and Kumar, K. (1987). Project monitoring and evaluation in agriculture. Published for the World Bank. The John Hopkins University Press, Baltimore.

DEAT (2004). Overview of Integrated Environmental Management. Integrated Environmental Management, Information Series 0. Pretoria: Department of Environmental Affairs and Tourism (DEAT).

Gagnon, L., Klimpt, J.E. and Seelos, K. (2002). Comparing recommendations from the World Commission on Dams and the IEA initiative on hydropower. In Energy Policy. November 2002 Issue.

Eastham J., Mpelasoka F., Mainuddin M., Ticehurst C., Dyce P., Hodgson G. and Kirby M. (2008). Mekong River Basin Water Resources Assessment: Impacts of Climate Change. Australian Commonwealth Scientific and Research Organization: Water for a Healthy Country National Research Flagship. Canberra, Australia.

Égré, D. (2006). United Nations Environment Programme – Dams and Development Project. Compendium of Relevant Practices. Benefit Sharing Issue.

Heinsohn, R-D. (2007). United Nations Environment Programme – Dams and Development Project. Compendium of Relevant Practices. Social Impact of Affected People.

International Association of Public Participation. (2007). United Nations Environment Programme – Dams and Development Project. Stakeholder Participation Mechanisms (Eds. V. Twyford and C. Bladwin).

IFC (2002). Handbook for Preparing a Resettlement Action Plan. IFC: Environment and Social Development Department. The World Bank Group, Washington, USA.

IFC Performance Standards on Environmental and Social Sustainability (January 2012): Performance Standard 5: Land Acquisition and Involuntary Resettlement (www.ifc.org).

International Finance Corporation - Policy and Performance Standards on Social and Environmental Sustainability (2006): Performance Standard 5: Land Acquisition and Involuntary Resettlement (www.ifc.org).

International Finance Corporation – Guidance Notes: Performance Standards on Social and Environmental Sustainability (2007): Guidance Note 5: Land Acquisition and Involuntary Resettlement (www.ifc.org).

International Hydropower Association (2004). Sustainability Guidelines (www.hydropower.org).

Molle, F, Tira, F, and Mira,K (eds.). 2009. Contested Waterscaps in the Mekong Region: Hydropower, Livelihoods and Governance. Earthscan, UK and USA.

Moore, D., Dore, J. and Gyawali, D. (2010). The World Commission on Dams + 10: Revisiting the large dam controversy. Water Alternatives 3(2): 3-13. www.water-alternatives.org

International Hydropower Association. (2011). Hydropower Sustainability Assessment Protocol: Background Document.

Roquet, V. (2006). United Nations Environment Programme – Dams and Development Project. Compendium of Relevant Practices. Compensation Policy Issue.

Sawdon, J., Thuon, T., S. Somchanmayong, and P. Wyrwoll (2013), 'Mekong ARCC Task 2: Climate Change and Vulnerability Assessment – Social and Economic Assessment', International Centre for Environmental Management (ICEM) and DAI-A thematic report prepared for USAID

Schmidt-Soltau, K. (2006). United Nations Environment Programme – Dams and Development Project. Compendium of Relevant Practices. Addressing Outstanding Social Issues.

Smits, Mattijs (2012) Hydropower and the Green Economy in Laos: Sustainable Developments in Hezri, A., Hofmeister, W. (Eds.), 2012, Towards a Green Economy: In Search of Sustainable Energy Policies for the Future. Singapore: Konrad Adenauer Stiftung.

South Africa (2010). South Africa. Environmental Assessment Regulations. Government Gazette, 33306, 18 June. (Government Notice R 543). 2010.

Southern African Development Community (SADC). (Undated). SADC Concept Paper on Benefit Sharing and Transboundary Water Management and Development. SADC Secretariat, Gaborone, Botswana.

Tapela, B.N., Matete, M.E. and Heinsohn R-D. A Training Manual on Selected Economic and Social Aspects of Large Water Infrastructure, for the Sustainable Major Water Infrastructure Development Programme in Eastern and Southern Africa. SADC, EAC, UNEP, InWEnt. (2009).

Taylor, C.N., Bryan, C.H. and Goodrich, C.G. (1995). Social Assessment: Theory, Process and Techniques. Second Edition. The Caxton Press, Christchurch, New Zealand.

The World Bank. (2004). Involuntary Resettlement Sourcebook. Planning and Implementation in Development Projects. The World Bank, Washington, USA.

The World Bank Position on the Report of the World Commission on Dams (2000) pp. 3-4. The World Bank's position on this matter was supported, among others, by the International Hydropower Association.

United Nations. The future we want. Resolution adopted by the General Assembly A/RES/66/288, 123rd plenary meeting. (27 July 2012).

United Nations. 2012. International Year of Sustainable Energy for All, 2012: Report of the Secretary General. Report A/67/314. (16 August 2012).

UNEP, (2007). Dams and Development: A Compendium of Relevant Practices for Improved Decision-Making on Dams and their Alternatives. www.unep.org/dams

*Note: this UNEP document as well as other related UNEP background studies are also available at the NSHD-website available; see: library*

United Nations Symposium on Hydropower and Sustainable Development. Beijing. (October 27-29, 2004). Available online at: www.un.org/esa/sustdev/sdissues/energy/op/. para. 11, p.2.

Vanclay, F. (2003). Social Impact Assessment International Principles. International Association for Impact Assessment Special Publication Series Number 2.

Van Wiclin, I. & Warren W. (1999). Sharing Project Benefits to Improve Resettlers' Livelihoods. In Cernea, M. (Ed). The Economics of Involuntary Resettlement: Questions and Challenges. World Bank.

World Commission on Dams (2000). Dams and Development: A New Framework for Decision Making. Earthscan Publishers: London (UK).

www.businessdictionary.com

www.iap2.org/associations/4748/files/foundations-bro.pdf

# 10 MRC-GIZ COOPERATION PROGRAMME BACKGROUND

GIZ is supporting the Mekong River Commission (MRC) in its work in poverty-alleviation and environmentally friendly hydropower development, as well as in protecting the population from the negative impacts of climate change in the Lower Mekong Basin. GIZ is directly supporting experts and managers from the MRC Secretariat, the National Mekong Committees, and the Ministries for water, energy and environment in the member countries. The GIZ programme aims to achieve long-term, sustainable improvement to the livelihoods of more than 60 million people in the Lower Mekong Basin.

The GIZ programme comprises the following components:
(http://www.giz.de/themen/en/30306.htm):

- Supporting the Mekong River Commission in organisational reform
- Supporting the MRC in pro-poor sustainable hydropower development
- Supporting the MRC in Adaptation to Climate Change in the Mekong region
- Adaptation to climate change through climate-sensitive flood management

**Supporting the MRC in pro-poor sustainable hydropower development**

GIZ is advising the Mekong River Commission (MRC) on developing and implementing instruments for testing and improving the sustainability of hydropower projects. For example, this includes instruments for analysing the impacts of hydropower development in catchment areas as well as approaches for establishing benefit-sharing mechanisms within water catchment areas and beyond borders. In addition, GIZ is promoting the exchange of experiences between various river basin commissions involved in sustainable hydropower development. The project is also developing basic and advanced training measures on sustainable hydropower.

**Network on Sustainable Hydropower Development in the Mekong Countries (NSHD-M)**

The NSHD-M is integrated in the project 'supporting the MRC in pro-poor sustainable hydropower development' of the Mekong River Commission (MRC) - GIZ Co-operation programme. The Network was established in October 2012 by universities and research institutions in the Mekong countries Cambodia, China, Laos, Thailand and Vietnam. The network aims to

- enhance knowledge and skills on sustainable hydropower development (SHD) at academic and research institutions,
- share knowledge and experiences on SHD in the Mekong countries,
- increase awareness on SHD at all levels of decision making,
- strengthen the capacity of stakeholders, including planners and decision makers, to cope with the challenges of SHD.

The network and its activities in the Mekong River Basin are supported by GIZ on behalf of the Federal Ministry for Economic Cooperation and Development (BMZ).

Further information on NSHD-M goals, activities and partners:
www.cdri.org.kh/index.php/nshdmekong.

Contacts: klaus.sattler@giz.de and thomas.petermann@giz.de

## About the authors

**Dieter Heinsohn** is Managing Director of ACER (Africa) Environmental Management Consultants, operating from KwaZulu-Natal, South Africa. He has more than 25 years' experience in environmental and social impact assessments, and public participation programmes. His work crosses many sectors, particularly bulk water (large dams, weirs, pump stations and pipelines) and industry (e.g. mining). More recently he has become involved in the renewable energy sector, primarily hydropower.

**Try Thuon** is a professional researcher with over a decade of experience in Cambodia and neighbouring countries, working on natural resource governance (land, forest, water, fishery), rural livelihood systems and agrarian changes, irrigation and water resource management, climate change adaptation and mitigation, REDD, and carbon trading.

**Wanpen Wironajagud** is Associate Professor at the Khon Kaen University, Faculty of Engineering. With a background in environmental engineering—particularly environmental health engineering—her key working areas are, amongst others, Environmental Management, Environmental Impact Assessment, and Strategic Environmental Assessment.

**Guoqing Shi** is an International Resettlement and Social Development specialist, based at the Social Development Institute (SDI) of Hohai University, as well as the National Research Center for Resettlement (NRCR) in China. In his professional work, which also includes various consultancies, he focuses on resettlement projects, often related to hydropower development.

**Silinthone Sacklokham** is Vice Dean at the Faculty of Agriculture, National University of Laos. Her focus is on Agro-Economics, which she recently combined with the topic of hydropower development.

**Van Sy Nguyen** is an environment specialist working at Vietnam Water Resources University, Hanoi. As the Dean of the Faculty of Environmental Engineering, amongst his key topics are Environmental Impact Assessment (EIA) of Water Resources Development Projects, Integrated River Basin Management, Wastewater Treatment and reuse for irrigation, and Wastewater Treatment Technology.

# Imprint

**Published by the**
Deutsche Gesellschaft für
Internationale Zusammenarbeit (GIZ) GmbH

Registered offices
Bonn and Eschborn, Germany

Mekong River Commission - GIZ Cooperation Programme
P.O. Box 9233
Vientiane, Lao PDR
T ++856 21 263263 ext 3061
mrc@giz.de

HCD subcomponent Sustainable Hydropower Development Network:
Network for Sustainable Hydropower Development in the Mekong countries (NSHD-Mekong)
www.cdri.org.kh/nshdmekong
www.giz.de/themen/en/30306.htm

**Responsible**
Dr. Philipp Magiera (philipp.magiera@giz.de)

**Editors**
Thomas Petermann (thomas.petermann@giz.de)
Klaus Sattler ( klaus.sattler@giz.de)

**Authors**
Dieter Heinsohn (South Africa), lead author
Try Thuon (Cambodia)
Wanpen Wirojanagud (Thailand)
Guoqing Shi (China)
Silinthone Sacklokham (Laos)
Van Sy Nguyen (Vietnam)

**Design and layout**
GIZ

**Photo credits**
© GIZ/Lucas Wahl, Thomas Petermann

**Reproduction**
The manual may be reproduced in whole or in part in any form for educational purposes with prior permission from the copyright holder.

**Place and date of publication**
Vientiane, January 2014

GIZ is responsible for the content of this publication.

On behalf of the
German Federal Ministry for Economic Cooperation and Development (BMZ)


Network for Sustainable Hydropower Development in the Mekong countries (NSHD-Mekong)