



**RESETTLEMENT: AN ESSENTIAL COMPONENT
OF WATER DEVELOPMENT PROJECTS**

BY

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INTRODUCTION

Throughout history, water has always been considered to be a critical natural resource on which mankind's very survival depends. Human history, from the earliest evolution of the human beings to the development of the main civilizations on the banks of some major rivers, like the Nile, Euphrates, Tigris and Indus, can be considered to be water-centred. These early important civilizations developed and flourished because of the many advantages the rivers gave them. In fact, the history of mankind can be written in terms of human interactions and interrelations with water, so much that they can be called hydraulic civilizations (Biswas, 1970).

For some 5,000 years, water retaining structures have been built in different parts of the world to ensure water availability for domestic and agricultural purposes on a reliable basis. As science and technology have advanced, it has been possible to construct larger and more complex water storage and distribution structures. In the 19th and 20th centuries, these advances coincided with the growth of the global population, when more water became necessary to support ever-increasing human activities in the domestic, agricultural and industrial sectors. The Industrial Revolution further accelerated the demands for water. With very significant advances in technology, human knowledge-base and the global economy, and plentiful availability of water, it was possible to match the accelerating water demand by increasing water availability. Furthermore, electricity requirements to support an ever-increasing global population and economic expansion increased as well. Since no large-scale generation of electricity is possible without water, water requirements increased concomitantly. Navigation became an important form of transportation to move goods produced by the Industrial Revolution. Populations steadily became more dispersed over a larger area, and the rates of urbanisation started to increase, as a result of which society had to be protected from the regular ravages of droughts and floods through better water control mechanisms and management practices. Thus, water control and assured water availability of appropriate quality became an

essential requirements for continuing economic and social development of the world (Biswas and Tortajada, 2001).

One of the most efficient ways to manage water resources is with the construction of dams, which create reservoirs for the storage of water and its future distribution. Currently, there are about 45,000 large dams, as defined by the International Commission for Large Dams (ICOLD). These are dams higher than 15 meters or higher than 10 m but with more than 500 m crest length, or more than 1 million m³ storage capacity, or more than 2,000 m³/s spilling capacity (ICOLD, 1997). While some of the existing dams are more than 2,000 years old, about 73% of them have been built only during the last 50 years. The reservoirs formed by these dams store some 3,600 km³ of usable water (ICOLD, 1999). Large dams have become an integral part of our basic infrastructure by offering indispensable benefits, like irrigation, hydropower, domestic and industrial water supply, flood control, navigation, fish farming and recreation (Lecornu, 1998).

Due to the limited and uneven distribution of water at the global level, many more dams are still needed if development is to be promoted and basic human needs are to be covered. This applies especially to the developing countries, which currently represent 70% of the world population and approximately 94% of the annual global population growth. In many of these countries, increased food production is only possible through improved or increased irrigation. Currently, it is estimated that 30-40% of the irrigated land worldwide relies on dams and that dams generate almost 20% of the electricity at the global level (Bird and Wallace, 2001). About 250 million hectares of land are under irrigation, growing one-third of food at the global level on less than one-fifth of the world's total cultivated area, and accounting for almost three-quarters of world water consumption. In conjunction with determined efforts to develop effective ways of saving water by avoiding losses in the distribution systems, and by applying better irrigation techniques, the United Nations Development Programme (UNDP) estimates a 3%

compound rate of growth in irrigated agriculture to meet the needs of an extra one billion people in the next 10 years (ICOLD, 1997).

Increasingly more emphasis will have to be paid in the future on population control, as well as on improved water demand management practices, including efficient use, re-use, and reclamation of water by various technical, economic, social and legal means. However, in addition to a more efficient water management, more and more water will be needed to meet the increasing human needs for domestic, agricultural, power and industrial sectors of the world, as well as to simultaneously satisfy environmental requirements. At present, it is estimated that approximately 8,000 km³ of water available is stored behind dams, which represents one and a half times the world's total annual water consumption. Hence, future water demands of the world cannot be met without the construction of new projects to store and distribute water (Gupta, 1998).

The primary objectives of every water development project in the developing world should include poverty alleviation, improvement in the standard of living of the populations, regional income redistribution, economic efficiency, and protection of the environment. All of these issues have to be assessed against the backdrop of considerable costs (both financial and human) that go into the planning, design and construction of any project. In addition to the classical criteria of technical, economic and financial feasibility, large development projects, like dams, have to satisfy a fourth and increasingly stringent criterion, namely social and political acceptance (Bhalla, 2001).

Because social and environmental issues were often not comprehensively addressed in the past during the planning and construction of large development projects, there is now strong opposition to such projects. Large dams, because of the size of the areas they cover, have become the lightning rods for opposition by various social and environment activist groups. One of the demands of these so-called environmental movements has been, and rightly so, the improved social and environmental performances by the

governments, lending institutions, and now the private sectors, involved in the planning and construction of dams. The increasing pressure exerted by these groups at the national and global levels has had many positive impacts, since the concerned institutions have been forced to improve the whole process leading to the construction of dams and their subsequent management. This awareness of social and environmental issues at the global level has resulted in changes of earlier processes and practices during the planning and construction phases of large dams. Two important benefits have been participation of the stakeholders and better treatments of project affected people (PAP).

There are many cases which indicate that governments have focused most of their attention in the past on technical and economic issues when planning and constructing dams. It is equally true that many projects have been implemented properly from the technical, economic, social and environmental perspectives, and that these projects represent not only the backbone for the socio-economic development of the countries and the regions, but they have also significantly contributed to poverty alleviation and protection of the environment.

There are new emerging social and environmental requirements which can contribute to radical changes in water and land management practices. In spite of the unquestionable social and economic benefits which could accrue from properly planned and managed irrigation projects, poorly planned and managed projects have also resulted in reduced economic benefits at significant social and environmental costs. This has turned many environmental and citizens' groups against irrigated agriculture, with the national and international media questioning the benefits of large-scale irrigation development projects in many parts of the world.

There are compelling reasons to improve the management and the efficiency of irrigation schemes, irrespective of the pressures from the environmental and social activists. Changes in land uses, as a result of irrigation, have sometimes resulted in extensive

waterlogging, salinisation, deforestation and soil erosion. Rapid expansion of irrigated areas, without major changes in the present management practices, could contribute to increasingly more environmental degradation, and also could have negative impacts on the projects themselves, unless appropriate countermeasures are taken (Tortajada, 1999). However, the discussions in the international arena have often gone out of proportion. What is demanded by the international environmental movements is that no new dams should be constructed, irrespective of their overall total benefit to the society. Numerous non-governmental organisations (NGOs) have been mostly promoting these dogmatic views. While some of these groups represent the interests of the populations affected, many others represent only their own dogmatic views. In their genuine or faked concern for the people and the environment, they many times ignore the basic needs and the rights of the low-income majority of the population of the developing world (Scudder, 2001).

The validity of the arguments for and against dams by governmental institutions and NGOs cannot be resolved one way or the other because of the lack of past and present post-project evaluations of the economic, social and environmental impacts (both positive and negative) of large dams from different parts of the world. Hence, only anecdotal information can be used to justify or refute the arguments made by the proponents or the opponents of the large dams. Thus, until and unless objective and reliable environmental assessment studies and post-project evaluations are carried out, and then analysed and disseminated, no definite conclusions on the overall benefits and costs of dams can be drawn.

RESETTLEMENT AND REHABILITATION

Settlement movements sponsored by governments or other agencies can be either voluntary or involuntary. Voluntary mobility, including rural-urban migration, stimulates economic growth, reflecting people's willing pursuit of new opportunities, and has also resulted in the design and implementation of settlement policies. In contrast, involuntary

resettlement is often a direct consequence of a planned change generated by a major development project or programme. It has been a companion of development throughout history, and has been indelibly written into the evolution of industrial as well as developing countries.

Involuntary resettlement does not include the choice to remain in place, and, if improperly carried out, the resettlers often may face more risks than opportunities. Because it represents such an extreme example, settlements resulting from involuntary relocation spotlight a number of problems which, to a lesser extent, characterize all types of new land settlements. Involuntary resettlement consists of two distinct, although closely related, social processes: displacement of people and reconstruction (or rehabilitation) of their livelihood. Displacement concerns on how land and other assets are expropriated to allow a project for the overall social good to proceed. Rehabilitation is related to the fate of the displaced people. In theory, the two processes are segments of a single *continuum*, in practice, the first does not always bring about the second (Scudder, 1991; World Bank, 1984).

Forced relocation is widely, but mistakenly, seen as a consequence of construction of mainly large dams when, in fact, it also occurs for many other sectors. Several categories of development interventions (primarily those predicated on major changes in land and water use) are likely to require mandatory population dislocation. Dam construction has been the largest single cause for involuntary resettlement, although its proportional importance currently is dropping as increasing numbers of people are moved due to the construction and renewal of transportation corridors (railways, highways, airports, transmission lines, irrigation canals, and others that require right of way); new ports and towns; urban infrastructure, such as sewerage systems, intracity roads, and subways; mining development; major industrial estates or zones that require considerable land; and protection for forest reserves or national lands (Scudder, 1996b; World Bank, 1994; Cernea, 1991).

Inefficient involuntary resettlement has been presumably due to the failure during project preparation to carry out social surveys of those who are to be dislocated as well as of those in the host-area, where people are to be resettled. This, plus the weak preparation of viable re-development alternatives, may be the reason why appraisals of resettlement plans are some times inappropriate. Costs tend to be underestimated, and even this budget is not released in a timely manner. Compensation payments may be delayed significantly. Since water ministries are generally dominated by engineers, they are often put in charge to implement the resettlement plans, even though they may have no prior knowledge and experience in this complex area. Social scientists may not have a career path in water ministries, and thus their numbers, and the roles they can play, may be seriously restricted. Inadequate concern for the severe consequences of involuntary dislocations, or the inability to prevent destitution by establishing those evicted on an alternative productive base, can be a major constraint for the success of a development project (Umaña, 1998).

Involuntary resettlement has been, and often still is, approached as a salvage and welfare operation, instead of as a multi-sided opportunity for the reconstruction of systems of production and human settlements that would represent improvements in the standards of living of those affected, as well as in the regional economy. In fact, the backbone of any proper resettlement plan is precisely the development packages, which should include a series of project funded provisions. The objective should be to reconstruct the production base of those who are to be relocated, and re-establish them as self-sustaining producers or wage earners. This way, involuntary resettlement plans would eventually improve the lifestyles of the people affected (Cernea, 1988; World Bank, 1984).

The complex social nature of involuntary resettlement practices should be appreciated by the government agencies and the project managers so that these can be directly addressed with the tools and resources available for the planned change. Rather than seeking mitigation only, as it is generally the case at present, the aim should be to restructure the

socio-economic development process, within which the PAP can play effective and productive roles. Additionally, given the complexity of the resettlement practices and the unimpressive track record for both land and non-land strategies, the first principle of any development project, which displaces populations, must be to reduce the number of people affected to the minimum extent possible, until financial and economic returns argue otherwise (Picciotto et al., 2001).

For rural areas, there should be two basic strategies to re-establish those dislocated both economically and socially: land-based strategies and non land-based strategies. Cash compensations may not always be the proper answer because such compensation may not be adequate, paid on time, and/or not invested productively, which many times is the case. If land for land compensation is not provided, many of the displaced population may end up in squatter settlements within a relatively short period. This of course undermines the objectives of any development project. Under the pressure of immediate real or perceived needs, people frequently tend to use cash compensations for purposes other than replacing the land, after which those displaced become destitutes and are forced to start farming on canal banks, or encroach, deforest or overgraze communal lands. (Cernea, 1988). Such results are neither beneficial to the individuals nor to the society.

A review of the experiences from the various World Bank supported projects indicate that involuntary resettlement has often been under-financed. One major reason for this has been that the costs of resettlement have been systematically underestimated. Examples of cost elements frequently missed are surveys, population and property census, foregone benefits from assets being lost, land reclamation and improvements at relocation sites, construction of adequate urban and rural infrastructures, implementation of rehabilitation packages, mitigation of the impacts on host populations, temporary losses or reductions in production and income of the affected population, cost of setting up new industrial and commercial enterprises, and provision of special health, education

and welfare services (Scudder, 2001). Thus, the inclusion of involuntary resettlement in a project is not by choice but by necessity, since its cost is an integral part of that of the total project. Therefore, it is neither desirable, nor appropriate, to provide a separate economic justification for resettlement, as one would do for a separate component.

Dissemination of information to the people who are to be resettled on the resettlement procedures, including relocation and compensation processes, is fundamental to promote participation and reduce stress. Lack of efficient and systematic information and communication channels between the agencies and the population can exacerbate misunderstandings and strengthen resistance to the project. It also results in situations where some individuals may try to manipulate the conditions to their own personal advantages. A programme to inform and educate the people concerned is therefore a prerequisite for obtaining the cooperation of the affected population (Umaña, 1998).

Involving local leadership and constructive NGOs is another basic requirement for successful resettlement operations. In many cases, the contributions of the NGOs can be substantial and beneficial. These could include conducting baseline socio-economic surveys, organizing resettler participation, intervening at the grassroots level, and in calling the attention of national and international agencies to problems emerging due to improper resettlement operations, especially when resettlement practices are inadequate (Umaña, 1998). In other cases, however, performances of the NGOs have been far from optimal. The evaluations of involuntary resettlement of major case studies (Bhalla and Mookerjee, 2001; Patel, 2001; Picciotto et al., 2001; Verghese, 2001) show that the involvements of the NGOs are not always productive. Each case has to be analysed individually. The involvement of the NGOs could result in positive impacts on government behaviour, but the impacts may be limited because of their own lack of interest or because of the lack of interest of the governments, their individual agendas which may not be the same as those of the affected populations, adversarial relationships with authorities, single cause advocacy, and availability of limited technical knowledge

and support. While there are resettlement programmes where there is not enough voluntary and constructive grassroots activities by the NGOs, some other programmes tend to fail precisely due to the NGOs, who create confrontational or abusive relationships with resettlement agencies, affecting negatively the PAP, since in many cases they even refuse to establish a dialogue (Picciotto et al., 2001).

In addition to the government agencies and the resettlers, the other major stakeholders in resettlement processes are the host populations living in the receiving areas. It is a mistake not to consider the role of the host population during the resettlement processes, only to discover during implementation that serious problems arise. Since only rarely can implementing agencies find empty lands for all the resettlers, the risks are that population density in receiving areas will increase suddenly to levels above the carrying capacity of the land and the natural resources available to both the hosts and the newcomers. Although the relations between the resettlers and the host communities are good in many projects (Fisher, 2001), serious conflicts may also arise as increased demands are placed on land, water, services, etc. Infrastructural and social facilities of the areas could be overwhelmed by the sudden influx of the resettlers, which could contribute to the development of tensions between the two groups.

In situations where there is not enough land available and a “fill-in” operation is planned, experience shows that hosts tend to see the newcomers as a source of cheap labour and may try to exploit them. If possible, education, water, health and other services should be provided not only to the resettlers, but to the host community as well. The social, economic and cultural integration of the resettlers with the host population is a slow, but important process, if viable communities, settlements and new social networks are to be built. Such a process can be accelerated by policy-driven planning that integrates and cements host-resettler inter-relationships, especially when the authorities can provide incentives to the host communities (Cernea, 1988).

The World Bank, the first major international agency to adopt a resettlement policy, shares the views of those critics who deplore bad resettlement operations in the past and support their concern for the welfare of the displaced populations. However, the Bank also recognises that the rejection of all involuntary resettlement is unrealistic, and in many situations, it is even unavoidable. Thus, the real issue is how to minimize the number of people who are to be resettled, and how to respond effectively to their needs. Several borrowers of the World Bank loans have enacted or improved domestic policies and legal frameworks for resettlement practices because of the pressure from the Bank (Picciotto et al., 2001; World Bank, 1994). However, to what extent the Bank itself changed its policy due to the pressures of the activist NGOs is an issue that needs to be examined.

While incorporation within a wider political economy and more institutional involvement have the potential to create new opportunities for displaced communities, the general record up to date has been that resettlement generally continues to be unsatisfactory. This includes lack of awareness of many of the governments and aid agencies of the complexity and dynamics of the resettlement processes, acceptance of inappropriate goals, and an inadequate perception and understanding of the impacts of resettlement on displaced people and hosts. Other reasons include lack of empowerment, loss of resiliency, and conflicts with the populations who have been resettled. The main goal of involuntary resettlement must be that both the population to be resettled and those among whom they are to be resettled, become beneficiaries of the projects. This would mean that the income and living standards of a large majority of the people concerned must improve to the extent that it is evident to both themselves and to the external evaluators. Improper resettlement creates dependence and impoverishment, which reduces the expected benefits from the projects. However, at the same time, one of the paradoxes of resettlement is that it may subsequently foster a more dynamic process of economic development and community formation. In fact, it has been observed that aspiring

entrepreneurs and leaders are apt to find themselves in a more flexible environment than before (Scudder, 1996a,b).

In rural areas, two basic strategies must be pursued for re-establishing the dislocated populations: employment strategies and, whenever possible, land-based strategies. Past experiences indicate that vocational training alone will not restore income, unless those displaced can actually get employment with their newly acquired skills. This is why improvement of productive systems and substitution of lost income-generating assets should go beyond simple cash payments to provide an alternative on income basis to the affected people. In the case of those displaced from urban or peri-urban areas, a combination of land-based and employment strategies may be appropriate. This is because this type of population usually derive their livelihood from jobs in the industrial, service sectors or from self-employment, but sometimes they may also own some farm land. Whichever strategy is followed, it must be flexibly translated into specific steps that should be taken and funded by the project concerned (Cernea, 1991).

Resettlement should ideally focus on a productive base than on “passive” compensation, like in the case of Itaparica (Umaña, 1998). In fact, its main objective should be to provide adequate compensation for all lost production and household assets, and to improve the productive base and income levels of the populations affected. Resettlers are normally dissatisfied with compensation rates, improvements such as the *ex gratia* payments are welcomed, but do not fundamentally redress past grievances. The income generating grants are often too small for most productive investments. Nonetheless, these payments and grants are sufficiently popular to encourage resettlers to want to be included.

While the resettlers tend to generally accept that the worst is behind them, in many cases, because additional efforts are being made to fully rehabilitate them, resettlers often tend to downplay benefits and overstate sufferings in an attempt to win more benefits.

Although resettlers are naturally inclined to claim that what they have received is inadequate, so that they can make the case for receiving additional benefits, evidence is overwhelming that when compensation rates for houses, land and other assets are generous, this is recognized by the resettlers, but only indirectly. When compensation is generous, it normally generates discontent among unaffected and thus non-compensated people. This is one of the best indicators that compensation was sufficient. It is confirmed by survey data showing that unaffected people would have liked to have been resettled themselves, if only they could receive similar compensations (Picciotto et al., 2001).

Social infrastructure and services are the components of the resettlement programmes that usually receive the stronger approval from the resettled populations. However, quality of the infrastructural services (water, electricity, access roads, communication networks, health, education, etc.) vary in the new villages compared to the old ones. While there are cases in which the services are better in the new villages than before resettlement, many other times resettlers complain about the erratic or poor quality of human services and the material supplies provided. More often, the complains are generic, and indicate failures of the local authorities to operate the services at a level commensurate with the structures built, or to fund adequate upkeep.

While improvements in the physical infrastructures are welcomed by the resettler communities, mainly in those cases where no infrastructure existed before, a distinction should be drawn between the physical infrastructure and the supporting services required to use and maintain it. Social infrastructures have to be accompanied by adequate staff and supplies: schools and clinics without teachers, textbooks, nurses and medicines are of no use to the people.

In many cases, failures include lack of infrastructures for water supply, sanitation or electricity for resettlers, which in some cases have contributed to serious health problems. However, the attitude of many resettlers also represent a handicap for their own

improvements, since many times they expect to be supported financially by the government eternally (Picciotto et al., 2001; Umaña, 1998).

In general, in recent years, most governments have become more committed to improve their performances in terms of the resettlement processes. However, it has to be recognised that there are many levels of commitment. Sometimes there is commitment at higher, more policy-oriented levels but relatively less at the working level. Other times, dedicated individuals in the field are frustrated by the indifferent attitudes at the higher levels, who may not provide them with the resources to perform their tasks effectively. Experiences indicate that some of the errors that the governments should avoid in formulating effective resettlement programmes are the absence of participation by the affected population; failure to establish an institutional mechanism to manage effectively the entire process; compensation rates that do not take into consideration the effects of the project on land prices in the region (if land prices increase sharply, compensation received on the basis of pre-project land prices will be inadequate); and lack of monitoring and evaluation of the processes (Umaña, 1998). Additionally, the relevant planning and the executing institutions responsible for resettlement should be strengthened, especially when they lack knowledge and experience necessary to design and implement resettlement processes appropriately.

Resettlement is a very complex process which goes far beyond the formulation of laws and regulations. Even the implementation of the most appropriate laws is often inadequate because of economic, social, institutional and cultural constraints, as well as due to issues like lack of vision, corruption, inefficiency, and lack of political will. Properly implemented, resettlement programmes can be an element of a nation's strategy to promote development and reduce poverty. However, this requires not only sound policies and adequate resources, but also major changes in the mind-sets of the officers concerned, to ensure that the resettlers receive their fair shares of the benefits from the projects which are directly responsible for their displacement (Scudder, 1996a,b).

It is essential that there are both practical and moral reasons to ensure that all affected people participate in the decision-making process, and are fully compensated and properly rehabilitated. All parties lose when projects are designed without the input of local knowledge and experience, when basic civil and human rights are threatened or violated, and when the projects are delayed as a result of resistance and protests from PAP because they may have been unfairly treated. Unless the difficult issues associated with the water development projects are considered properly, opposition to them could accelerate in the future as a result of which consideration of large dams as a solution to the water problems may become more difficult. The challenges, then, are to improve the relationships among dam planners, dam-affected communities, and human rights/environmental activists, to find ways to reduce environmental and social costs, and to formulate and implement policies sensitive to economic development, social acceptability and environmental protection (Fisher, 2001).

EXPERIENCES IN THE GAP REGION

The Southeastern Anatolia (GAP) Region of Turkey has been historically a low-productive plateau lying at the foot of the Taurus Mountains and drained by the Euphrates and the Tigris rivers. The region is rich in water, land and human resources. In terms of water, both the Euphrates and the Tigris rivers represent more than 28% of the surface waters of the country. The region has more than 20% of all economically irrigable land at the national level. According to the 1997 census, the ratio of working age population living in the area is above 48%. However, irrespective of all these strengths, the GAP Region has lagged far behind the rest of the country in terms of development indicators such as per capita income, life expectancies, infant mortality rates, literacy rates, manufacturing activities and health and infrastructure facilities. Even though its economy is based largely on rain-fed agriculture, the productivity of the area has historically been low as a result of high unemployment, with seasonal agricultural out-migration and continued rural to urban migration (Unver, 2000). Additionally, a major

inhibiting factor for the economic development of this area has historically been the non-uniform distribution of rainfall (Harmancioglu et al., 2001). The highly erratic flows of the rivers have limited their utilisation, since a low monthly flow is only one-ninth of a maximum monthly flow, and a dry yearly flow is one only-third of a wet year flow (Altinbilek, 1997).

However, it was the vast development potential of both the Euphrates and Tigris rivers which in the 1960s contributed to the idea of harnessing their waters for irrigation and hydropower generation. Towards the end of the 1970s, the State Hydraulic Works (DSI¹) planned a series of land and water resources development projects on these two rivers under the name of Southeastern Anatolia Project.

In 1989, it was decided that Güneydogu Anadolu Projesi (GAP), or Southeastern Anatolia Project, would not only be a land and water resources development project, but also a large-scale, multi-sectoral regional development activity. The project would focus not in the economic growth based on infrastructural development, but also on the regional development taking into consideration industry, transportation, urban and rural infrastructure, environmental protection and social sectors like employment generation, health, education, capacity building, gender equity, etc. The main objective of the GAP Project would be a water-based development strengthening social, economic, institutional and technical aspects of human development in an economically disadvantaged region by significantly increasing the living standards of its people (GAP Administration, 1999; Altinbilek, 1997). The water resources development programme of the region includes 13 groups of irrigation and hydropower generation projects in both the Euphrates and the Tigris river basins. It is proposed to construct 22 dams, 19 hydropower plants and irrigate 1.7 million ha of land. The overall planned installed capacity is about 7, 500 MW, with an annual hydroelectric production of 27 billion kWh.

During the early 1990s, the GAP Administration commissioned several social surveys from different institutions in Turkey. The surveys included a diagnosis of the problems of the people of the region: demographic and family structures, health services, level of education and educational services available, infrastructure, settlement patterns, employment and income levels, etc. It was realised that many people of the region would need assistance to adapt to the new conditions resulting from the rapid economic development of the areas. This vulnerable group was identified and attempts were made to determine how best both the government and NGOs could support them to cope with these anticipated changes.

Some of the surveys that were carried out included the Assessment of the trends of the social changes in the GAP Region by the Chamber of Agricultural Engineers in 1991-1993; Population movements in the GAP Region by the Sociology Department of the Middle East Technical University (METU), 1992-1994; Status of women and their integration to the processes of development in the GAP Region by the Development Foundation of Turkey in 1992-1994; Problems of employment and resettlement in areas which will be affected by reservoirs in the GAP Region by the Sociology Association, in 1992-1994; and Socio-economic studies on the management, operation and maintenance of the GAP irrigation systems, Department of Sociology of the METU, 1993.

In 1997, the GAP Administration, with the support of UNDP and the Food and Agriculture Organisation of the United Nations (FAO), initiated a project entitled “Planning and Implementation Project for Resettlement, Employment and Economic Investments for the Population Affected by the Birecik dam” (GAP Administration, 1997). The main objectives of this project were to:

- organise the affected populations so that they could express their own views and preferences in terms of selecting the areas where they could be resettled;
- inform them of their entitlements in terms of the various resettlement laws;

- advise them on how best the compensation money received can be used to generate stable and regular income on a long-term basis; and
- support them to generate employment and/or income-generating activities in their new settlements.

During the survey undertaken for this project, the heads of more than 1,300 households were interviewed from a total of 200,000 people in 36 settlements. This population had already been affected by the construction of three dams (Karakaya, Hancagiz and Hacıhidir), and would be further affected by four more dams that were under construction at the time of the study (Ataturk, Dicle, Kiralkizi and Batman), as well as by another dam, Ilisu, that is likely to be constructed in the near future. Heads of villages and people working in the local government institutions were also interviewed with the objective of finding out their views on and concerns with the entire resettlement process. The results of these interviews indicated that compensation (both level and timing of payment) was their main concern, since even though 1052 families would be affected by the dam, only 131 families had received their compensation money.

The results of this survey reflected not only the problems faced by the PAP in terms of lack of funds because of delays in receiving compensations, but also the socio-cultural difficulties they had to face to adapt themselves and their families into their new living conditions. The lack of timely and proper implementation of the expropriation and the resettlement laws made the processes difficult, frustrating and time consuming. A fundamental problem that repeatedly was mentioned by the PAP was the lack of economic activities and unemployment for the displaced populations, which could result in socio-economic hardships for thousands of families. The PAP expected in general a more timely resettlement planning, better levels and timely payment of compensations, their effective participation throughout the decision-making processes, including selection of sites where they could be resettled, support for employment generation, including self-employment, training and support for farming and animal husbandry-

related activities, availability of low interest credit facilities, equitable land distribution, and so on.

Based on the results of this survey, it was clear that the adverse impacts of the construction of the dams in terms of resettlement could be minimised if the PAP were included in the planning and the decision-making processes from the very beginning. In addition, compensations should be paid at appropriate levels on a timely basis and training and guidance services should be organised properly to ensure the channelling of the compensation funds to productive income-generating activities. If all these constraints could be simultaneously taken care of, the adverse socio-economic impacts of resettlement could be minimised on both short- and long-term basis.

The GAP Administration thus decided to initiate a pilot resettlement planning project in the area that would be inundated by the Birecik dam. The primary objective was to initiate a new approach to resettlement, which would be more acceptable to the people whose lives will be disrupted by the projects constructed, and to ensure that the standard of living of the PAP is better than what they enjoyed before. The approach would be participative and consultative, wherein the target population would be considered to be an integral part of the resettlement planning and implementation processes, with good communication and coordination between the governmental institutions involved and the people to be resettled. Due to the historical and the archaeological richness of the area that would be inundated by the project, the protection of the cultural assets was also considered to be a priority consideration.

Birecik Dam Resettlement Process

The Birecik dam is a multi-purpose dam, with emphasis on hydropower generation, and ensuring a reliable supply of water for domestic, industrial and agricultural purposes. Flood control would also be an important benefit of the project. The annual electricity

output of the dam is expected to be 2.5 billion kWh, and an area of 700,000 decars (10 ha = 1 decar), reaching up to the Syrian border, will benefit from irrigated agriculture. The construction of the Birecik dam started in 1996, and its first power generating unit was operational in 2001. The construction is based on a BOT (Build-Operate-Transfer) model, and the consortium for the project consists of Turkish, Belgian, German, Austrian and French firms. The dam will be transferred to the Government of Turkey after an operational period of 15 years (Yasinok, 2000).

The Birecik dam is a private sector initiative, whose main payback will come from the selling of hydropower generated to the State. Since the main focus of the dam was on electricity generation, the expropriation activities were not the responsibility of DSI, which normally is the case in Turkey, but of the Electric Works and Survey Administration, Ministry of Energy. This organisation is normally not responsible for resettlement activities. Thus, not surprisingly, it has had very little knowledge and experience in implementing large-scale resettlement activities.

The construction of the Birecik dam affected more than 30,000 people living in 44 villages, which included Halfeti, Birecik and Bozova districts in Sanliurfa province, Araban, Yavuzeli and Nizip districts in Gaziantep province, and the Central and Besni districts in Adiyaman province. The project inundated some 50,000 decars of agricultural land. The settlements that were affected in terms of inhabited areas and/or agricultural and grazing lands are shown in Table 1 (Yasinok, 2000; GAP Administration, 1998).

The first step of the participatory resettlement process initiated consisted of establishing communication with the populations affected and to find out their concerns so that the social, economic and spatial preferences of the people affected, could be defined. Surveys in 13 settlements were carried out over two years, which resulted in responses from 1307 families. Concurrently, open meetings were organised in the different settlements in order to establish a direct dialogue with the populations. This was also a confidence-building

measure. During all these meetings, villagers were given appropriate information on both compensation and resettlement practices, their legal rights and obligations, and overview of resettlement experiences from both within and outside the region.

The populations were specifically informed on the criteria for evaluation of their properties, and on how the valuation committee would price their resources and assets so that the total compensation could be determined. They were advised to point out certain specific characteristics of their assets and resources to the valuation commission, which would ensure that they receive higher, but just levels of compensations. This was a totally new process, since these types of information and support were not available to PAP in any earlier project in Turkey. This campaign to inform the people of their rights and how valuations would be made, generally resulted in the families receiving higher levels of compensation than otherwise may have been the case.

The people who decided to be resettled in the project area, worked jointly with the concerned governmental institutions to identify the locations of their new villages. In addition, a Multipurpose Community Centre (CATOM) was opened by GAP Administration in Halfeti District Centre, with the objective of providing information on a regular basis and establishing regular communication with the settlers. The information provided included an overview of the impacts of the Birecik dam at the national, regional and local levels; how it would affect the local populations directly and indirectly, expropriation, compensation and resettlement-related issues; preferred locations for their new settlements; types of housing they need or could expect, etc.

In terms of compensations, the resettlers had several alternatives to choose from. They could either opt for cash payments and then be responsible for their own resettlement, or request the authorities concerned to use the cash amount to facilitate their resettlement. Generally, however, it appears that the people preferred to resettle as a group in areas near to the original settlements with which they are familiar. Settlers who requested cash

compensations were paid the amounts stipulated by the law, although there were considerable delays in receiving such payments in many cases. They also received support from the government for the construction of their new villages. Some people preferred not to accept compensations in cash, but requested instead that the authorities construct their houses and infrastructural facilities. Other resettlers decided to accept their compensation amounts in cash and then resettle in urban areas of their choice by themselves, while some others requested the support of the government to move into urban areas, and thus forego the cash compensation alternative.

Table 1. Settlements and population affected by the Birecik dam

District	Settlement	Population (1997)	Area (decars)	Plots affected	Level affected
Birecik	Meteler	171	3457	190	Fully
	Altinova	1595	311	14	
	Surtepe	312	22	37	
	Gecittepe	173	3034	219	Fully
	Keskince	946	6718	555	Fully
	Dorucak	549	625	75	Fully
	Ayran	2592	821	95	
	Sub-Total	6228	14,988	1185	
Halfeti	Kavaklica	464	2510	289	Fully
	Sirataslar	817	568	65	
	Bulakli	307	2	1	
	Kayalar	522	423	3	
	Bozyazi	906	355	9	
	Gozeli	890	762	7	Fully
	Saylakkaya	843	223	2	
	Savasan	299	597	41	Partly
	Cakalli	573	690	28	
	Merkez	2560	2322	232	Partly
Sub-Total	8181	8452	677		
Bozova	Kiragili	326	158	11	
	Killik	604	639	11	
	Urunlu	855	83	4	
	Irmakboyu	532	707	28	Partly
	Ozgoren	307	1161	18	
	Karapinar	154	131	12	

	Sub-Total	2778	2879	84	
Nizip	Kavunlu	422	4312	572	Fully
	Samandoken	291	1120	40	
	Keklik	180	1561	308	
	Toydemir	193	131	12	
	A. Cardak	813	3927	772	
	Y. Cardak	285	1002	221	
	Erenkoy	563	1916	412	Fully
	Gumusgun	220	1384	354	Partly
	Kamisli	412	929	46	
	K. Meydani	114	1510	159	Fully
	Sub-Total	3493	17792	2896	
Yavuzeli	Kasaba	284	605	94	
	Sarilar	1473	432	9	
	Sub-total	1757	1037	103	

District	Settlement	Population (1997)	Area (decars)	Plots affected	Level affected
Araban	Elifkoy	2595	317	5	
	Fistiklidag	715	949	16	
	Hirarkoy	880	490	14	
	Tarlabasi	109	396	7	
	Ciftekoz	310	100	0	
	Sub-Total	4609	2252	42	
Adiyaman					
Besni	Kizilin	2140	642	28	
Merkez	Gumuskaya	1610	837	35	
Merkez	Akdere	1175	667	34	
	Sub-Total	4925	2146	97	

Source: Yasinok, 2000, GAP Administration, 1998.

Through the participation, information and communication strategies, the villagers were made fully aware of their rights and financial entitlements under the Turkish compensation and resettlement laws. The population was given all the relevant information on the criteria by which their land and properties would be assessed for expropriation by the government, and thus the levels of compensation they could expect. The GAP Administration staff advised them as to which aspects of their land and

properties should be specifically shown to the assessors so that they received proper compensations. The villagers followed these advices, as a result of which their compensation payments were assessed at correct levels, which were higher than the initial estimates prepared by the government. Unfortunately, it appears that this was not appreciated by some of the relevant institutional authorities who were partners of the GAP Administration in the resettlement process. Payments of higher compensations thus became an important element which directly contributed to confidence building with the local populations. Such results of the awareness-raising aspects of the participatory process can generally be considered to be positive.

In order to learn from their own approaches, the GAP Administration carried out an internal evaluation on “the planning and implementation project for resettlement, employment and economic investments of the population affected by Birecik dam” (GAP Administration, 2000). Following it, an independent study was conducted to evaluate the resettlement process due to the Birecik dam and of the salvage operations in the city of Zeugma. The analysis that follows refers to this last study, where the author participated, and will focus only on the resettlement process due to Birecik dam (Biswas and Tortajada, 2000).

An important component of the independent study was to conduct an objective assessment of the process used for resettlement of the population affected by the construction of the Birecik dam, and the results thereof. As a part of this study, extensive discussions were carried out with the GAP Administration staff associated with the Birecik dam resettlement study, both in Ankara and in Sanliurfa. Numerous meetings were also organised with the representatives of the regional offices of the General Directorates of Agrarian Reform and Rural Affairs, and regional branch of the Public Works, Governor of Sanliurfa, District Governor of Halfeti, and Mayors of Halfeti and Sanliurfa. In addition, several newly resettled villages were visited, especially those

considered by the GAP Administration staff to be good examples of the participatory resettlement process.

The assessment was carried out less than six months after the people had moved into the new settlement areas. Hence, it was possible to assess only the process through which the people were encouraged to participate, the outcomes of their participation, and the transfer of the affected population from their own land to the new resettlement zones. The main lesson of this resettlement process is the fact that the populations were consulted, informed and supported before and throughout the resettlement period by the government, which contributed to the building confidence between the populations and the related agencies. There were also handicaps, which were mainly due to shortages of funds, delays in execution, and the lack of coordination between the several governmental agencies in charge of the different tasks.

As noted earlier, there are many levels of commitment, including at the higher policy-making and at the field levels, some of which varies within and among the institutions. However, the commitment and performance of the populations, and also that of the NGOs, are also decisive for the success of the resettlement and rehabilitation processes. The delay in relocating the households do not always result from the lack of political will. Many other factors, including delays in decision making from the resettlers, conflicting views of the villages, lack of responsibility and self-dependency, also affect the resettlement and rehabilitation processes negatively.

Based on the analysis carried out, the delays in the resettlement and rehabilitation processes cannot exclusively be attributed to the government agencies. PAPs are also responsible for the delays in the implementation of the process. For example, in the case of the Birecik dam, some people decided that they would take the money and resettle by themselves. Hence, new villages were planned for a certain number of people in terms of housing and associated services. However, all of a sudden, most of the people of a certain

village who had already taken their compensations and had left, came back indicating their desire to be resettled with their previous neighbours. Not surprisingly, this situation could not be solved promptly, since new housing and infrastructure requires planning, executing and budgeting, which needed time. The population who came back received support from the government in terms of temporary housing, but would have to wait to be resettled.

In another case, the inhabitants of one of the villages to be resettled, changed their mind several times regarding the site where their new village would be relocated. It was until they realised that the construction of the other villages was going on, and that theirs would not be ready by the time they would have to leave the present ones, that they finally accepted the place that had been initially selected by them and the government staff. Obviously, the construction started much later than planned and thus would be finished much after the rest of the villages are complete.

The populations of the several villages were informed of the risks they could face if they opted for cash compensation, left the region and did not invest the money productively. Extensive information was provided to the resettlers of the people who had left the region with cash compensation payments. If these cash payments were not properly invested, those people ended up in the streets as financial destitutes. The objective of this exercise was to make populations aware of the importance and consequences of their own decisions. The result was that 100% of the people that were relocated, or relocated by themselves due to the Birecik dam, stayed within the region.

The payments the resettlers received for their properties were not only legal but were also just, but these payments were invariably given very late. The people who had been resettled at the time of the current assessment (July 2000), and those who still have to be resettled, are generally poor, not properly educated and have very little political power. However, this did not entitle government staff to act unfaithfully, or not to provide fair

share of the compensation money, or not to make timely payments. In future resettlement cases, the GAP Administration, as well as the other governmental organisations, should make even more vigorous effort to make the people not only aware of what are their legal rights, but also assist them to ensure that their legal rights are respected, and they receive the appropriate compensation payments in a timely manner.

An interesting finding was the difference in attitude and knowledge of the people who were resettled because of the construction of the Ataturk (Tortajada, 2002; Biswas & Tortajada, 1999) and the Birecik dams. In the case of the Ataturk dam, the population had only a vague idea about the amount of expropriation payments they were entitled to receive, as well as to their legal rights in general. People were passive, and to a large extent, mostly grateful for whatever benefits the government had decided to give them. Even some 10 years after the completion of the Ataturk dam, as of August 2000, there were still 330 families who were waiting to be resettled. They still did not know where exactly they would be resettled, or when. Since the government has paid for the housing of the people, they have been waiting passively and patiently for almost a decade for the government to give them the necessary information, and hopefully resettle them somewhere some time in the foreseeable future.

In contrast, many of the resettlers of the Birecik dam who were interviewed were aware of most of their rights, and they were not passive or shy in asking for what they were entitled to by the law. Their expectations were much higher than the resettlers of the Ataturk dam, and they were more active and forceful in terms of demanding their rights under the Turkish laws. It was also evident that they were somewhat more aware of the power of the media to bring their plights to the attention of the nation, or even internationally, compared to their counterparts in the Ataturk dam, who were basically naive in terms of using the media.

Even though the GAP Administration succeeded in the awareness-raising aspects with the population, it did not have the same success with the governmental institutions involved with the resettlement process. The overall intentions may have been good, but better planning and timely implementation still have to be achieved by the different institutions responsible for implementing the resettlement process. It has to be realised that the participatory process is not an end by itself, since it will only have limited impact on the lives of the population, if the process is not implemented timely. The end is to achieve a better life-style of the people who are resettled. Clearly, a participatory process is a fundamental requirement in terms of communication, information, and support to the population, but it should be recognised only as the beginning of the process to pay back the affected population what they are entitled to.

In order to achieve successful results, all resettlement processes should be monitored and the results evaluated by independent professionals who are not responsible for either the project development or the implementation of resettlement. The results of the monitoring process should be evaluated periodically, and remedial measures must be taken promptly to address the shortcomings. These evaluation reports should be part of a strategy to encourage all the participating institutions to the resettlement process to complete their agreed activities on time so that the expected benefits accrue to the PAP, and the promises of delivery of services are kept, and not delayed, as was the case for the Birecik dam.

Another issue to consider in the resettlement issues is timing. In general, large development projects, like dams, are constructed and put into operation over a 10-15 year period. However, the case of the Birecik dam is different, since the private consortium responsible for its construction completed it in only 5 years. It indicates that private sector groups have the potential and the interest to construct and operate large dams in far shorter time than what was the average earlier. This also means that the governments must re-think the overall resettlement strategies. The resettlement plans must be

formulated and implemented in far shorter times for BOT projects, compared to government-constructed projects. Private-public partnerships have to be developed so that the planning and implementation stages of the infrastructural projects can take care properly of all relevant environmental and social issues, including resettlement. The failure to do this would make timing another important reason for a poor implementation of the social components of water development projects.

At present, resettlement practices are being closely scrutinised by social and environmental activists, as well as by the international media. If the governments and the private sector cannot assure that the environmental and the social components of development projects can be taken care of sensitively and efficiently, it would make future construction of large dams more difficult. Lack of support to water projects by the global community can make it very difficult for any new project to be implemented. Inadequate resettlement practices can result, besides from the failure of the project, in a general reluctance by the external financing agencies to provide funds for the construction of large dams. It could delay, or even stop, construction of new dams, even when they are properly planned and their overall societal benefits are beyond any question.

The participation of private sector opens a new dimension in the construction and operation of large water development projects. Since private sector companies are likely to become increasingly more involved in the construction of large dams, they should recognise the need to improve their environmental and social performances. Companies will have to give further thought as to how the resettlement practices can be further improved, even when they are not directly responsible for this aspect, as was the case for the Birecik dam.

The rapid advances in the environmental awareness of the public in recent years has meant new pressures on both the public and private sectors, mainly by the NGO

movement and its ability to expose wrong doings, real and imaginary, through electronic and printed media. The public has become increasingly aware of the social and environmental impacts of large development projects. Accordingly, irrespective of the past and the present situations, social and environmental impacts of future development projects must be overwhelmingly positive. This includes resettlement practices, which must show significant improvements in the coming years.

The main objective of any development project should be to improve the lifestyles of as many people as possible. Such projects, however, must not have serious negative impacts on people who may have to pay very high costs. In this case, the very rationale of constructing a new project can be seriously questioned. Resettlement can be a serious concern for large dams, and it will continue to remain so, until and unless the practices are improved significantly. In this connection, participatory resettlement process which was formulated for the Birecik dam is a good beginning.

However, in the final analysis, it is not the participatory resettlement process that is most important, but what actually happens to the people who are to be resettled due to the construction of large development projects. In this specific case, many people have already been resettled, but equally many others are waiting to be resettled. No conclusion can now be drawn as to what are likely to be the social and environmental impacts on the resettlers in the future. Would they be able to pursue appropriate income generating activities in their new environment? Or, would their future lifestyles be better than the past? It would probably take another 10 years or so, before definitive conclusions can be drawn in the effectiveness of the participatory resettlement process attempted for the Birecik dam regarding long-term socio-economic development for the resettled populations. In the intervening years, it would be desirable to monitor the lifestyles of the people who have been resettled, and those who will be resettled, on a regular basis. This will ensure that the shortcomings can be taken care of as and when they surface. Monitoring will also add to our knowledge-base, which is particularly weak because of

absence of data and information on the efficacy of the resettlement processes due to the construction of large dams in the past.

FINAL REMARKS

The importance of water development projects for the socio-economic development of developing countries cannot be denied. However, there are several important issues which can no longer be ignored either. First, many governments have failed to identify and minimize the social and environmental negative impacts resulting from the construction and operation of large projects. Second, irrespective of the importance and the necessity of actively engaging the affected populations in the decision-making processes, these have been mostly ignored in the past. Third, it is only recently that involuntary resettlement is being recognised as a development process and not simply as a salvage operation as has often been the case in the past. Fourth, efficient information and communication strategies have neither been formulated, nor been implemented between the government agencies responsible for resettlement operations and the PAP, in spite of the substantial benefits that are likely to occur to the people that are to be resettled as well as the project itself.

Anecdotal evidence supports the fact that both the adverse and the positive social and environmental impacts of large water projects have been seriously underestimated. However, absence of objective post-project evaluations means that no conclusive and definitive statements can be made on the overall impacts of the large dams on the society and the environment.

Even though resettlement is one of the major issues for which large dams have been criticised in recent years, it should be noted that not all involuntary resettlement practices in the past have been left much to be desired, be they due to the construction of large dams or for other development projects. However, in the current era of social and environmental awareness, what may have been considered acceptable earlier can no

longer be considered acceptable at present. It is thus essential that resettlement practices must be sensitively and efficiently carried out so that the people who are to be resettled also become real beneficiaries of the projects, instead of paying the costs, as has often been the case earlier for many such people.

Government agencies often lack the experience to develop income-generating activities which are well suited to the needs and the capacities of the resettlers. Thus, cooperation with the NGOs and the private sector should be solicited from the initial stages of project planning. Properly managed, these groups can make good contributions which could benefit the affected populations. Best practices for involuntary resettlement practices should include good participatory processes, where governmental authorities and people concerned could plan and implement the resettlement requirements together.

However, in the final analysis, participation for the sake of participation is of no use to the resettlers or to the project. Although better planning practices could lead to better implementation, this assumption has not always been true in the case of involuntary resettlement. As a secondary, or even tertiary operation, resettlement continues to receive inadequate attention during implementation phases. Additionally, past experiences indicate that economic rehabilitation of the resettlers is one of the weakest aspect of resettlement planning.

Once government agencies and officers in the field understand the importance and complexity of involuntary resettlement, they are more likely to address it properly and sensitively with the resources allocated to the process. Instead of seeking mitigation measures only, they should aim to re-establish a socio-economic development process, from which the resettlers could benefit over the long term. However, it is important to remember that involuntary resettlement dismantles production systems and may affect irreversibly the lifestyles of many people. A comprehensive consultation process and the development of strategies in terms of income improvement would help, but it would be

an almost impossible task to find alternatives that would satisfy all people. It is also possible that resettlers may change their minds as conditions change, or they receive new information. Furthermore, some may feel that no compensation would be enough for forcing them to change their previous lifestyles, and move from the land where their forefathers had lived.

Participatory resettlement, as initiated in the Birecik dam, is a step in the right direction. However, discussions and consultations are not enough: they must result in concrete actions on a timely basis. This will require political will, and understanding by the government institutions responsible, that resettlement is a critical issue which must be performed satisfactorily. While resettlement is receiving increasing attention, the fact still remains that more needs to be done in most development projects.

NOTES

¹DSI, under the Ministry of Energy and Natural Resources, is the institution responsible for managing and developing water resources projects in Turkey. It is responsible for irrigation development, flood control, hydropower generation, and provision of drinking water to the large cities of Turkey, and other associated water-related activities. It is also the executing agency for land expropriation for water development projects. Approximately, one- third of the Turkish population has directly benefited from the water from the dams, pipelines and treatment plants constructed by DSI.

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