Putting People's Perspectives into Environmental Action in Caspian Sea Communities

This note summarizes the key findings of a social assessment (SA) carried out in Caspian Sea communities in Azerbaijan. The SA was carried out within the framework of the government's National Environment Action Plan (NEAP). The Caspian Sea SA helped identify social assessment stakeholder perspectives and has important implications for the government's National Environment Action Plan (NEAP) and follow-up investment project. A grant from the Swiss Government, facilitated by the Swiss Executive Director's Office of the World Bank provided institutional and financial support to this social assessment.

The SA process originally set out to:

- Systematically identify social development and participation issues affecting segments of the population suffering from environmental problems
- Define a sustained participation framework to ensure that stakeholder needs are integrated into environmental planning and management
- Identify appropriate institutional mechanisms to ensure that environmental action is inclusive and responds to the needs of the poor and the vulnerable
- Propose a monitoring and evaluation framework, including social impact monitoring, for the management of the environmental agency and for environmental projects.

While six stages were originally proposed to meet the SA objectives, due to budgetary constraints only two stages were carried out:

1. Develop an understanding of environmental priorities of communities affected by the rising level of the Caspian Sea
2. Organize stakeholder workshops to integrate social development and sustainable participation concerns into the NEAP.

Participatory Process and the NEAP

The NEAP process was carried out by a joint team of Azerbaijani professionals, international consultants, and World Bank staff, and was supervised by a high-level government steering committee. During the process a multi-disciplinary team of local experts prepared environmental and natural resource sector studies and analyzed environmental issues within their physical, sectoral, and institutional contexts. Experts from the Committee of

This note was prepared by Ayse Kudat and Bulent Ozbilgin of the World Bank, and Ahmed Musayev of the Sorgu Sociological Research Center in Baku, Azerbaijan. For more information on the social assessment, contact Ayse Kudat, The World Bank, 1818 H St., NW, Washington, DC 20433, USA, Fax: 202-522-2510, E-mail: akudat@worldbank.org. To view other Social Development Notes on social assessment, please visit the World Bank's website at: http://www.worldbank.org, and click on the “Social Assessment” section in “Development Topics.”

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Ecology, other government and nongovernmental organizations, the Academy of Sciences, and representatives of local administrations, industries, ministries, media, universities, and regional authorities were closely involved throughout the development of the NEAP and, in particular, during the identification and discussion of national environmental priorities and criteria for ranking those priorities.

Within the NEAP about 50 different actions were recommended to be undertaken to address existing environmental damage and prevent new problems in the Caspian communities. Carrying out all of these actions would have been beyond the financial means of the government; thus, setting priorities assumed great importance. The SA assisted the NEAP team in using three main criteria to prioritize these actions: (a) the extent of adverse social and human damage, (b) danger of loss of irreplaceable natural resources, and (c) adverse employment conditions, loss of income, and other economic hardships suffered by impacted populations.

Using these criteria, the SA pointed to the following priority actions:

- Relocation of households in the affected regions of Neftchala, Lenkoran, and Astara
- Prevention of secondary pollution of the sea from oil-related activities
- Restoration of some sea-based industries and re-creation of jobs lost as a result of damage to these industries
- Restoration, relocation, or protection of infrastructure of national importance, such as critical land-based transportation links.

The participatory approach helped incorporate citizens' needs and priorities into the national planning process and promoted greater ownership of NEAP objectives and follow-up action. The process also increased the visibility of environmental institutions within the government, and in the country as a whole. In addition environmental awareness was enhanced and the capacity of institutions dealing with environmental issues was strengthened.

During NEAP preparation media coverage of environmental issues increased and civil society organizations, including national associations of women, took greater interest in environmental protection. However, ensuring sustained participation of stakeholders in environmental issues will be an ongoing challenge, given the pressing economic and political problems facing the Republic.

**Project Implications**

To ensure that implementation of the most pressing actions would not be delayed until the NEAP was finalized, an Urgent Environmental Investment Project was initiated in 1997, financed by the World Bank and other donors. This project represented a first step toward NEAP implementation in Azerbaijan, addressing the following components: (a) Sumgayit City mercury cleanup, (b) sturgeon hatchery development, (c) oil pollution mitigation, and (d) institutional strengthening. The SA's contribution was limited to work on the sturgeon hatchery, but an earlier SA on the Baku Water Supply and Sanitation Project had, in 1994, called attention to oil pollution problems.

The sturgeon hatchery component included in the Urgent Environment Investment Project was designed to help address the decline in sturgeon stock and provide relatively high-income jobs for a number of people in one of the most economically depressed regions of the country. The service and manufacturing industries supporting fishing and caviar production would also be strengthened. Thus, in the long term, the component would improve the sustainability of sturgeon fishing and caviar production, thus helping to preserve sturgeon's historic importance to Azerbaijan's culture and economy. Additional benefits included increasing the commercial value of sturgeon, protecting sturgeon from extinction, and preserving the value of sturgeon as a source of medicine.

**Box 1. Changes in the Caspian Sea Since 1996**

Since the onset of the NEAP in 1996, the water level in the Caspian Sea has declined slightly. This has significantly altered the relative order of priorities in the NEAP, as protection measures became less urgent and time was gained to develop a coastal zone protection plan before new areas are flooded. Nonetheless, damages already incurred are pervasive, with substantial social, environmental, and economic costs. Moreover, damage is ongoing in some areas because of wave action and significantly higher groundwater levels.
Social Development Concerns

The key social development concern was for vulnerable populations, including those displaced by armed conflict who had returned—or intended to return—to their original homes, and those displaced or otherwise impacted by the environmental disaster caused by the rising level of the Caspian Sea. The concerns of the internally displaced populations were addressed through a comprehensive process of SA, initiated in 1994 and completed in 1998 (Jonathan Brown, "Listening to People in Azerbaijan, Post-Conflict Reconstruction: A User’s Perspective," Washington DC: World Bank, 1998) and through the Azerbaijan Pilot Reconstruction Project, financed by the World Bank and other donors. The concerns of people affected by the Caspian Sea disaster were incorporated in the NEAP and in the follow-up Urgent Environment Investment Project. While steps were taken to strengthen national and regional institutions overseeing relevant environmental actions, social impact monitoring was not incorporated in the Project’s monitoring and evaluation component.

In early 1996 a team of local social scientists and Bank social assessment specialists visited the Caspian Sea communities and carried out a rapid assessment consisting of ten focus-group meetings and a large number of semistructured individual interviews. The team also visited local government representatives and central government institutions. Subsequently, a team of local social scientists and members of the local Association of Women in Development was trained to carry out surveys and focus-group meetings in affected areas. The findings were presented to concerned government agencies and shared with the NEAP team. The findings were also presented at the national stakeholder seminar organized to establish environmental action priorities for Azerbaijan.

Main Findings

The main findings of the SA were:

- Income and employment are the most important concerns for local people living in the coastal settlements of Neftchala, Lenkoran, and Astara. The rising sea level is perceived as a priority only when it is recognized as a main cause of unemployment. In Neftchala, for example, most unemployment is perceived to be related to the sea-level rise because it was responsible for destroying the sturgeon hatcheries and fishing in that region. Consequently, almost 90 percent of the people in this region view the rising level of the Caspian Sea as a priority concern. In Lenkoran and Astara, in contrast, where only a few households suffered economic harm, rising sea levels are not perceived as a hazard. Unlike many of the residents of Neftchala, the people of these regions have alternative means of survival, such as subsistence farming.

- Residents of coastal settlements are experiencing severe problems from exposure to poor sanitary and health conditions as a result of rising sea levels. Most residents indicate that their health has deteriorated since sea levels began to rise; 71 percent of Neftchala residents think that their health was better before the rise in sea levels, and 36 percent indicate that their current health situation is poor; the situation is similar in other regions. In all of these regions cases of asthma, tuberculosis, and rheumatism have been reported. Lenkoran and Astara, in particular, have experienced an increase in snakes and bugs around houses due to a proliferation of swampy areas formed by receding sea water.

- The sea-level rise has serious, indirect impacts on the level and quality of education available in these three regions, mainly because of the damage to transportation and communication lines. Although the majority of educational facilities were not directly affected by rising sea levels, many roads are blocked and communication among settlements is, at best, irregular. Consequently, it has become extremely difficult to find teachers willing to go to these settlements.

Box 2. A Dedication to Prof. Ahmed Musayev

The social assessment described in this note is dedicated to Professor Ahmed Musayev, who died at an early age in December 1997. Professor Musayev was director of the Sorgu Sociological Research Center of the Institute for Social Management and Political Sciences at the University of Baku, and founder of the Azerbaijan Social Science Network. His contributions to many social assessments of Bank projects have been invaluable.
areas. The declining quality of education further erodes the base on which new local development initiatives can be started. Until roads are improved and local educational institutions start functioning, the future could imply further economic decline in the coastal settlements.

- **Basic infrastructure has deteriorated, due mainly to the effects of rising sea levels, but also to poor construction.** Electricity is the only source of energy for most people, but supply is unreliable. Good quality drinking water is usually not available. In each of the three regions surveyed, moreover, rising ground waters have had a significant effect on the water supply. In most cases, clean water is not available. People usually have to fetch water from a distance, and in most cases, they must pay for it. Most households that cannot afford to pay must use poor quality water.

- **Households in the city of Baku are not directly affected by rising sea levels.** Very few houses in the suburbs of Baku were affected by the rise in sea level. Most concerns stem from the economic and environmental effects of the sea-level rise, such as blockage of sewerage lines and deterioration of productive enterprises.

- **For most households in the affected communities, migration to other regions is not viewed as a desirable option.** But a large percentage of the directly affected population would be willing to move to other areas of the same village. Relocation efforts thus far have been limited in scope and usually do not meet the real needs of affected people. People are unwilling to move for a variety of reasons, including a perception that those relocated are not faring well. Relocation would be acceptable if livelihoods in the new locations were sustainable. Relocation policies should take into consideration the issue of long-term sustainability with respect to further (indirect) impacts of sea-level rise (for example: further salinization of the land, lack of transportation, lack of basic infrastructure, and lack of opportunities for alternative employment).

- **Most people trust the central government and think that their problems can only be solved through government intervention.** Favoritism, together with adverse conditions caused by both rising sea levels and overall economic conditions, have caused people to lose trust in local administrations. They would prefer to give local governments a limited role in further impact mitigation. They expect the central government to take the initiative with regard to mitigation measures, in collaboration with international organizations experienced in such activities.

- **Because the adverse impact of the rising sea levels varies widely from region to region, a case-by-case assessment of affected communities is necessary to achieve maximum protection.** In some settlements, for example, almost half of the villages were destroyed by the sea, while in others, only a small number of households was directly affected. In designing mitigation strategies, therefore, it is important to assess the extent of damage in each settlement.

- **There is a clear need for timely and accurate information regarding the cyclical nature of the rise in sea levels, expected sea-level changes, and future mitigation measures.** Although people are somewhat aware of the cyclical nature of sea-level rises, some believe that the sea has stopped rising and is now regressing. This perception, coupled with the desire to stay in their birthplaces—which in some cases are located on valuable parcels of seaside land—cause people to stay in heavily affected areas and undertake limited measures to survive until the sea returns to its former level. Recognizing the uncertainties surrounding the rise in sea levels, residents in all three regions expressed a need for forecasting the sea-level rise through scientific methods, requiring the involvement of international organizations.