

**PAKISTAN'S NATIONAL  
CONSERVATION STRATEGY:  
RENEWING COMMITMENT  
TO ACTION**

**Report of the Mid-Term Review**

by

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### **ABOUT THIS REPORT**

**This report was prepared by the External Review Team (ERT) and is based on findings of the Team, including other results from the Pakistan National Conservation Strategy Mid-term Review (MTR). The main period of work took place during 1999-2000. Comments were received between July-November 2000. This final version was completed in November 2000.**

# **CHAPTER 1. MEETING THE CHALLENGE OF SUSTAINABLE DEVELOPMENT IN PAKISTAN**

## **Introduction**

1.1 The Mid-Term Review (MTR) of Pakistan's National Conservation Strategy (NCS) is very timely. Ten years after preparations for the UNCED meeting in Rio, almost 15 years after the Brundtland Report, and almost three decades after the Stockholm Conference on the Human Environment, Pakistan is still faced with daunting challenges. The tremendous effort of devising a NCS that might meet the needs of a country faced with multiple challenges of population growth, poverty, issues of governance, and decades of war and turbulence along its borders deserves recognition and commendation at the start of this report. Pakistan's NCS followed some international guidelines, but it was pioneering in many ways. From its initiation, it has wisely focused on issues of sustainable natural resource use and environmental protection.

1.2 This report is based on a year-long effort to examine a decade's process on developing and implementing the NCS. The NCS is unprecedented in terms of its scope and therefore the review and the draft report evoked much discussion on people from the various sectors, levels of government and different organizations active in Pakistan's environment and development initiatives. The potential beneficiaries of the NCS ideally would encompass the entire population of Pakistan. The NCS has such a vision and it would be good to measure impact at this level. This has not been possible, and, indeed, there is not a good sampling of the impact has had at the level of communities or households, or of perspectives about it at this level. Nevertheless, within the bounds of available information, the External Review Team which has prepared this report is of the view that the MTR portrays an accurate picture of the strengths, weaknesses and future needs for Pakistan's National Conservation Strategy. Further information about the approach for the review and the organization of this report is provided in Chapter 2. Here, we wish to focus on sustainable development as it might be applied in Pakistan, and the relationship of this subject to the NCS.

1.3 As described in Annex 1, the NCS has three overall objectives: (1) conservation of natural resources; (2) sustainable development; and (3) improved efficiency in the use and management of these resources. Achieving these objectives is to be based on three operating principles: achieving greater partnership in development and management, merging environment and economics in decision-making, and focusing on durable improvements in the quality of life of Pakistanis. But various people pointed out during the course of the MTR, that the NCS was not intended as a full strategy for sustainable development, although much of the language of the NCS is couched in terms compatible with the concept. There is to some extent a split within Pakistan between those who view the past and future of the NCS as primarily concerned about environment and conservation, and those who believe that it should become even more firmly oriented towards sustainable development in the future.

1.4 We start this report with a brief discussion of the challenges facing sustainable development implementation within Pakistan because it is the direction

we believe will need to be taken in the future. And, indeed, we found much evidence that the NCS has tried to make the appropriate linkages between environmental sustainability, economic growth and poverty reduction, since conservation will not work in Pakistan if these linkages are ignored.

## Fundamental Constraints

1.5 Many fundamental development constraints remain within Pakistan. These have affected the delivery of NCS programs. These constraints include: inequitable economic growth and widespread poverty, gender concerns, feudal social structures that are reflected in political power relationships, absence of local government and exclusion of the majority of the population in decision-making and access to basic services, unabated environmental degradation and failure of institutions to provide sufficient integration of environmental, social, and economic policy objectives. Of course, the NCS is intended to address some of these problems, but the barriers still remain and some are worsening. Some perspectives are noted below.

1.6 *Economic growth.* The growth momentum in Pakistan has slowed down in the 1990s. While annual economic growth was 6% in the 1980s, it fell to 5% in the early nineties, and has further declined to 4% since the mid-90s<sup>4</sup>. This trend was not sufficient to significantly raise living standards for a population growing at an average annual rate of 2.6%. Equally important, growth in Pakistan has not been accompanied by desired social and environmental outcomes.

1.7 *Human development.* Social indicators in Pakistan continue to be among the worst in the world. Pakistan lags behind South Asia countries in several areas. Infant mortality is 95 per thousand live births relative to 77 on average in South Asia, illiteracy is 59% relative to 49% in South Asia, and access to safe water is 62% relative to 81% in South Asia<sup>5</sup>. Viewed from a gender perspective or in absolute numbers, these statistics point to an even worse performance. Thus, “approximately 30 million people cannot meet minimum nutritional norms, 42 million adults (over two-thirds of the population) are illiterate, 58 million people do not have access to health facilities, 28 million people are without safe drinking water and 87 million people lack basic sanitation facilities<sup>6</sup>.” Some progress has occurred in the past decade, for example on the number of people with piped drinking water. A recent study<sup>7</sup> indicates that the number of the absolute poor has increased from 24 million to 42 million (i.e., almost doubled, between 1990 and 1994), providing further evidence of deterioration in human development indicators. While population growth remains high (2.6%), it is reduced from 3.2% a decade ago.

1.8 *Environmental sustainability.* While environmental data are limited and of variable quality, there is evidence of widespread environmental degradation in Pakistan. Water availability has declined from 5,300 cubic meters per capita in 1951 to a borderline 1,200 m<sup>3</sup>/cap today (barely above 1000 m<sup>3</sup> per capita, the indicator of water scarcity). A recent survey by the Government of Punjab revealed that water from 10 of 11 surface samples, and 2 of 4 ground water samples, was unfit for human consumption. While agriculture continues to consume over 90% of annual

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<sup>4</sup> World Bank 1999a.

<sup>5</sup> World Bank 1999a.

<sup>6</sup> Planning Commission, GOP 1998.

<sup>7</sup> Mahbub-ul-Haq Center 1999.

freshwater withdrawals, about 38% of Pakistan's irrigated land is waterlogged and 14% is saline. Application of agricultural chemicals has increased by almost a factor of ten since 1980. Air pollution exceeds WHO guideline values in almost all samples collected by provincial environment departments. Despite important efforts, deforestation has also continued unabated, with forest cover shrinking by about 3.1% annually and woody biomass by about 5% annually—the second highest rate in the world. There is some hope that the expanding investment in agroforestry will eventually partially compensate for some of these losses. Energy use continues to be very inefficient and commercial fuels not accessible to rural households and the poor. Despite considerable natural gas reserves, the country continues to use high sulphur fuels, leaded gasoline, and about 60% of households continue to rely on solid fuels. Finally, since 1992, floods have affected millions of people and damaged thousands of houses and large areas of cropland<sup>8</sup>.

1.9 *Industrial pollution* is contributing substantially to environmental degradation in both cities and some parts of the countryside. The information available suggests that both large and small industries are functioning outside of reasonable guidelines. However, the combination of domestic and international factors may be starting to have an impact on the development of cleaner production processes, especially for some of the more newly established operations. The debate around National Environmental Quality standards, linked to the NCS, is playing a role, as is the growing recognition of new international standards such as ISO 14001.

1.10 *Biodiversity and natural resource conservation.* The situation for Pakistan's very limited natural forest cover has declined over the past decade despite the Forest Action Plan. The Balochistan juniper forest, unique in the world, continues to be cut beyond its capacity to regenerate. The condition of mangroves in the coastal zone is precarious, and even more precarious is the status of certain aquatic wildlife, such as the Indus freshwater dolphin. In the mountainous regions of Balochistan, the NWFP, the Northern Areas and AJK, the wild populations of goat and sheep, including the Markhor, have declined to a point where they have been extirpated from many valleys. The situation is serious when considering many of the formerly abundant species. Fortunately, there is evidence of some species slowly rebounding where conservation programs have been put in place, apparently even for the very rare snow leopard. When it comes to examining genetic diversity, the problems are not well understood throughout the country in relation to the onslaught of biotechnology, genetic mining for plant species and varieties, and the impact of the biosafety protocol under the Biological Diversity Convention. These are issues, however, that are now being considered in more depth through the National Biodiversity Action Plan (BAP) and with biosafety legislation under consideration.

## **Costs of Inaction**

1.11 *The costs of inaction.* From a macro-economic perspective, when human development and natural resource depletion are taken into account, the *genuine domestic saving*<sup>9</sup> of the country is in reality much smaller than what is indicated by the traditional *gross* or *net domestic saving* rates of the National Accounts. In Table 1, *genuine domestic savings*, estimated to be 2.5% of GDP, or less than a quarter of

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<sup>8</sup> Tariq Banuri and Shaheen Rafi Khan. 2000. *Environmental Strategy Background Report*. SDPI for MELGRD and World Bank

<sup>9</sup> An indicator of the true savings of a country after taking into account investments in or depletion of human, physical, and natural capital (World Bank, 1999c)

gross domestic savings, is clearly indicative of Pakistan's declining natural asset base.

**Table 1. Genuine Saving in Pakistan**

<b>PAKISTAN</b>	<b>Percentage of GDP in 1997</b>
<i>Gross Domestic Savings</i>	10.4
Consumption of Fixed Capital	6.4
<i>Net Domestic Saving</i>	4
Education Expenditure	1.9
Energy Depletion	1.1
Net Forest Depletion	1.6
CO2 Damage	.8
<i>Genuine Domestic Savings</i>	2.5

Source: World Bank, 1999c

1.12 In addition, the social cost of environmental degradation is likely to be enormous and will continue to increase. The direct health and productivity impacts have been conservatively estimated at US\$ 1.5 to 3.0 billion annually, or 2.3 to 4.6% of GDP<sup>10</sup>, almost half of which are attributable to water pollution and two thirds constitute the toll on human health from premature mortality, morbidity and reduced economic activity. This cost is almost doubled if the impacts of indoor air pollution—an important neglected issue given the heavy reliance of households and particularly the poor on solid fuels—are included.<sup>11</sup> The magnitude of this cost is enough to offset much of the annual economic growth and the effectiveness of the Social Action Program, for which the government has set a target of 2% of GDP.

### **Urgency of Response**

1.13 This somewhat dismal list of sustainability concerns might raise the response that in the face of other very immediate and serious governance, security and financial problems, why tackle these problems now? Why not wait till other issues are successfully overcome? There are several reasons not to delay:

- *Sustainable development fits with other urgent reform needs.* In particular, SD can contribute to the success of devolution, and to the economic reform required to reduce current losses and inefficiencies.
- *Link to poverty reduction.* The value of sustainable livelihoods, reduced risk from natural disasters and from air and water-borne sources of disease, and improved access to natural resources are essential needs for both rural and urban poor in Pakistan.
- *Danger of losing a decade's investment in environment and sustainable development.* The NCS has opened new thinking and the beginnings of important institutional change. All of this is fragile and could be lost if there are not strong enough signals of the significance of the NCS to the country's future, and most importantly, if there is not continuity on the part of the institutions and donors.
- *Environment and security are becoming interlocked issues.* The potential that environmental decline has to create social unrest and other impacts on national

<sup>10</sup> Brandon and Hommann, 1995.

<sup>11</sup> Gandapur and Bouzaher, 1999

and regional security is being explored in a number of areas around the world. Preliminary indications are that Pakistan is highly vulnerable at this time if environmental conditions continue to decline.

- *Environment is a unifying theme, reflecting the heritage of the nation.* Pride in the natural wonders of a country and their sustainable use over centuries can bring together rather than divide people. The great diversity of landscapes and world recognition of many aspects such as the Karakoram and other mountain ranges, and the 'cradle of civilization' in the Indus Valley are part of this heritage. The realization that important elements are under threat should provide for a common objective of improvement.
- *Sustainable development is changing international expectations for policy and governance, with important political and economic overtones for Pakistan.* The growing significance of environment and social elements in trade relationships, the opportunity to gain access to new financial resources to handle national contributions to solving global environmental concerns, and obligations under multilateral environmental agreements are examples of why no country can afford to ignore sustainable development concerns. There is increasing understanding that open, participatory processes linking government, civil society and market players are likely to set the dialogue globally and locally. The World Summit on Sustainable Development in 2002 is the next major global stock-taking.

## Conclusion

1.14 A successful sustainable development strategy will have to address three key needs. It will have to *mainstream the environment* in a way that achieves widespread acceptance and brings conservation into traditional policy making areas such as economic growth based on industrial and agricultural development. It will have to *focus much more on quality of life and human development*, including the links to health and education. And it will have to demonstrate that *by addressing sustainability concerns poverty will be reduced*, for example, by providing and safeguarding livelihood opportunities. All of this is highly dependent on capacity building and institutional development started over the past decade, and on more general issues of governance and priority-setting. It will have to be supported in a variety of ways including re-alignment of institutions and budgets, better knowledge and monitoring, and a search for non-conventional sources of funding.

1.15 The past decade brought with it an awakening of interest in Pakistan concerning these issues, stimulated in large measure by the NCS. Understandably, perhaps, a considerable amount of attention has focused on ecological conservation. It is vital that conservation continues, for any nation stands vulnerable when its natural wealth enters into a decline. But, as other countries are discovering, the challenges of sustainable development go right to the heart of economic and social concerns. Thus it will be helpful in Pakistan to consider a three-pronged approach in which the needs of people are kept front and centre in all efforts to improve the environment and sustainability. This approach highlights three elements:

- *Environmental Health.* The burden created by air and water pollution, vector-borne diseases, and exposure to toxic substances can be reduced by more effective action on the part of municipal authorities, through education linked to family planning efforts in communities, preventive health measures, worker safety, and disaster reduction efforts.

- *Sustainable Livelihoods.* Natural resources and biodiversity are important considerations in poverty reduction, community development and, ultimately, in more participatory approaches to management of land and water resources. Currently the curves are moving in the wrong directions—many resources are declining while population and demand for rural livelihoods are on the increase. This huge challenge is central to the future health of rural ecosystems as well as economic opportunities.
- *Sustainable Industrial Development.* Export markets for several Pakistani products will move industry towards environmental improvement. This will require strong and credible regulatory institutions and far greater use of market-based instruments and voluntary measures. Cleaner production and cleaner energy are two obvious outcomes. But getting there is a major challenge since Pakistan is still at an early stage where the regulatory framework is largely untested.

1.16 In brief, these points highlight what should be high priority concerns of a national sustainable development strategy. The argument is made in many countries that sustainable development should proceed hand-in-hand with other reforms. Indeed it is perhaps in times of crisis that the greatest gains can be made, since the economic inefficiencies and other structural reforms that must be tackled can have longer-term benefits for environment and natural resource management. But this does not happen serendipitously. It requires careful consideration of social impacts, and reform to ensure that the right kind of decision-making and management processes are put in place. The NCS has been a well-intended effort at a national dialogue and action for sustainable development. We, the members of the External Review Team (ERT), will examine the strengths and weaknesses of what has happened to date. But at the start of this report, we wish to convey—with a sense of urgency—that the effort for sustainable development should continue and be strengthened in Pakistan.