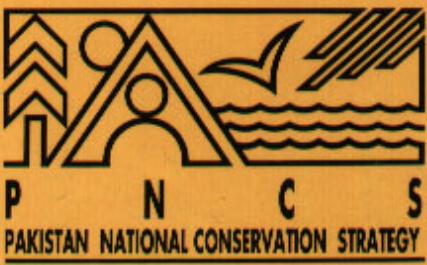


THE STORY OF PAKISTAN'S NCS

AN ANALYSIS OF
ITS EVOLUTION



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ACRONYMS

AKRSP	Aga Khan Rural Support Programme
CIDA	Canadian International Development Agency
EIA	Environmental Impact Assessment
EPA	Environmental Protection Agency
EUAD	Environment and Urban Affairs Division
FAO	Food and Agriculture Organization
GOP	Government of Pakistan
IMF	International Monetary Fund
IUCN	The World Conservation Union
JRC	Journalists' Resource Centre for the Environment
NCA	National Commission on Agriculture
NCCW	National Council for the Conservation of Wildlife
NCS	National Conservation Strategy
NEAP	National Environmental Action Plan
NGO	Non-Governmental Organization
NWFP	North West Frontier Province
OECD	Organisation for Economic Co-operation and Development
P&D	Planning and Development
PEPA	Pakistan Environmental Protection Agency
PEPC	Pakistan Environmental Protection Council
SDPI	Sustainable Development Policy Institute
SPCS	Sarhad Provincial Conservation Strategy
UNCED	United Nations Conference on Environment and Development
UNEP	United Nations Environment Programme

WCED World Commission on Environment and Development
WCS World Conservation Strategy
WWF World Wildlife Fund (now known as World Wide Fund for Nature)

P R E F A C E

In February 1993, the International Development Research Centre, the National Round Table on the Environment and the Economy, the International Institute for Sustainable Development, the Swedish Agency for Research cooperation with Developing Countries, the Institute for Research on Public Policy and IUCN-The World Conservation Union organized a symposium in Ottawa. The participants discussed the role of multi-stakeholder consensus groups in planning for sustainable development.

The symposium reviewed the Canadian experience with Round Tables on the environment and the economy, dialogue groups and green planning. We invited a number of prominent decision makers from developing countries to participate to see whether there was anything in the Canadian experience which might be useful to the Third World. One of these participants was Aban Marker Kabraji, the IUCN Country Representative in Pakistan. It was clear from her presentation that Pakistan had gone much further than any of the rest of us in planning for sustainable development.

This impression was confirmed at a second IDRC symposium, on National Planning for Sustainable Development, held in October of 1993. Imtiaz Sahibzada, the Secretary of the Environment and Urban Affairs Division, and Ms. Kabraji represented Pakistan. Among the dozen or so countries participating, Pakistan stood out.

Accordingly the Institute for Research on Public Policy, with a grant from the Canadian International Development Agency, decided to prepare a short piece on why Pakistan had been able to achieve such political and bureaucratic consensus on a complex topic.

I agreed to undertake the task with the proviso that this would not involve me in a conventional evaluation of the National Conservation Strategy process. Rather, I would

interview a number of the participants in the process and draw some conclusions about the big and small 'p' politics of the NCS.

I am extremely grateful to Ms. Kabraji and her colleagues, especially Farheen Mahmood of the Sustainable Development Policy Institute in Islamabad for her indefatigable research assistance. I would also like to take this opportunity to thank those whom I interviewed on my visit to Pakistan in December 1993.

They should in no way be held responsible for the content of this piece. In particular, they should not be held responsible for the inevitable errors and omissions which result from my pretentious assumption that I can write about a country as sophisticated as Pakistan after a trip of only two weeks.

David Runnalls
Ottawa, 1994

PART I

INTRODUCTION

On March 1, 1992, the Cabinet of Pakistan approved the National Conservation Strategy. This 406-page document was prepared by a team of experts over a three-year period under the supervision of the Deputy Chairman of the Planning Commission, one of Pakistan's most powerful bureaucrats. It involved more than 3,000 people through workshops, comments on drafts and other consultations.

It describes the stark reality of the country's deteriorating resource base and its implications for what is still largely a natural resource-based economy. It sets forth the beginnings of a plan to integrate environmental concerns into virtually every aspect of Pakistani economic life.

The Strategy has three overriding objectives: conservation of natural resources, sustainable development, and improved efficiency in the use and management of resources. Reaching these goals depends in turn on three operating principles:

- Achieving greater public partnership in development and management;
- Merging environment and economics in decision making;
- Focusing on durable improvements in the quality of life of Pakistanis.

Part I of the report surveys the state of Pakistan's environment in the broadest sense by examining the quality of its land, water and air, its energy use, the health of its people, and the institutions and policies that deal with these concerns.

The report points out that less than 20% of the country's 88 million hectares have the potential for intensive agricultural use — an amount nearly matched by the current

cultivated acreage. In addition, at 4%, Pakistan has one of the smallest percentages of land surface covered by forest in the world.

Ample scope exists for increased agricultural production through multiple cropping and higher yields per hectare. However, to achieve this level of intensity, serious problems of water and wind erosion, salinity and sodicity, waterlogging, flooding and loss of organic matter from the soil must be tackled. Deforestation must be arrested and reversed.

Pakistan relies on irrigation for more than 90% of its agricultural production. Although the amount of water available per acre has increased by more than a third over the last 30 years, the efficiency with which it has been used has not. Even by the standards of the rest of Asia, Pakistan's irrigation efficiency record is poor. Only about 30% of the water diverted from the river system actually reaches the crops. The rest is lost in poorly maintained, largely unlined, often weed-infested, canals and watercourses and through poor farming practices.

The arid and semi-arid rangelands which cover much of the country are in bad shape with chronic overgrazing and poor maintenance practices responsible for productivity losses of up to 40%. In a dry country like Pakistan, this is often a prelude to desertification.

Pakistan's considerable marine resources are also under threat. Untreated urban sewage, mangrove cutting, siltation and unplanned urban development affect particularly the coastal areas around Karachi. Fresh water resources are also becoming increasingly polluted.

As the NCS points out, Pakistan is energy poor and energy profligate. Rural dwellers have little access to commercial energy sources and are often forced to rely upon the nation's dwindling forest resources and other biomass for fuel for cooking and heating. Yet the 'modern' sector uses what commercial energy is available very inefficiently. Pakistan's energy use per unit of the gross national product is as high as that of the United States, one of the world's most wasteful energy consumers.

Pakistan also suffers from high levels of pollution. Only half the urban excreta is disposed of in sewers, and virtually none of that is treated before it flows into the rivers and the sea. While 44% of the Pakistani population has access to piped water, surveys of most urban locations suggest that none of the water is safe for human consumption. Gastrointestinal diseases account for more than a quarter of all hospital cases and approximately 60% of infant deaths are due to infectious and parasitic diseases, most of them waterborne. The Pakistan National Report to the United Nations Conference on Environment and Development estimates that 80% of illnesses and 40% of urban deaths are caused by unhygienic water.

Untreated sewage has contaminated many of the country's rivers and streams. The Strategy cites the example of the Ravi River downstream from Lahore where pollution has cut fish production by 5,000 tons a year.

Solid waste is also a problem. Only about half of the country's solid waste is collected by the municipal authorities. In Karachi, a city of 11 million people, only 55% of the households have garbage collection. Most of these wastes are disposed of in poorly sited and maintained dumps. The remainder of the household wastes are simply left on streets or dumped on vacant land.

But domestic wastes are not the only pollution problem. A 1985 survey of 100 hazardous chemical industries by the Pakistan Council for Scientific and Industrial Research showed that only three plants treated their wastes to commonly accepted standards.

As if contemporary problems were not sufficiently serious, the report goes on to point out that Pakistan's annual population growth rate of 3% is one of the highest in the world. And even the most optimistic forecasts do not see that figure dipping below 2% for at least 20 years. Pakistan is already the world's tenth most populous country with at least 122 million people. It is also the fourth most densely populated country in the world. If the current growth continues, Pakistan will double its population in 23 years.

"Environmental degradation in Pakistan has reached alarming levels...In the Sarhad, biodiversity loss, diminishing landholding capacities, use of fertilizers and unsustainability of local governments are some of the areas that need to be addressed. In Peshawar... industrial waste and municipal waste is dumped into the river as is the waste from Mardan and Charsadda." Khalid Aziz, Additional Chief Secretary, NWFP

Therefore, without major changes in Pakistan's current development pattern, efforts to provide these quarter billion people with a decent standard of living will result in environmental and poverty problems which would dwarf the current crisis.

But the NCS is not a gloom and doom document. The bulk of the report deals with solutions to these problems. Part II contains detailed recommendations for various sectors of the economy. It makes a strong statement about the urgency of merging economics and the environment in decision making and the use of economic instruments rather than regulation to control pollution. It also identifies a series of cross-cutting intersectoral programmes for population, education, communications, research and the role of women.

Part III contains 68 different programmes which would boost the government's spending on projects broadly related to natural resource management and the efficiency with which resources are used from about 4% of national investment to 8% by the year 2000. Perhaps most important, it lays out a wide ranging set of recommendations to reform the way in which economic decisions are made.

Fourteen core areas are set out for priority implementation:

- Maintaining soils in croplands
- Increasing irrigation efficiency
- Protecting watersheds
- Supporting forestry and plantations
- Restoring rangelands and improving livestock
- Protecting waterbodies and sustaining fisheries
- Conserving biodiversity
- Increasing energy efficiency
- Developing and deploying renewables
- Preventing and abating pollution
- Managing urban wastes
- Supporting institutions for common resources

- Integrating population and environment programmes
- Preserving the cultural heritage

Since the adoption of the NCS by Cabinet and its subsequent publication, some steps have been taken to ensure its implementation.

At first glance, Pakistan would seem to be an unlikely candidate to produce the best plan for environmental improvement and sustainable development among the 50 or more countries which have prepared Conservation Strategies, National Environmental Action Plans and the like.

Throughout much of its history it has been ruled by repressive or unstable regimes — one calculation has it that the country experienced 11 changes of government between the time the NCS was first conceived (1985) to the present (1994).

Pakistan has experienced a rapid rate of economic growth by South Asian standards. Real GDP has grown at roughly 6% per annum since the 1960s and per capita income has more than doubled since 1972. Yet, "in 1990, 80% of the population still had no sanitary facilities and close to one third of the population were classified as living below the poverty line. Between 1970 and 1990, adult literacy increased by only 15%, to just 35% of the population. For women, the situation is much worse: 79% of Pakistani women have received no formal education...As a percent of total government expenditures, the Pakistani government's budgets for health and education are among the lowest in the South Asian region — about half the level of neighbouring countries like Sri Lanka and Bangladesh."¹

Caloric intake in Pakistan is below the mean for other low income countries and life expectancy and infant mortality rates compare unfavourably with poorer Asian countries. And the human rights records of previous governments have been the subject of much comment by international organizations such as Amnesty International.

Why then has the NCS taken root so firmly in Pakistan? Part of the answer lies in the international environmental debate which has been unfolding since 1972. Part of it

¹ NCS Bulletin, March 1993, p. 9.

lies in the Strategy's approach to sustainable development. And finally, part of it has to do with the 'made in Pakistan' approach.

THE INTERNATIONAL BACKGROUND TO THE STRATEGY

The 1972 UN Conference on the Human Environment made the environment into a respectable, if marginal, issue on the international agenda. But in Pakistan, it seems to have had little lasting impact. True, the environment was added to the list of subjects for concurrent jurisdiction in the 1973 Constitution and an Environment and Urban Affairs Division was created. But no comprehensive legislation to control environmental degradation was introduced until 1983. And that Ordinance did not become effective until the first meeting of the Pakistan Environmental Protection Council in 1993.

In 1980, two international non-governmental organizations, the International Union for the Conservation of Nature and Natural Resources and the World Wildlife Fund, and the United Nations Environment Programme collaborated on the publication of the World Conservation Strategy.

The Strategy represented an important watershed for the traditional wildlife and conservation community. While much of their activity (especially their fund-raising activity) had traditionally focused on the preservation of specific species such as the whale or elephant, the WCS shifted the emphasis to the ecosystems necessary for the survival of these species.

This concern with ecosystem health led to a concentration on land use issues such as deforestation, the spread of urbanization and the clearing of land for agriculture. In turn, this led the wildlife conservation community to turn its attention to the relationship between environment and development.

As with many international reports, the WCS is a rather general document, setting out principles and methodologies. Its authors had always recognized that it would have its most practical applications at the national and local levels. IUCN therefore moved

from authorship of the Strategy to the establishment of a Conservation for Development Centre at its headquarters to assist developing countries and foreign assistance agencies in the preparation of national strategies.

In 1983, the Inspector General of Forests, W.A. Kermani, made a number of requests for assistance to IUCN's Conservation for Development Centre. IUCN felt that the requests could best be handled within the overall framework of an NCS. Following the visit of a two-man IUCN mission to Pakistan the government asked for assistance in the preparation of an NCS.

The publication of the WCS coincided with preparations for the tenth anniversary of the Stockholm Conference. Two other reports released at the same time revealed the seriousness of the global environmental crisis. The publication of the Global 2000 report to US President Carter and the scientific report prepared for the Special Session of the UNEP Governing Council called to commemorate Stockholm's tenth anniversary, revealed that the global environmental situation had dramatically worsened since 1972.

The news on the development front was not much better. The report of the Brandt Commission on international economic development revealed that the traditional approach to development was not working. Parts of the world were dramatically worse off than they were in the 1970s when the Pearson Report had first sounded the alarm about the slow pace of development.

These twin crises led Canada and a number of other countries to call for the creation of a high level global commission to examine the relationship between environment and development and to see if a new pattern of development could be found which both increased human well-being and preserved the environment. In 1984 the World Commission on Environment and Development set to work under the guidance of the Norwegian Prime Minister, Gro Harlem Brundtland.

The Commission looked at the state of the global environment and was profoundly disturbed at what it saw:

"In 1963, on assignment with the UN in Sudan, Ethiopia and Uganda, I learnt the importance of wildlife conservation...On my return to Pakistan, I started a series of wildlife conservation efforts...I was closely involved in the initial stages of the NCS — it was vital for the people and the government to have a strategy outlining the steps to be taken in the future."

W.A. Kermani,
Former IG Forests

- Deforestation of 10 million hectares per year (since revealed to be closer to 19 million);
- An area of Africa, the size of all of India, subject to desertification;
- Chlorofluorocarbons from the developed world which threatened to destroy the earth's protective ozone shield, thus spurring a dramatic increase in skin cancers and threatening crop production;
- Carbon dioxide and other 'greenhouse gases' threatening to bring about climate change over the next 50 years more extreme than that produced over the previous 10,000;
- Pollution from a myriad of man-made toxic chemicals and from industrial sources reaching epidemic proportions in many parts of the globe;
- Population growth on such a scale that the world is almost bound to have twice its current population by the middle of the twenty-first century.

The Commission concluded that efforts to provide a relatively decent standard of living for that 10 billion would require food production to triple, and energy production to quintuple. It also concluded that with present patterns of production and consumption, energy growth alone would cause intolerable amounts of pollution and climate change.

It called, therefore, for a new kind of development. A development that would be more equitable both within and between countries. A development that would be far more resource and energy efficient. A development that would build up the world's ecological capital of soils, forests, water and wildlife, rather than run it down. A development that would ensure that present generations are provided for in a way that does not jeopardize the chances of their children. Most important, it called for the integration of environmental concerns in all economic decisions before these decisions are taken. Anticipation of problems before they happen and acting to prevent them is cheaper than reacting to them and curing them later.

The report was taken seriously in economic circles because the WCED was not a northern 'green' commission. Rather, a majority of its 23 members were drawn from

the developing world. And most of the politicians, industrialists, public servants and intellectuals who made up the group were not initially identified as environmentalists.

The Commission's report, Our Common Future appeared at an opportune time for the Pakistan NCS. Published in May 1987, it was eventually translated into more than 30 languages and became the subject of special debates in the UN General Assembly, the World Bank, and the European Commission.

The Pakistan NCS Secretariat was established in April 1988, while the international debate over the Brundtland Report was at its peak. This not only gave the NCS process some further legitimacy, it also influenced the thinking of the Secretariat and the authors of the various papers. According to one of the earliest participants, the NCS was originally viewed as just "a modest little wildlife and parks strategy". The Brundtland emphasis on economics and development helped transform it into a full scale analysis of the resource base of the Pakistan economy and its importance for the development of the country.

The third international event which influenced the Pakistan NCS was the UN Conference on Environment and Development, popularly known as the Earth Summit, in Rio de Janeiro. The Brundtland Commission had recommended that a world conference be held five years after the publication of its report to measure the world's progress toward sustainable development.

If Stockholm represented the coming of age of the environment as a marginal international issue, Rio was supposed to represent its maturation into one of the central political/economic issues of the last decade of the twentieth century. To stress the importance of environment/economy integration to the sustainability agenda, Secretary General Maurice Strong invited all of the world Heads of State to the last two days of the conference.

The preparations for Rio started while the NCS was still in its draft stage. This enabled those preparing the Pakistan National Report to UNCED to benefit from the work being done on the Strategy. And the knowledge that Pakistan was to chair the Group

"There was strong political support for the NCS. Working with other ministries was facilitated by a large degree of cooperation not only at the ministerial level, but at other levels of bureaucracy. The Cabinet Division worked very closely with the Environment and Urban Affairs Division. Even the Prime Minister's Secretariat showed enthusiasm for the NCS." Anwar Saifullah Khan, Former Minister for the Environment

of 77 Developing Countries in Rio gave good political and bureaucratic visibility to the NCS.

But international events alone would not make a conservation strategy an influential document in a populous South Asian country. The strategy would need to be relevant to the challenges of development.

PART II

THE PAKISTAN NCS AS A SUSTAINABLE DEVELOPMENT STRATEGY

The focus of the WCS was largely environmental, concentrating as it did on ecosystem integrity. This approach was faithfully reflected in the first national strategies. These strategies often seemed irrelevant to the real concerns with poverty, income distribution and rapid urbanization faced by most developing countries. As a result, many remained on the shelves of the government wildlife and parks agencies which had commissioned them.

As experience was gained with these strategies, the demands of the donor agencies and the lessons drawn from the field pointed toward the need for an increasing focus on the interaction between the environment and development. Brundtland's elaboration of the concept of sustainable development sharpened this focus.

CHARACTERISTICS OF A NATIONAL SUSTAINABLE DEVELOPMENT PLAN

Pakistan NCS qualify? The International Institute for Environment and Development and IUCN cite a number of criteria for the success of such a strategy:

1. Its ultimate goal must be sustainable development, not merely the maintenance of biodiversity or ecosystem preservation or the enhancement of forest

What, then, is a sustainable development strategy and does the

resources, although these will be vital components of a strategy.

2. It must combine the long term approach so critical to sustainable development with a series of short term, politically achievable goals.
3. It must choose a series of strategic objectives, targets and actions. Sustainable development strategies run the risk of being about everything. Clear choices must be made and priorities set.
4. It must be intersectoral and integrative. A truly successful strategy must be able to integrate ecological, economic, and social perspectives.
5. The process must be as inclusive as possible. This requires involving a wide range of people in the whole strategic process, including defining objectives, identifying issues and preparing and commenting on drafts.
6. It must be adaptive. Economic, ecological and political conditions change constantly. Monitoring and evaluation are therefore critical components of the strategy process.

As these criteria imply, the process of preparing a sustainable development plan is often at least as important as the final document. These plans always involve extensive institutional change. These changes will be resisted by the status quo. The legitimacy derived from an extensive process of consensus building is therefore an important element of success.

STRATEGIC IMPERATIVES FOR SUSTAINABLE DEVELOPMENT

If the process seemed more or less right, what about the content of the strategy? Here the Brundtland

Report and a number of Canadian documents give us some guidance. Sustainable development has been defined as development which meets the needs of the present without seriously jeopardizing the prospects for future generations.

Sustainable development strategies must include a series of "strategic imperatives" or principles such as:

- Reducing the resource and energy content of growth;
- Living off the interest of natural capital;
- Meeting essential human needs;
- Curbing pollution;
- Ensuring a sustainable level of population;
- Safeguarding the rights of future generations;
- Improved decision making;
- Ensuring greater equity both within and between nations;
- Reorienting technology and minimizing risk.

The Pakistan Strategy deals effectively with most of these. The NCS contains specific recommendations for increased efficiency in the use of water and energy. It examines the forestry sector in considerable detail and makes recommendations for a more sustainable policy. It talks about the need for technological change. It deals with the serious pollution problems of the country.

It contains some bold recommendations on population growth and family planning programmes. But it does not contain detailed recommendations for social sustainability.

The authors understood that the sustainable development agenda is a policy driven agenda. Although individual programmes may well remain important, the main need is to change the way economic decisions are made and to reorganize government so that the cross-sectoral issues of sustainable development can be better managed.

The Strategy contains a number of painstakingly detailed tables enumerating the kinds of coordination required among ministries and parastatals. It recommends the creation of a sustainable development policy think tank, a genuinely innovative recommendation to remedy the chronic lack of effective policy units within the Pakistan bureaucracy. It recommends the creation of new agencies and the elimination or streamlining of others.

The authors of the Strategy understood the role of environmental agencies very

"The document's success is that it has a correct perspective in dealing with the issues presented. The direction and the strategy employed in the making of the NCS contributes to its success. It is a very well researched document in that every sentence is self-contained and meaningful."

Rahim Mahsud,
Member,
NCS Steering
Committee

well. All too often environment departments are handed the mandate to clean up the mess left behind by other, more politically powerful departments such as energy, transportation or industry. This simply does not work. "Economic development and ecological effects are bound together in the workings of the real world; their consideration needs to be similarly integrated in decision making. This will require changes in attitudes and objectives and in institutional arrangements at every level: make the central economic, planning and sectoral development agencies at the federal and provincial levels directly responsible for the maintenance of ecological systems and processes and for the sustainable use of natural resources...The mainstream departments alone should be held responsible for the impact of economic development on the environment."²

Yet despite the elaborate analysis, the implementation sections of the report contain no convincing suggestions for ensuring this accountability.

WHAT'S LEFT OUT?

And it does back away from the merging of environment and economics which is implied by sustainable development. There is little examination of the whole range of ecologically blind subsidies which most countries offer to their farmers, their industries, and their other resource dependent sectors. There is little examination of the relationship of pricing policies in the agricultural sector, for example, and the overuse of natural resources such as rangelands. All countries provide subsidies and incorrect price signals for what are often defensible social and political reasons. Often they are designed without the environment in mind. Yet they have an impact on the natural resource base far greater than any environmental improvement measure.

And, perhaps not surprisingly, the document does not really succeed in linking macroeconomic policy and the environment. None of the national strategies produced in other countries have succeeded in penetrating this sanctum sanctorum of the Ministry of Finance.

² Government of Pakistan and IUCN, The Pakistan National Conservation Strategy: Where We Are, Where We Should Be, and How to Get There, 1992, p. 143.

Yet the structural adjustment agreements with the World Bank and the International Monetary Fund which largely govern present day Pakistani economic policy and their emphases on efficiency and subsidy elimination could provide a good entry point for environmental sustainability. But none of these agreements has yet been designed with sustainability as one of its principal objectives.

The Pakistan National Conservation Strategy, like virtually all the other strategies, also falls short in the area of social sustainability. While it moves on from the almost exclusively environmental emphasis of previous strategies, it fails to deal adequately with social issues.

This is partly an error of commission. The high level Steering Committee repeatedly turned down recommendations from the NCS Secretariat to include an analysis of land ownership and land reform. There is little discussion of income distribution. They were also wary of the question of regional economic and social imbalances. Any discussion of the role of the military, which consumes almost 40% of the country's budget, was also left out. The Strategy contains no references to nuclear issues — either civil or military — despite the country's ambitious programmes in these areas. These political time bombs were deemed too sensitive for the times.

The government was devoting considerable time to the development of the Social Action Plan, an ambitious scheme to right some of the inequities cited above. The Steering Committee felt that its inclusion in the NCS would be confusing and redundant. But sooner or later the NCS process and the social development process must be more closely linked.

The relative lack of emphasis on social sustainability is also an error of omission. For this is genuinely uncharted territory. None of the Canadian provincial strategies for sustainability deal adequately with the social issues, nor do any of the so-called Green Plans prepared by the Organisation for Economic Co-operation and Development countries. Much of the methodology for measuring social sustainability simply does not exist.

AN IMPLEMENTATION PLAN

Finally, the document contains an implementation plan with budgets for individual programmes. These programmes were designed under the watchful eye of A.G.N. Kazi, Chair of the NCS Steering Committee and Deputy Chair of the Planning Commission, who was determined to achieve demonstrable practical results and to attract as much donor assistance as possible.

In a perverse way, this may also turn out to be one of the document's weaknesses. For it shifts the focus to the familiar terrain of project preparation and approval, and donor meetings to consider them, and away from the fundamental shifts in the structure of public institutions and macroeconomic policy implied by the main arguments of the document.

All this having been said, the NCS is a superb document, more far-reaching in its scope and recommendations than the well-publicized Green Plans of the OECD countries. It takes the lessons of sustainability to heart and lifts the environment from a sectoral issue with little political and bureaucratic support to a central determinant of economic and social policy.

Both the process of preparing the Pakistan NCS and the content of the document itself should be viewed as real successes. Some of the reasons for success are very specific to the bureaucratic and political culture of Pakistan. Some are tied to external events, such as the Earth Summit in Rio de Janeiro. Others may well provide generic lessons for new attempts to evolve national sustainable development plans.

PART III

WHY DID THE STRATEGY WORK?

IT WAS AN INDIGENOUS PROCESS

For a number of years, aid agencies, NGOs and the multilateral system have been urging governments of the South to prepare plans for the conservation and management of their natural resources. National conservation strategies, forest action plans, biodiversity strategies, National Environmental Action Plans, anti-desertification plans have all been part of their arsenal.

Many of these plans have failed to make significant impact because they have been viewed by the governments concerned as something that needed to be prepared in order to receive development assistance. In short, they are viewed as the donors' plans. There is ample evidence, especially in Africa, that governments have even been threatened with the withdrawal of certain kinds of assistance until such plans have been prepared. Furthermore, many of the plans or strategies have been designed, and in some cases executed, by experts from outside the country concerned. With little or no national ownership, they are launched with great fanfare and then quietly laid to rest after a decent interval.

Pakistan's case is an interesting example of a successful relationship between an indigenous process which drew its support from both within and outside government, an international NGO (IUCN) that provided the initial impetus and identified most of the external advisors, and a foreign donor (Canada).

The WCS was sent by IUCN to all of its member countries in 1980. It was

received by Pakistan's National Council for the Conservation of Wildlife, the government agency designated as the focal point for IUCN.

In 1983, W.A. Kermani, the IGF who had been responsible for Pakistan's state membership in the Union, requested assistance from IUCN for a variety of wildlife and forestry related topics. IUCN suggested that the best approach would be to begin with the preparation of a conservation strategy and fit the other requests within the framework it would provide. The government agreed and Mark Halle, the Deputy Director of IUCN's Conservation for Development Centre and Brian Johnson, a consultant, visited Pakistan at the end of that year to prepare a prospectus for the strategy.

The idea of an NCS had also begun to take root with WWF in Pakistan. Syed Babar Ali, one of the country's most prominent industrialists and the founder of WWF in Pakistan urged the formation of a high level group outside government to press for action on the environment in general and the NCS in particular. The group was based around the board of WWF Pakistan and contained some of the country's most prominent industrialists. Babar Ali also agreed to a suggestion from Mark Halle that WWF Pakistan should assist IUCN to establish an indigenous presence in the country.

In what proved to be one of the most critical steps in the success of the NCS, Aban Marker Kabraji, WWF Pakistan's Regional Director, was appointed the IUCN Country Representative. A woman of enormous energy and drive and a member of one of the country's prominent political and industrial families, she initially acted as a prod to persuade the government to proceed with the NCS which Halle and Johnson had recommended. There is little doubt that it would have languished in the bowels of the bureaucracy without a local advocate. Later in the process she was one of the pivotal figures in ensuring its bureaucratic and political acceptability.

Much has been made by donors, and by some outside observers, of Ms. Kabraji's connections and her ability to reach the most senior people in Pakistan personally. These factors cannot be denied. Pakistan is a country run by a very small elite and the Marker family is an influential part of that elite. Ms. Kabraji's access to the corridors of

economic and political power is one of the major factors contributing to the high visibility of the Strategy.

But access is not everything. Ms. Kabraji brings a formidable intellect to bear on the process, resulting in a practical, conceptually clear document with appeal to foreign donors and to local politicians looking for 'implementable' projects. When the NCS Secretariat produced long and complex documents, she insisted on clarity and practicality. Her political savvy helped to ensure that the innumerable bureaucratic and political obstacles encountered by a process of great complexity, were overcome. She devoted enormous time and energy to the 'networking' necessary to keeping the Strategy process on the agendas of senior politicians and bureaucrats. She also managed to surround herself with a competent and dedicated staff who quickly made IUCN Pakistan into one of the most effective environmental institutions in the region.

There are a number of other factors that also contributed to making this a genuinely Pakistani Strategy. Most of the preparation of the NCS was done by local experts. Virtually all of the principal authors of the sectoral papers were Pakistani. All of the peer reviewers involved in the drafts were from Pakistan. The Secretariat arranged for several workshops and seminars for local officials, the press and NGOs. These gatherings not only helped to 'ground' the NCS in the local reality, it also helped to build support for the process beyond the capital.

And the Secretariat was ably managed by Syed Ayub Qutub, a government official released specifically for the task. Mr. Qutub provided the intellectual glue which held the document together. He also wrote personally much of the material which went into the various drafts.

THE PLANNING COMMISSION TOOK THE LEAD

Perhaps because of IUCN's traditional emphasis on wildlife and wild lands, its contact points in government are often in the ministries concerned with those issues. Indeed, the original NCS request came from the NCCW.

"In the last 10 years, understanding and awareness of environmental issues has dramatically increased. IUCN's role has been to initiate dialogue amongst political managers, media, skeptics, intellectuals and the NGO community regarding the need and importance of the NCS. As people realize the importance of conservation and development they take on ownership of the environment."

Aban M. Kabraji,
Country
Representative,
IUCN Pakistan

These ministries, like their counterparts from the North, are often understaffed, under-budgeted and politically of little influence around the Cabinet table. Not surprisingly, strategies and plans rooted in these ministries are often narrowly focused and have little influence on the country's overall development pattern. From the beginning, therefore, Mr. Halle and his colleagues at IUCN pressed hard for the NCS to be located in the Planning Commission rather than the environmental agency.

Pakistan has an approach to development similar to that of its South Asian neighbours. Projects are sent up from the line ministries and the provinces to the Planning Commission for approval. Elaborate five-year plans are produced to guide public investment and the flows of foreign assistance. These plans are the subject of regular meetings of the country's donors who are becoming increasingly important in light of the country's serious foreign debt situation. And the Planning Commission dominates much of this process. Along with the Ministries of Defence and Finance, it is one of the most powerful agencies of government, although the recent emphasis on privatization and deregulation may begin to dilute some of its influence.

The Ministry of Food, Agriculture and cooperatives, which had made the initial request to IUCN, pressed the Planning Commission to assume responsibility. The Commission refused, in light of the fact that its responsibility lay with coordination of projects rather than with implementation of work.

Since the strategy was originally viewed as an environmental plan, the main responsibility for the strategy eventually ended up in the EUAD of the Ministry of Housing.

Following the Search Conference in August 1986 (see below), it was clear that Pakistan needed far more than a conventional environmental plan or state of the environment report. The intersectoral nature of the problems, and the intimate relationship between environmental degradation and the country's economic prospects which emerged from the Conference led IUCN Pakistan to press again for Planning Commission involvement.

Although line responsibility remained with the EUAD, Ms. Kabraji persuaded A.G.N. Kazi, the Deputy Chairman of the Planning Commission, to chair a high level Steering Committee to oversee the NCS. This turned out to be another critical step in its success.

Kazi, one of Pakistan's most distinguished public servants, immediately saw the connections between environment and development. In fact, he drafted the table of contents for the NCS personally. Earlier in his career he had been acquainted with resource management issues. Years before, as Finance Secretary for West Pakistan, he had tried to institute a kerosene subsidy for rural dwellers to take the pressure off Pakistan's dwindling forest resources. And like all former Indian civil servants of the old school, he has a well developed sense of history. Looking out of his window in Islamabad, he recounted how Alexander the Great had written about the great forests which covered this now largely arid area during his campaigns.

Because of Kazi's own position in the bureaucracy, he was able to establish representation within the Committee at the level of Secretary (Deputy Minister), thus ensuring a high degree of prominence. In addition, he and Ms. Kabraji approached a number of prominent non-governmental representatives to open up the process. Syed Babar Ali and Khursheed Marker represented industry. Shoaib Sultan Khan, General Manager of the Aga Khan Rural Support Programme, provided input from the community development sector. And Hameed Haroon, Deputy Chief Executive Officer of Pakistan's largest newspaper firm, and Javed Jabbar, Chief Executive Officer of a major advertising agency, brought the views of the mass media to bear.

By all accounts, Kazi worked this group and the NCS Secretariat very hard. In exchange for the bureaucratic protection which he provided, he made them produce draft after draft of each chapter until there was a consensus around the table. This process had a number of advantages. It ensured that the multisectoral aspects of the Strategy were accepted by all concerned ministries and that all ministries 'signed off' on the final document. Drafts were also sent to the provinces for comment. Because of

"The NCS gave us a platform and an opportunity to highlight the problems of environmental degradation and to deal with them concretely. Its preparation involved sectors other than government, i.e., the NGO community, mass media and the private and public sector. This fostered a spirit of partnership between various groups of people."

A.G.N. Kazi,
Chairman,
NCS Steering
Committee

the insistence on quality, the Steering Committee was forced to meet ten times over almost four years. And given the normal turnover in top jobs, and the fact that the government members were all ex officio, it meant that a large number of senior public servants were familiar with the NCS before it went to Cabinet. Therefore, there were few surprises. Finally, the consultation process seems to have penetrated fairly deeply into the government. As a result, a large number of middle and lower level bureaucrats were also exposed as members of the numerous drafting groups established or as providers of advice to their Secretaries.

A HIGH LEVEL MULTINATIONAL GROUP IDENTIFIED THE ISSUES

During his discussions with various high level officials, Brian Johnson had come to

the conclusion that "the highest priority for consultants in Pakistan is to develop a factual picture which dramatizes the degree of environmental deterioration especially as it affects natural resources, e.g. rangelands for livestock, salinated irrigated lands and forest catchment areas". Although the government had issued the Pakistan Environmental Protection Ordinance in 1983, little had been done to implement it and Mr. Johnson found scant knowledge of environmental issues amongst senior officials.

Dr. Rodger Schwass of York University in Toronto was sent by IUCN to Pakistan in 1986 to prepare a full plan for the development of the NCS. Dr. Schwass had been one of the pioneers in the development of the Search Conference process in Canada and he proceeded to use the same techniques of consultation and consensus building in Pakistan.

After consultation with Ms. Kabraji, Dr. Schwass conducted in-depth interviews with more than 80 government officials, NGOs and academics in preparation for a major workshop in August 1986. As a result of these interviews, he and Mr. Johnson differed in their conclusions. Dr. Schwass' discussions "...made it clear that there was both a widespread knowledge of the massive environment and development problems

facing the country, but also a knowledge of many of the potential solutions. Apart from technical solutions, there was plenty of discussion about the role of the military in pre-empting most of the public budget; religion in polarizing opinion; the landed elite in dominating government and avoiding taxes or land reform etc..."³

Thirteen papers were prepared for the Conference:

- Conservation Strategies for the Marine Environment and Marine Fisheries of Pakistan
- Forests and the Environment
- Wildlife, Livestock Development and Conservation
- Agriculture, Water and Land
- Industrial Pollution in Pakistan
- Minerals and Energy
- Pollution and Sanitation
- Human Settlements
- Health, Education and Community Development
- Population
- Institutions and Legislation

The Conference examined the effects of present trends if they continued to the year 2000. It considered what a desirable future would look like in the year 2000.

Through a consensus process, it identified ways to overcome the constraints to that future and produced an action plan.

The Search Conference was well attended by technical experts and government leaders. It served to illustrate both the immense nature of the challenge posed to Pakistan by environmental degradation and the fact that most of these problems and their solutions cut across many of the traditional sectors. "While there was great concern about the state of Pakistan's environment, most participants felt that they had little influence and lacked a mechanism to relate their concerns to one another. Boundaries

"The Search Conference was a landmark in itself as it was the first time that resource persons from different economic sectors were brought together to understand the complexities of cross-sectoral linkages and their impact on the environment." Abdul Latif Rao, Programme Director, IUCN Strategies Support Unit

³ Rodger Schwass, personal communication.

between ministries were perceived to be a major blockade to communication. An economic and financial mind-set that focused on economic growth indicators but ignored resource depletion and environmental and social degradation was also a problem. A further complication was that military control of the government inhibited open discussion of economic, social or environmental performance or allocation of resources. Even more fundamental were the lack of local government institutions, the lack of investment in education, primarily at the primary and secondary levels, and the low level of female literacy, which prevented women from taking their place as teachers and environmental advocates even at the local level, as well as further up in the system. All of these factors led to a widespread sense of helplessness to formulate or deal with the widespread problems in Pakistani society, which were preventing the achievement of sustainable development.⁴

The participants identified a set of 11 conservation goals for the year 2000:

1. To increase industrial and agricultural production on a sustainable basis to meet the needs of a growing population and for export;
2. To conserve and develop renewable resources — water, land, forests, fisheries, rangelands, mountain areas and wildlife — in ways that lead to sustainability;
3. To recycle or treat all wastes including sewage and toxic waste;
4. To increase energy supplies with emphasis on renewable, alternative and small-scale forms of energy;
5. To reduce the rate of population growth, the fertility level, and infant and child mortality;
6. To promote human resource development, including health, education and skills with the objective of universal education and training by the year 2000;
7. To increase the awareness of conservation and development issues among the general public using education and the media;

⁴ Rodger Schwass, personal communication.

8. To promote greater participation in sustainable development by local communities and NGOs and to develop a two-way flow of communication between government and local institutions;
9. To strengthen the research and data base for conservation and development initiatives;
10. To introduce broad legislation to control pollution and toxic substances and for resource protection and management;
11. To improve the efficiency and coordination of agencies responsible for environmental management.

In the final session, participants presented their action plan to the Ministers.

The search process had several major advantages:

- It put the most prominent experts from each sector in touch with one another and was structured in such a way that the multi-sectoral nature of the environment emerged with great clarity. Many of these experts had never spoken to each other across disciplinary lines.
- For the first time, the seriousness of the problem became obvious. Ministers and bureaucrats alike were alerted to the need for a strategy.
- It looked for the real causes of environmental degradation in Pakistan rather than simply dealing with the symptoms.
- It set the tone for a more participative process than is normally the case in Pakistan.
- This participative element, combined with Kazi's later insistence on consensus within the Steering Committee, meant that the NCS process which eventually followed the Search Conference became as important as the final document.
- Some feel that the Conference, with its multi-stakeholder character, represented the beginning of the environmental NGO movement in Pakistan.

The report, which was edited by Ayub Qutub, was a critical influence on the conceptual development of the NCS.

MANY PEOPLE PARTICIPATED IN THE PROCESS

While the Search Conference set the tone for expert consultations, the National Commission on Agriculture (which had just completed its work as the NCS was starting), provided a precedent for broader consultations with NGOs, the press and the private sector.

IUCN pressed to have non-governmental members included on the NCS Steering Committee. They also moved to open up the process through a series of workshops for each province, for villagers, for journalists and for various sectors.

In December 1988 and January 1989 a series of provincial workshops were held in Peshawar, Karachi, Lahore and Quetta. Animated by the NCS Secretariat, the workshops were attended by many of the 18 authors and peer reviewers of the NCS sector papers as well as provincial civil servants, NGOs, representatives from the business community and local government officials. The results of these workshops were conveyed to the Steering Committee and used by the authors to revise the drafts of their sections.

IUCN also moved to involve the press. In 1988, in conjunction with the development of the NCS, IUCN had established the Journalists' Resource Centre for the Environment in Karachi to sensitize the media to environmental issues. Because of tight state control of the electronic media, the JRC initially concentrated on the print media and especially the English language press. Although the literacy rate is low and the Urdu language press is much larger, it was felt that the English press was more influential with decision makers.

Between 1988 and 1992, the JRC organized a series of workshops for the media on the NCS and on subjects related to the themes of the Strategy. Through these workshops, the JRC created a substantial constituency within the print media for the NCS process. It has also served to create an influential new cadre of environmental journalists within Pakistan.

Village meetings were originally seen as an important part of the process. In March 1990, five meetings were held in the Punjab, the North West Frontier Province

and the Northern Areas. Because of political instability in Sindh and Balochistan, the other two were canceled. The results of these meetings were conveyed to the Steering Committee with mixed results. Some members of the Secretariat felt that the testimony of local farmers and villagers had a major impact on the Steering Committee. Others felt that the meetings were of little consequence in the drafting of the final document.

The NGO community benefited greatly from the various consultation processes. Pakistan has a number of community-based NGOs concerned with development — one figure mentioned was 6,000. But few had dealt formally with the environment. A number of the NGOs mentioned that the NCS process provided them with their first exposure to conservation issues. Many discovered that these involved items at the core of their own programmes even though they had not been formally described as environment or conservation — community forestry, clean water supplies, soil conservation projects, to name a few.

The workshop process also provided many with the first opportunity to 'network' with each other nationally and with IUCN. The regular publication of IUCN's NCS Bulletin also helped keep alive this network of people involved with the NCS.

THE EARTH SUMMIT RAISED THE POLITICAL STAKES

As mentioned above, the Brundtland Report played a significant role in shaping the thinking of the Steering

Committee and Secretariat on the relationship between environment and development.

The onset of the Earth Summit in Rio seems to have played a similar role for politicians and other portions of the bureaucracy.

As part of its preparations for the Conference, Pakistan was required to produce a National Report. With the assistance of the International Institute for Environment and Development, an international NGO based in London, IUCN Pakistan and the Government of Pakistan produced one of the best national reports of the Conference. It is billed by the Minister in his introduction as a joint government/NGO undertaking

that built upon a wide series of consultations with interested groups. The report provided another occasion for the discussion of environmental issues throughout the government. Though largely built on the work done by the NCS Secretariat, it does go some of the way to correcting one of the main deficiencies of the NCS — its lack of a significant connection to social sustainability. The primary author was Tariq Banuri who later became Executive Director of the Sustainable Development Policy Institute.

The Prime Minister and a number of Ministers were to be members of the Pakistan delegation to the Earth Summit. And Pakistan was to be the Chair of the Group of 77 Developing Countries at the Conference itself. This meant that Pakistani Ministers would be expected to coordinate Third World positions on a whole range of complex issues.

This knowledge greatly helped Anwar Saifullah Khan, the Minister of the Environment, and Zulfiqar Ali Qureshi, the EUAD Secretary, win support from Cabinet for the NCS. The need to carry something to Rio paved the way for Cabinet approval of the Strategy in March 1992, three months prior to the UN meeting. The importance of the Rio meeting also meant that the civil service needed to prepare briefs and position papers on a wide range of sustainable development issues both domestic and international. Here the background work and consensus building of the NCS were invaluable.

It also focused the attention of Finance Minister Sartaj Aziz on the issue of sustainable development. Mr. Aziz had been Minister of Agriculture when the NCS process had begun. He had also chaired the NCA, whose consultative processes provided one of the models for the Strategy. He remained actively involved with the NCS, chairing the donors' conference in January 1993 which discussed the Plan of Action for the implementation of the NCS.

OUTSIDERS PLAYED KEY ROLES

Much has been written about the role of the ubiquitous outside consultant in the development process. Outsiders tend to be expensive, often unfamiliar with local cultural and political conditions, and have no stake in the implementation of

their recommendations. But, as the NCS process demonstrates, carefully chosen consultants, managed carefully by the local organization, can bring unique perspectives to the issues.

Although the NCS benefited enormously from being an indigenous process, a number of outsiders played crucial roles at various times. The value added by IUCN Headquarters was particularly important in the early stages of the process. The initial mission led by Mark Halle helped to persuade the government and WWF Pakistan that an NCS was the important first step, rather than beginning with a set of projects. His report established many of the subsequent ground rules for the process — its participatory aspects, the need for involvement of senior economic departments, and the need for an early assessment of the overall environmental situation of the country.

The establishment of an IUCN presence in Pakistan, headed by a Pakistani national, was Mark Halle's decision. The selection of Aban Kabraji to head it proved to be an inspired choice. IUCN Headquarters provided critical, but not overly intrusive support to Ms. Kabraji and her staff throughout.

After the decision by the Canadian International Development Agency to support the NCS process, a number of Canadians played important roles. Rodger Schwass and his search process served to highlight the gravity of the overall situation for senior politicians and bureaucrats and to get the various sectoral experts working together. He later returned to play a role in the development of the implementation plan.

Alistair Crerar drafted the initial outline of the NCS and wrote several of the first draft chapters until he returned to Canada after a dispute with IUCN management. His part time replacements, Ralph Cobham and George Greene, organized and drafted Parts 2 and 3 of the document, the vital sections on intersectoral issues and implementation.

Nancy MacPherson, CIDA's Project Monitor, visited Pakistan regularly and was instrumental in directing attention to the participation and communication elements. She also insisted on greater prominence for the role of women in environment and

"My personal interest in environmental conservation began in 1972 with my involvement with the Stockholm Conference...On my return to Pakistan, as Minister for Food and Agriculture, my involvement with the subject of environmental conservation and sustainable development was inevitable and I was able to use my past experience to link the problem of food and poverty at the national level."

Sartaj Aziz,
Former Finance
Minister

natural resource management — not necessarily a popular subject in a male dominated society.

The NCS process seems to have demonstrated a rare degree of North/South cooperation. Credit must be given to IUCN for its choice of consultants who on the whole seem to have been culturally sensitive and willing to spend time helping to develop an indigenous capacity for analysis. Credit must be given to Mark Halle and IUCN Headquarters for understanding the need to have the NCS firmly rooted in the country and for their constant attempts to raise funds to keep it going.

Perhaps most important, credit must also be given to IUCN Pakistan and the NCS Secretariat for knowing how to use foreign help without becoming overly dependent upon it, a rare skill in a country so dependent upon foreign aid.

THE DONOR AGENCIES BACKED A PROCESS RATHER THAN A PROJECT

In a country where more than 20% of the national budget and a quarter of all export receipts go to service foreign debt, external agencies are very influential. Pakistan receives between \$2 to \$3 billion of foreign assistance per year and is dependent upon the World Bank and IMF support for access to international credit markets. CIDA is a relatively small bilateral player, contributing some 2% of the total foreign assistance.

CIDA has supported the NCS process throughout. On the whole it has played its role sensitively and constructively. The only real problems seem to have arisen from the rather byzantine project approval process which produced two prolonged periods of stagnation while approval for funds was awaited from Ottawa.

On the positive side, CIDA seems to have recognized that the NCS was a political and bureaucratic process first and foremost and a document second. As a result they were prepared to be patient and to provide additional money to allow the writing and consensus building process to come to fruition. The importance of this patience cannot

be overemphasized. The broad base of support for the NCS which is now found in Islamabad owes much to the willingness of Kazi and IUCN to build a consensus. And, as Canada's own domestic experience has repeatedly shown, consensus building is a slow and often frustrating process.

CIDA's sensitivity should be contrasted with the impatience of the World Bank in its haste to persuade countries to prepare National Environmental Action Plans.

It also raises some interesting questions about accountability. Sustainable development is quintessentially about policy change. This has been recognized in Canada with the creation of high level Round Tables on the environment and economy bringing together ministers, chief executive officers of major corporations, and environmental and community leaders.

The Canadian response to the Brundtland Report⁵ lays great stress on the need to change the way decisions are made. And in the corporate sector⁶, the writings on sustainability stress the need for companies to incorporate environment into all of their economic decisions at the senior most level.

The high level consensus-driven process is not like a traditional development project whose output can be measured in bricks and mortar or people trained or Canadian exports encouraged. It is therefore risky business for CIDA which is under pressure within the Canadian Government to demonstrate 'measurable results'. And yet it is the key to potentially one of the most important transformations of our times.

All that can be said after two weeks in Pakistan is that the NCS seems to be familiar to a great many of the senior public servants in the country. It engaged a number of influential politicians and seems to have had an impact on the media and the NGOs. Interestingly, support for the NCS appeared as the cornerstone for environmental policy in the manifestoes of the two major political parties in the last election. The document produced by Ms. Bhutto's Pakistan People's Party, contains a very sophisticated analy-

⁵ CCME, Report of the National Task Force on Environment and Economy, 1987.

⁶ MacNeill and Runnalls, Co-Chairs, A Strategy for Sustainable Development and Use for Ontario Hydro, October 1993.

sis of sustainable development. And interestingly enough, it is contained in the economic section of the manifesto. In short, the NCS is a model process for beginning the road to sustainable development. And CIDA is identified in Pakistan as its main supporter.

CIDA got a good deal for Canada as well. CIDA is one of the smaller donors to Pakistan. For little more than \$3 million they have become the lead donor in an area that is bound to grow in importance in Pakistan over the next five years. And they will retain that role in the implementation phase of the NCS, providing the money for the key support to institutional development of the NCS in the Planning Commission and the EUAD, and to IUCN Pakistan and the Sustainable Development Policy Institute.

Their only glaring mistake was their unwillingness to provide funding to any of the provincial conservation strategies which is where much of the on-the-ground implementation must take place.

The World Bank, on the other hand, played an ambivalent role. There is little doubt that the Bank's insistence on Environmental Impact Assessments and on the submission of environmental projects under the Global Environment Facility and other arrangements helped to sensitize the economic agencies to the environment. As a consequence of these new Bank requirements two former Ministers of Finance confirmed that when major projects reached the National Economic Council they and their senior officials were forced to come to grips with environmental factors which they had never before considered when formulating economic policy.

On the other hand, the Bank has been criticized by many for being insensitive. Bank officials insisted that Pakistan should prepare a separate NEAP as a condition for International Development Agency assistance, despite the existence of the NCS and an elaborate implementation plan. This was strongly resisted by IUCN and the government, aided by CIDA and some of the other principal donors — an indication of the degree of support for the Strategy and of the close working relationship between IUCN and the EUAD. The Bank finally recanted and agreed to accept the NCS in place of a NEAP.

The Bank's major Environment Protection and Resource Conservation Project has also run into criticism for being badly designed and unimaginative. Rather than strengthening the policy capacity of the federal and provincial governments and the ability of economic agencies to integrate the environment into economic decision making, the Bank's project is designed to strengthen the capacity of environmental agencies. It emphasizes such traditional environmental skills as EIA, legislation, regulation and the like. On the surface, this seems to go against much of the grain of the NCS (and many of the Bank's own publications on the subject) with its emphasis on incentives and economic instruments as a substitute for Pakistan's traditional inability to enforce rules and regulations directly.

THE INSISTENCE ON QUALITY

Last and by no means least, there was a determination throughout to produce a quality document. The Chair of the Steering Committee brought a real sense of rigour to the task. He insisted on numerous rewrites until he felt the particular section was right. The Secretariat was careful in its choice of authors and took an early decision to select three or four peer reviewers for each author to ensure that quality control was present from the beginning.

As mentioned above, the Secretariat and Steering Committee also made extensive use of both geographical and sectoral workshops to solicit comments on drafts and the material was revised in light of these comments. The Steering Committee met ten times and went over the NCS chapter by chapter and line by line. From time to time it also formed drafting subcommittees to correct sectoral recommendations and policy options.

PART IV

IMPLEMENTATION OF THE NCS

It is too early to draw any firm conclusions about the prospects for implementation of the Pakistan Strategy. The document was adopted by Cabinet only in March 1992. The first donors' meeting to discuss the implementation plan occurred in January 1993. It was followed by a period of political turmoil and then by a general election. At the time of the author's visit, the Government of Prime Minister Bhutto had not been fully formed. For instance, no Minister of the Environment had yet been named.

IMPLEMENTATION DESIGN FOR THE NCS

As part of the NCS process, an implementation design consultancy began in June 1991. It was funded by CIDA after some initial hesitation and budget cutbacks. The implementation group consisted of Rodger Schwass, who had organized the original Search Conference in 1985, Tariq Banuri, a Pakistani economist who divided his time between Harvard and the World Institute for Development Economic Research in Helsinki and Syed Ayub Qutub, the Coordinator of the NCS Secretariat.

The Strategy itself contains a number of recommendations for institutional change, but it does not go beyond government in its suggestions. The implementation group determined not only to flesh out the recommendations for government, but to make a series of suggestions for institutional changes in other sections of Pakistani society. Given the disarray in both political and bureaucratic institutions at the time, the group

felt that the all-encompassing concept of sustainable development could provide a rationale for rebuilding the institutions of Pakistan.

The implementation group was guided by a Steering Committee of six people. At the outset, they felt that it was necessary to expand the ownership of the NCS as far as possible. They therefore organized a series of workshops in Islamabad, Lahore, Peshawar and Karachi. "The implementation design workshops were organized to submit the recommendations of the NCS to a high level group of leaders from government, business, the judicial and legal community, NGOs, community organizations and the media, to gain an early reaction to their feasibility and to determine how best to implement them. The focus was on required institutional development and action."⁷

The workshops were preceded by extensive networking to ensure that the participants were well briefed. Each workshop consisted of approximately 30 people. The team identified nine major areas in the NCS where important institutional development is required in Pakistan. One workshop was devoted to each of these:

- Research institutions
- federal government institutions
- Provincial government institutions
- Education and training institutions
- Legal and judicial institutions
- Urban institutions
- Institutions to link business, industry and other sectors
- Media and communications institutions
- Community development institutions

THE PLAN OF ACTION 1993-98

Once the NCS had been adopted, a Cabinet-level Implementation Committee was established, chaired by the Minister for the Environment. With some guidance from this group, the recommendations from the design consultancy and

⁷ IUCN, Implementation Design for the NCS for Pakistan, January 1992, p. 51.

the remaining recommendations from the NCS were transformed by EUAD (with considerable help from IUCN) into an Action Plan for presentation to the Pakistan donor consortium in January 1993. In addition to the 14 core areas identified by the NCS, the Action Plan sets out four cross-cutting areas for immediate action: strengthening of institutions, in particular technical, regulatory and participatory institutions; creation of a supportive framework of regulations and economic incentives; formulation of a broad-based communications campaign for public awareness; implementation of projects in NCS priority areas. Some aspects of this plan are now being implemented.

1. Strengthening Institutions

a. The Planning Commission

The key to any successful strategy must be to systematically build environmental considerations into each investment decision. The plan calls for the creation of a high level team in the Planning and Development Division. Its main responsibilities would include the preparation of environmental sections of the Five-Year Plan and the maintenance of an active role in preparing other sections of the Plan which have environmental implications.

This group would also review the environmental and social impact of all large projects. And it would work closely with the business community to help ensure that major investments in new plants and equipment will be efficient in terms of energy use and environmental input (the NCS estimates that 80% of all Pakistani industry in the year 2010 has yet to be built).

An Environment Section has already been established in the federal P&D Division but it is clearly understaffed and overworked, especially if it is to scrutinize all existing development projects. It is doubtful if the group could handle all the tasks entrusted to it even if it is brought up to the level envisaged in the Action Plan.

Furthermore, although Planning Commission involvement was critical to the success of the Steering Committee and the NCS process, privatization and the desire to emu-

"The Strategy highlights that...a constituency of people willing to take action is emerging from within the country. It consists of people who belong to all walks of life and who understand the problems, their complex solutions and the modalities involved...Their vision will have to prevail for we only have five years to make the economic, developmental, social and environmental transition required to take Pakistan into the twenty-first century."

Aban M. Kabraji,
IUCN Pakistan

late East and South-East Asia along with pressure from the World Bank and IMF to deregulate the economy will diminish the role of central planning in the future.

A.G.N. Kazi and others therefore felt that there must be longer term processes built into the system to ensure environmental improvement. These include the need for some new regulations. But the NCS lays great stress on the need to provide market incentives to overcome the poor record in enforcing regulations, on the need for community involvement to encourage restoration projects such as tree planting and the rehabilitation of degraded land, and to provide incentives against overuse of common property resources by grazing.

b. The NCS Unit in the EUAD

This Unit (which has already been set up) is responsible for further design, modification, amendment, and updating of the NCS, as well as serving as a focal point for the implementation of the rest of the NCS. It will have at least one staff member for each of the four components of the action plan. This group also provides the Secretariat for the Cabinet-level NCS Implementation Committee. The latter function gives it potentially considerable influence.

c. Pakistan Environmental Protection Agency

This agency was envisaged by the ill-fated 1983 Ordinance. It is the regulatory agency of the federal government and will be complemented by provincial Environmental Protection Agencies. The Environmental Protection and Resource Conservation Project funded by the World Bank will provide three Directors and six Deputy Directors by 1994. The project also provides for the establishment of three new sections in EUAD to deal with international cooperation, local environmental matters and legal affairs. EUAD has already notified a set of National Environmental Quality Standards.

PEPA will have an inter-provincial role and will also be responsible for reviewing

all EIAs on federally funded projects, international issues, and all issues involving the capital district. The assessments will be prepared by the proponents of the project and reviewed by the PEPA. The PEPA can advise government to amend, reject or approve the project. Private sector projects will also eventually be subject to EIAs, beginning with the most damaging.

d. The Sustainable Development Policy Institute

Pakistan has little capacity for longer term policy research in the field of sustainable development. The NCS therefore proposes the establishment of an institute outside both government and the formal university system. As the implementation design team stated in their report:

"There are four motivating factors behind these proposals: to pursue and facilitate independent research; to use the concept of sustainable development as an entrée to the analysis of social problems; to take the society rather than the state as the unit of analysis; and to focus on policy, or decision making issues, as opposed to pure disciplinary research.

The most important objective is to get the country accustomed to independent research by introducing a public advocacy role in society in a non-confrontational, consensus forming way. This role includes the identification of 'desiderata' (e.g. 'clean water for all', 'zero population growth', etc.) as well as a framework for public action, monitoring and evaluating public policy initiatives, mobilizing sectors and stakeholders through analysis and advocacy, and linking the analysis of sectoral programmes to a programme for change."⁸

Despite the delay in implementation funding from CIDA, SDPI has been set up under a Board of Governors chaired by V.A. Jafarey, one of the Prime Minister's most senior advisors, formerly Deputy Chair of the Planning Commission and Governor of the State Bank. It includes Syed Babar Ali, founder of WWF Pakistan and former

⁸ IUCN, Implementation Design for the NCS for Pakistan, January 1992, p. 26.

Minister of Finance in the Moin Qureshi government; Shoaib Sultan Khan, Executive Director of the National Rural Support Programme and former Head of the AKRSP; Dr. Arshad Zaman, former Chief Economist of the GOP; Abdul Rahim Mahsud, former Secretary of the Ministry of Water and Power; and Dr. Parvez Hassan, Chair of the IUCN Commission on Environmental Law and Senior Partner in Hassan and Hassan, Advocates. There are two ex officio positions for the government and IUCN, presently occupied by Imtiaz Sahibzada and Aban Marker Kabraji, respectively. Dr. Tariq Banuri is its Executive Director.

SDPI has six principal goals:

- To provide expertise and advice;
- To catalyze the transition to sustainable development;
- To encourage sustainable environmental policy;
- To support IUCN and other NGOs;
- To act as a networking and information agency;
- To carry out policy and problem-oriented research.

The Institute has an ambitious publishing programme including an annual citizens' report on environment and development modeled after a similar report for India produced by the Centre for Science and Environment.

SDPI is based on an essentially American concept and involves a good deal of risk for a closed society such as Pakistan. But if it can demonstrate a practical value, along with its undoubted intellectual rigour, it could prove a model for other Asian countries.

e. Environment in other Ministries

The plan calls for the establishment of environmental cells in a number of line agencies. They have already been set up in the Water and Power Development Authority, Oil and Gas Development Corporation, Sui Northern, Capital Development Authority, Karachi Development Authority, Lahore Development Authority and the Peshawar Development Authority. Their effectiveness is unknown.

f. Environment in Education

The Department of Environmental Planning and Management at the University of Peshawar will be bolstered by the establishment of a Geographical Information System under the World Bank project. The Action Plan also provides for significant support for staff training in all affected government departments and another GIS is being installed in the Forest Management Centre.

A number of observers question the suitability of GIS technology in institutions which are in need of far more fundamental help such as books, library facilities and trained faculty.

g. Non-Governmental Organizations

Support to NGOs will be provided through EUAD's recently established Rs. 30 million fund as special grants for NGOs.

The government's Action Plan⁹ calls upon IUCN Pakistan to lead in coordinating the actions of NGOs in support of the NCS. The Country Representative and her staff realized that the kind of organization that would promote the NCS and help in its implementation is not the same kind of organization that prodded the government into a commitment to prepare a strategy and then played a key role in its drafting.

Therefore, with CIDA's assistance, a team of three consultants conducted a management review of IUCN's operations. "The thrust of the programme recommendations of the Review lie in four main areas. First, IUCN Pakistan must choose and focus on a programme strategy and avoid undue dispersal of effort. This focus should be on continued support to the NCS. Second, its main role should be facilitation in four key areas — institutions, economic and legal incentives, awareness raising and the support of a select number of field projects...Third, the Review sees IUCN Pakistan eventually expanding to cover all the provinces in Pakistan...Finally, IUCN Pakistan should try to capitalize on the global strengths of IUCN in shaping a programme strategy.

⁹ EUAD, The Pakistan National Conservation Strategy, Plan of Action 1993-98, Document for the Donors' Conference, January 17, 1993.

"Government structure has not evolved with time, i.e., there has been neither institution nor capacity building. The strengthening of EUAD will play an instrumental role in this respect as will the emergence of a significant NGO community. NGOs will not replace government in implementing the NCS, rather partnership between government and NGOs should prove to be the key to successful implementation."

Abdul Latif Rao,
IUCN Strategies
Support Unit

Capacity building should be the overall theme guiding IUCN Pakistan's programme activities in Pakistan."¹⁰

As with all new NGOs, the team found that IUCN needed to undertake a number of internal reforms to adjust to its new larger size. Things which had been done informally now had to become more structured. The Country Representative needed to direct a more hierarchical management team and to delegate far more decision making authority to the members of that team. Financial procedures needed to be more efficient and policies designed for personnel management.

The IUCN management team reported on their progress in implementing these recommendations at a meeting of donors in December 1993. They appear to have implemented the bulk of the recommendations already, although the management review team had suggested an implementation period of two years.

h. National Rural Support Programme

Modeled upon the highly respected AKRSP, the National Rural Support Programme was established by the government to undertake community development projects across the country. NRSP has been granted Rs. 10 billion over 10 years. Given the concentration of AKRSP on community level forestry, water supply and agriculture projects, the government Action Plan recognizes a number of areas for cooperation.

i. Environment and the Provinces

The environment is one of the concurrent jurisdictions under the Constitution of Pakistan. This means that up to 80% of the implementation of the Strategy must take place at the provincial level.

Each of the provinces has set up an Environmental Protection Agency. Those in the Punjab and Sindh are the largest, the one in Balochistan the newest. The World Bank project is supposed to provide a good deal of technical assistance to these nascent

¹⁰ Peter Morgan, Zafar Qureshi, Johan Holmberg and Naim Sipra, Capacity Building for the Environment, IUCN, April 1993, p. x.

agencies. It is fair to say that the writer found various degrees of skepticism about the ability of any of the provinces, with the possible exception of the NWFP, to effectively enforce environmental standards.

The provinces are being encouraged by IUCN and some of the donors to prepare their own versions of the NCS. The most advanced is that of the NWFP.

What are the reasons? As with A.G.N. Kazi at the national level, the key figure in NWFP is a senior planning official, the Additional Chief Secretary, Khalid Aziz. The ACS is the second most powerful bureaucrat in the provincial government, responsible for overseeing all development activities. He felt strongly that environment is not just a sectoral function, but a planning and regulatory function as well. The need to build the environment into the decision making process also argued for it to be placed in the planning department.

In January 1992, with support from CIDA and IUCN, the NWFP Government convened a workshop of government officials, NGOs and others to consider the scope and structure of a provincial conservation strategy. The group produced a list of priorities which was somewhat different from those contained in the national strategy. The NWFP Government made a commitment to develop a proposal to fund a provincial strategy.

With funding from the Swiss and help from a unit within the Planning and Development Department supplied by IUCN, the province has developed a three-part approach: implementation of the broad recommendations of the NCS; building up its capacity for environmental monitoring and enforcement under the World Bank project; and preparation of a conservation strategy for the province. According to most observers, they are way ahead of any of the other provinces.

A number of reasons were given for this leadership:

1. The NWFP bureaucracy is relatively more open and less formal than those of the other provinces and it has already begun to implement some of the reforms set forth in the NCS Action Plan.

"In my opinion, one of the basic problems in Pakistan is that of weak governance... What we really need is a constituency of decision makers who act responsibly and fulfill the mandate through which they have been elected. The first step would therefore be to elect/select responsible decision makers who can positively influence and shape decision making in Pakistan."

Syed Babar Ali,
President,
WWF Pakistan

2. NWFP contains the headwaters of many of the major river systems necessary for the functioning of the irrigation systems of the Punjab.
3. The estimated 3 million refugees who arrived from Afghanistan have increased the pressures on an already fragile land and water base.
4. Most of the province consists of arid and semi-arid land and mountains and the inhabitants have always been aware of certain kinds of environmental pressures.
5. The area has a greater experience with community involvement. The AKRSP began in the province and the Sarhad Rural Support Corporation was the first of the provincial rural support organizations to replicate the AKRSP style of programming.
6. The province has a very limited agricultural land base which is being lost to unproductive uses.
7. The economic base of the rural areas is very precarious, leading to out-migration from villages and overcrowding in the province's cities.

2. Legislation and Economic Incentives

Changes in legislation and policy was the second cross-cutting issue in the Action Plan.

The government has already promulgated some standards under the 1983 Ordinance. EUAD hopes that a new bill will be ready by the last quarter of 1995. This bill will consolidate earlier laws and resolve outstanding areas of confusion. It will also pay careful attention to the problems of enforcement.

There are discussions at the provincial and federal levels of investment in protection and management of natural resources through government action and the strengthening of community-based management systems for common property resources.

And the Plan refers to an updated study being prepared on the link between economic policies and natural resource management. It will include an assessment of the

environmental impact of existing economic policies, a set of recommendations and mechanisms for incorporating environmental concerns into future policy actions, and an incentive package to induce businesses to undertake environmental clean ups.

SDPI has prepared a paper, on air pollution; other papers are in preparation. If these studies are able to tackle the links between macroeconomic policies and the state of Pakistan's environment, they could have a revolutionary effect on economic policy. Few other countries have even attempted anything so ambitious.

3. Campaign for Public Awareness

The Plan recommends a three-year programme on awareness through the mass media to finish in 1993-94. The NCS Unit in EUAD has about Rs. 4 million per year for this work.

4. Projects in NCS Priority Areas

As mentioned above, the NCS Implementation Committee insisted on 'projectizing' many of its recommendations to make them more appealing to donors. A list of the main programmes and their proposed budgetary implications is included as Annex 1.

These recommendations represent a major funding commitment by GOP amidst a serious economic crisis. They will need to jockey for position with a number of other new spending priorities for the government such as the Social Action Plan. Many observers were skeptical of the ability of the government and its donors to provide anything like the sums envisaged.

Prospects for Success

Despite some promising efforts at implementation, I found many to be very skeptical about the prospects for success.

As Canada's experience with the Green Plan and other multisectoral programmes has shown, the implementation of sophisticated plans linking environment and develop-

"What we really need to do is to bring in legislation to control new economic activities. For example, we in PEPC decided to introduce and enforce air and water quality standards from July 1, 1994...to achieve this purpose existing industries should be given economic incentives e.g., the duty-free import of pollution abatement equipment and tax incentives."

Parvez Hassan,
Chairman,
IUCN Commission
on Environmental
Law

ment is fraught with difficulty. Coordination problems among ministries that each own part of the pie, turf fights, political bickering and the sheer complexity of the task can baffle the best trained and organized bureaucracy. In fact, some writers contend that sustainable development can only occur with a wholesale reorganization of government that breaks down many of the current watertight compartments.

And the Pakistan bureaucracy is far from being the best trained and organized. During the two weeks that the author spent in Pakistan, hardly a day went by without an article in the press detailing the low morale, widespread corruption and lack of training in the civil service. These sentiments were echoed by the donors.

The United Nations Development Programme went so far as to state that little would be accomplished in even the traditional development programmes in Pakistan without a complete renovation of the bureaucracy. The implementation situation is so difficult that Syed Babar Ali, the Finance Minister in the acclaimed Moin Qureshi transitional government, claimed that the government had no less than \$12 billion in the aid 'pipeline' (Pakistan receives about \$3 billion per annum in new foreign assistance).

Although others contested that figure, all admitted that disbursements were far behind because of the limited absorptive capacity of the government. The situation in the provinces, with the possible exception of the NWFP, is said to be much worse.

Pakistan does have more than its share of highly trained and dedicated public servants at the top. And those whom the author met virtually all lamented the state of the public service.

This bureaucratic paralysis has been at least partly a function of political unrest. Despite what by all accounts were free and fair elections in 1993, Pakistan is a country which has been characterized by political instability since Independence. And yet experience has shown that ambitious sustainable development plans of the type contained in the NCS can only be carried out with the enthusiastic support of senior Ministers and, hopefully, the Prime Minister. In Canada, the Green Plan did not enjoy

that support under the Mulroney Government. In contrast, the Dutch environment plan was identified personally with the Prime Minister.

As mentioned earlier, the Pakistan People's Party manifesto came down firmly on the side of sustainable development. The Prime Minister has not yet spoken on the subject. One can only hope that she and her successors enjoy sufficient security of tenure so that they can concentrate on the creation of new patterns of development for Pakistan.

While the NCS and its implementation plan focus on the need to change the decision making process and they rightly stress the necessity to forge links between macro-economic policy and the environment, much of the follow-up seems to be concentrated on the development of 'projects'. This is perhaps understandable in a country and bureaucracy so fixated on central planning and decision making. And perhaps it can be partially remedied through the research and action programmes of SDPI and IUCN.

Privatization and deregulation of the economy may also reduce the influence of the central economic agencies somewhat.

Much of the follow-up is also directed to improving the 'react and cure' capabilities of the EPAs. Together with the bulk of the funds provided by the World Bank project, this focuses attention on the training and recruitment of environmental bureaucrats, regulation writers and enforcement officers.

Although these are necessary, even critical ingredients of a sustainable development programme, experience has shown that they are less effective than policies designed to anticipate problems before they arise and to prevent them from happening. They are less effective than getting the policies right from the beginning.

And even within the domain of the development project, there are already problems. Projects come up from the line ministries and the provinces, whose line ministries mimic those of the federal government. These ministries have little or no experience in designing multisectoral projects. And they have little incentive to prepare these designs. Bureaucratic instincts are to garner as much money for one's department as possible.

"During the last decade we devoted time to focusing in on various issues and problems faced by the country. But the situation is liable to deteriorate if concrete remedial steps are not taken. This entails a shift in thinking, i.e., the time has now come to focus on possible solutions and their effective implementation."

Syed Ayub Qutub,
Coordinator,
NCS Secretariat

Projects which share development monies with other departments are projects which reduce the home department's prestige and resources.

If NCS implementation costs are Rs. 21.3 billion, as is laid out in the document, Pakistan should have had Rs. 3 billion of projects in the first year. Yet it has fallen far short of that figure. Why?

- Lack of expertise. Departments cannot adequately formulate projects for submission to the National Economic Council. For example, much of the \$30 million World Bank project came straight from line ministries and is written along very traditional lines.
- Environmental programmes are not being given adequate matching local funds. It is customary for Pakistan to put up at least 20% of project costs in local currency. These projects cannot be forwarded to higher levels for approval by the Planning Commission. In many cases, the provinces want the federal government to put up the entire matching share (20%) for the World Bank project.
- A lack of expertise in integrating environmental concerns into traditional development projects. The Planning Commission stated that it wanted to allocate at least 3% of project budgets for environmental purposes but cannot because the environmental components are missing.
- There is little experience in generating projects where the environment plays a major role. Projects designed for the Bank and UNDP's Global Environmental Facility have been slow to develop.
- A number of those interviewed felt that the working relationships between EUAD and some of the sectoral ministries such as agriculture and forestry were not effective in securing adequate preparation of EIAs for projects.
- The Cabinet Committee on the NCS has not been very effective in stirring up the system. This is obviously at least partly a function of the political turmoil of the past year and could well change.

- The high level Pakistan Environmental Protection Council which is called for under the 1983 Ordinance has met only once and is obviously not very effective.
- Although the World Bank project provides for a substantial increase in the number of qualified people on the environmental protection side, there is clearly inadequate staffing for the environmental/economic appraisal side.

"NCS implementation is now the task of the entire nation and a tremendous effort is needed to successfully see it through this phase. One of the prerequisites of successful implementation is strong political commitment to the issues of sustainable development in Pakistan. This requires the political will not only at the Prime Minister's level but also at the Chief Ministers' level in the four provinces."

Rahim Mahsud
Member,
NCS Steering
Committee

PART V

LESSONS LEARNED

The Pakistan NCS is a major success story, although the prospects for its implementation are not yet clear. As with all successful national plans, the NCS is deeply rooted in the political culture of its country. Like all successful policies, it also benefited from a bit of luck. The Brundtland Report came along at the right time in the development of the NCS and the coincidence of the Earth Summit and Pakistan's leadership of the G-77 proved to be of enormous help in securing Cabinet approval. All of that having been said, however, there are a number of lessons that can be drawn from the Pakistan experience that should be of use to similar exercises elsewhere.

THE NCS IS A POLITICAL DOCUMENT

From the outset, IUCN recognized the need for the development of a genuinely Pakistani strategy. They also recognized the essentially political nature of a strategy. A successful NCS is not merely a technocratic document prepared by experts. It must gain widespread political and economic acceptance.

The decision, therefore, to establish an IUCN Country Office was critical. The decision to appoint a director who understood and was plugged into the political culture of the country was even more critical.

The decision to involve the Deputy Chair of the Planning Commission and a high level Steering Committee drawn from both the bureaucracy and the private sector helped to ensure the Strategy's acceptability to the economic community and to protect the Secretariat from the rest of the bureaucracy.

THE NCS MUST ALSO BE A SUSTAINABLE DEVELOPMENT STRATEGY

To be politically acceptable, conservation strategies must also be sustainable development strategies. The NCS comes as close as any strategic plan to what the Brundtland Commission intended as a sustainable development strategy. Like most such documents, it falls short in the area of social sustainability.

But it does contain recommendations for making the environment an integral part of economic decision making. It does reiterate the need to anticipate problems before they occur and to design economic policy so that it has minimal impacts on the environment. It forcefully reminds the government and people of Pakistan how much their economic prospects are bound up with the health of their natural resource base. And it does appear to have taken root in the upper levels of the economic sections of the government. Sartaj Aziz, the previous Finance Minister, was one of its strongest supporters, although there is no evidence that the concept of sustainable development has any supporters in the bureaucracy of the Finance Department. A.G.N. Kazi brought it into the Planning Commission through his chairmanship of the Steering Committee. And V.A. Jafarey, currently the de facto Minister of Finance, was one of its earliest supporters. Much of the follow-up on the economic side rests with the new unit in the P&D Division. And the first of the provincial strategies, in the NWFP, is also anchored in planning.

SUSTAINABLE DEVELOPMENT REQUIRES MAJOR INSTITUTIONAL CHANGE FOR ITS IMPLEMENTATION

Sustainable development im-

plies major changes in the ways in which policy is formulated and implemented in both the public and private sectors. And these sorts of changes are unlikely to come entirely from government, whose policy people are almost constantly preoccupied with the short term agendas of elected ministers.

It also requires major intellectual breakthroughs. The development of new techniques for measuring and anticipating the effects of major economic changes on the environment, or for incorporating the value of natural resources in a country's national accounts, is essential. Universities have a major role here. But as the experience of a number of Northern countries has shown, this work can often best be done in policy research institutions where the rhythm of the academic world is replaced by the reality of the political decision making timetable. The creation therefore of the SDPI is potentially one of the most important legacies of the NCS.

These sorts of major policy shifts imply major changes in the institutions of society as well. The NCS recognizes the need for 'massive' change at the federal level. The NCS makes 58 recommendations for developing the capacity of the government to carry out sustainable development. "In particular, it underlines the need to create and develop new institutions, revise and strengthen existing ones and create linkages among federal departments and between the federal government and provincial and local governments."¹¹

THE PROCESS IS AT LEAST AS IMPORTANT AS THE FINAL PRODUCT

Johnson and Halle consulted widely throughout the government and NGO community. The subsequent decision to interview more than 80 experts and decision makers in depth and then to involve them in a Search Conference set the tone for a fairly open process.

The Steering Committee for the NCS included five members from outside government. And the Secretariat organized workshops with the provinces, NGOs, the private sector, and the academic community. Five meetings were held at the village level. This process continued into the preparation of the implementation plan.

¹¹ Francois Bregha, Resource Futures International, personal communication.

"What we need is a strong government that would focus on such issues in its agenda. If environmental concerns are not institutionalized into decision making processes then even the Sarhad Provincial Conservation Strategy will not be able to address the issue of conservation and development in Pakistan."

Khalid Aziz,
Additional Chief Secretary, NWFP

IUCN and its JRC worked throughout the process to create and sustain a network of environmentally literate journalists and NGOs. Workshops were held, the NCS Bulletin was published regularly and the staff excelled at the constant 'networking' required to keep the process alive.

The NCS Secretariat calculated that more than 3,000 people had a chance to provide their inputs to the NCS.

STRATEGIES SHOULD BE DESIGNED TO BUILD CAPACITY IN-COUNTRY

While the NCS process itself was not designed to build capacity in Pakistan for sustainable development, there is a good deal of evidence to suggest that it did begin the process. The preparation of the document involved 18 principal authors, many of them working on a multisectoral project for the first time. Kazi's insistence on consensus meant that a large number of civil servants were involved in drafting groups, approval processes, structured workshops or the Steering Committee itself.

The process created a new organization, IUCN Pakistan, with an annual budget in excess of \$1 million and a series of specialized units on education, communications, and the private sector, as well as considerable expertise in the implementation of specialized field projects.

The process also seems to have brought many Pakistani NGOs in contact with one another and exposed them to environmental issues for the first time.

The patient work of the JRC has led to the creation of a new cadre of environmental journalists within the country.

And the implementation plan of the NCS is largely about capacity building. Taking to heart the Brundtland injunction to integrate environment and economics in decision making, the NCS makes a series of recommendations for strengthening the P&D Division, for creating environmental cells in line ministries and for beefing up the legislative and enforcement capacities of the EUAD. It recommends the creation of SDPI to

fill the policy vacuum in this area. It also sets up a special fund for NGO strengthening in the area of sustainable development.

Recognizing the need to transform IUCN Pakistan from a fledgling NGO to a larger, more permanent organization, CIDA and IUCN commissioned a management study of the organization. Its report, entitled Capacity Building for Sustainable Development sets out a clear strategy for institution building.

OUTSIDE ORGANIZATIONS MUST BE SENSITIVE TO THE INDIGENOUS NATURE OF THE PROCESS

In many ways, the NCS represents a

model for cooperation between an indigenous organization (which IUCN Pakistan has certainly become), an international NGO (IUCN Headquarters) and a development assistance agency (CIDA). The global strategy was invented by a global NGO (IUCN) with assistance from another international NGO (WWF) and a United Nations organization (UNEP).

The global strategy document was originally conveyed to the government, a member of IUCN, by the Swiss-based Secretariat of IUCN. The Secretariat then responded to a request for help from Islamabad and developed a prospectus for an NCS, with some assistance from WWF Pakistan. Mark Halle, who remained a pivotal figure throughout, facilitated the creation of an indigenous organization, IUCN Pakistan, to act as a stimulus and source of advice to the government.

Once IUCN Pakistan had been established, the Headquarters Secretariat continued to provide advice and support and was instrumental in providing the right consultants at the right time. Perhaps the greatest compliment that can be paid to this non-intrusive management style is that IUCN Pakistan is viewed within Pakistan as an indigenous organization, despite the fact that it is in law merely a branch of IUCN Switzerland and that Ms. Kabraji reports to IUCN's Director General.

CIDA agreed to fund the initial stages of the NCS. This commitment was later

extended to the whole Strategy. Although the relationship had its rough spots, on the whole CIDA was prepared to wait for a consensus-based bureaucratic and political process to come to a conclusion without undue prodding from the outside.

The NCS eventually took considerably longer than initially planned and required additional funding from CIDA at a time when funding cuts in Ottawa made money scarce.

CIDA took the lead in donor coordination, helping to ensure eventual World Bank acceptance of the NCS as a substitute for a NEAP. CIDA also sat in on the loan negotiations between the government and the World Bank to ensure that the World Bank loan complemented the NCS implementation plan as much as possible. The agency also held informal donor consultation meetings in Islamabad throughout the NCS process. This sort of donor coordination is both labour intensive and frustrating, but is essential to the policy dialogue.

OUTSIDE CONSULTANTS MUST BE CHOSEN WITH CARE AND USED SPARINGLY

On the whole, CIDA and IUCN chose their external consultants with care. As with all successful consensus processes, individual personalities are important. Rodger Schwass had been with the NCS from the beginning. His Search Conference process enabled Pakistani experts and policy makers to identify their own problems. Along with Nancy MacPherson he urged that the Strategy involve as many people as possible through workshops, communication programmes and attempted to involve some of the disadvantaged sectors of Pakistani society such as women. Alistair Crerar developed the original design for the Strategy with Syed Ayub Qutub and A.G.N. Kazi. He also prepared many of the original drafts.

Ralph Cobham and George Greene had critical roles in the organization and drafting of the report, especially the key sections on cross-cutting issues and implementation. And Linda Starke, editor of the Brundtland Report and the Worldwatch Institute's

annual State of the World report, edited the volume. Many others contributed to various aspects of the NCS and to the development of the implementation plan.

While the outsiders were important to the success of the Strategy, it remained an indigenous effort. And credit must be given to IUCN and the NCS Secretariat for knowing how to use consultants in the most productive way.

CONCLUSION

The valley of the Indus is one of the cradles of civilization. Archaeologists tell us that settled agriculture first began there more than 5,000 years ago.

The area has been host to most of the world's major religions and has a rich cultural tradition.

But rapid population growth and the over-exploitation of its natural resource base are putting the future of Pakistan in grave danger. And Pakistan is not alone. As Ms. Brundtland put it in her introduction to the report of the WCED, "Environmental degradation, first seen as mainly a problem of the rich nations and a side effect of industrial wealth, has become a survival issue for developing nations. It is part of the downward spiral of linked ecological and economic decline in which many of the poorest nations are trapped."¹²

The NCS adapts that Brundtland analysis to Pakistan and sets out a programme to bring the country on to a path of sustainable development. This programme goes much further than that of any of the much acclaimed Green Plans of the OECD countries. It goes further than the National Conservation Strategies of other developing countries.

Pakistan has set itself a formidable challenge. Sustainable development is potentially a very radical concept, postulating as it does a new relationship between the economy, society and the natural environment upon which we all ultimately depend for our survival.

It is not surprising that its implementation is difficult, uneven, and time consuming.

¹² World Commission on Environment and Development, *Our Common Future: Report of the WCED*, Oxford University Press, New York and London, 1987, p. xi.

For it requires not only changes in the institutions of government and in the way policy is formulated; it also requires fundamental changes in the way people think about their relationships to the natural environment and to such fundamental issues as social equity and the elimination of poverty.

Pakistan has set out this ambitious agenda for fundamental change before any of its Asian neighbours. Its execution will require continuous support from its donors and help from IUCN and other international NGOs. But just as the Strategy is largely indigenous, so must be its implementation. In the words of the NCS:

"In the preparation of the Strategy, there has been acute awareness among those involved in both the product and the process that fine documents and policies do not make change — people do. The key to change is the ability to implement the recommendations of the technical experts, practitioners, and advocates of good environmental practice. Thus the implementers must inevitably be the people of Pakistan. It is to them and their success that this Strategy is addressed. Collectively, we can green our future."

ANNEX 1

NCS IMPLEMENTATION BUDGET

Core Area Programme	Number of Schemes	Proposed Allocation in Environment Sector (Rs. Million)
I. Maintaining Soils in Croplands	11	1,143.30
II. Increasing Irrigation Efficiency	8	431.08
III. Protecting Watersheds	14	1,943.52
IV. Supporting Forestry and Plantations	24	2,051.90
V. Restoring Rangelands and Improving Livestock	20	1,523.28
VI. Protecting Water Bodies and Sustaining Fisheries	23	668.25
VII. Conserving Biodiversity	32	1,692.61
VIII. Increasing Energy Efficiency	11	893.32
IX. Developing and Deploying Renewables	4	62.70
X. Preventing and Abating Pollution	37	3,451.83
XI. Managing Urban Wastes	11	3,822.32
XII. Supporting Institutions	17	689.54
XIII. Integrating Population and Environment Programmes	11	92.18
XIV. Preserving the Cultural Heritage	18	310.50
Total I to XIV	241	18,776.33
Non-Governmental Organization Support Fund		500.00
GRAND TOTAL		19,276.33

ANNEX 2

FORMULATING THE NCS: WORKSHOPS AND MEETINGS

National workshop on the NCS

Islamabad, August 25-28, 1986

- Organized by IUCN and EUAD, and funded by CIDA.
- Designed by Rodger Schwass, as a modified version of the Search Conference in Canada, to develop an action plan for the conservation of nature and natural resources in Pakistan.
- Attended by 70 experts from the government, the business sector, the media and universities.
- Began with a global overview and a keynote report.
- Thirteen papers were presented on conservation strategies for the marine environment and marine fisheries, forests and the environment, wildlife, livestock development and conservation, agriculture, water and land, industrial pollution in Pakistan, minerals and energy, pollution and sanitation, human settlements, health, education and community development, population, and institutions and legislation.
- Groups reviewed the present situation with respect to conservation and development in Pakistan and project various trends to the year 2000. They also reviewed constraints and obstacles and how to overcome these.
- The workshop recognized that much of the action necessary had to be taken at the level of local communities.

NCS Steering Committee meetings

Islamabad, August 1988 - July 1991

- Members of the Committee were notified of their appointment in May 1988. They were a mix of government officials and private businessmen.
- The Committee held 10 meetings at which it set the work-plan and agenda for the NCS Secretariat, reviewed drafts of the emerging strategy and commented on the final document. It also authorised four subcommittees to draft material on certain key sectors.

- First meeting	August 8, 1988
- Second meeting	October 29, 1988
- Third meeting	June 6, 1989
- Fourth meeting	August 24, 1989
- Fifth meeting	October 31, 1989
- Sixth meeting	March 24, 1990
- Seventh meeting	October 17, 1990
- Eighth meeting	November 10, 1991
- Ninth meeting	April 3, 1991
- Tenth meeting	July 18, 1991

NCS signed off by Steering Committee and sent to
the Cabinet

Authors start-up meeting

Islamabad, September 15, 1988

- A meeting of all NCS sector paper authors was held to discuss the approach to writing the papers. Participants agreed that the papers, to be commissioned by the NCS Secretariat, should focus on cross-sectoral issues.
- Under discussion were economic activity sectors, environmental impact sectors and prescriptive sectors.

Provincial workshops

December 1988 - January 1989

- Workshops held in:

- | | |
|------------|----------------|
| - Peshawar | December 13-15 |
| - Karachi | December 20-22 |
| - Lahore | December 27-29 |
| - Quetta | January 9-11 |

- Participants included authors, sector paper peer reviewers, civil servants, local government officials, members of provincial NGOs, and the business community.
- Held to identify ways in which economic development could occur along with the maintenance and improvement of environment quality; and to propose demonstration projects which would illustrate these approaches.
- In each three-day workshop, participants divided into economic, social, administrative and environmental subgroups facilitated by Rodger Schwass, Tariq Husain, Ayub Qutub and Alistair Crerar respectively.
- 55 people attended each workshop.
- The workshops gained the widest possible endorsement on the 19 sector papers commissioned by the NCS Secretariat.

Village meetings and public hearings

The Punjab, the North West Frontier Province and the Northern Areas,

February - March 1990

- Series of consultative meetings to test the relevance of the NCS recommendations.
- Three public hearings — Multan, Faisalabad and Abbottabad — to facilitate structured discussion of specific issues raised by the NCS.
- Five village meetings — Chak 202 in Jhang, Chak 332 in Toba Tek Singh, Chikiskot near Gilgit and Giddary and Shiwa in Mardan and Swabi districts respectively — to incorporate feedback from the villagers. There were separate but simultaneous meetings for men and women.

Conference on population-environment linkages in the NCS

Islamabad, March 17-18, 1990

- Participants included demographers and conservation strategy experts who projected the changes that would occur in their respective sectors from a doubling in the country's population.
- Four working groups formed to discuss:
 - The limited availability of natural resources as a constraint to growth.
 - Rural areas' carrying capacities and population policies.
 - National urban settlements policies.
 - Relationships between environment, development and human fertility.
- Group findings were used to provide the NCS with the perspective of population and its effects on natural resources and the environment.

Special focus sector workshops

April - May 1990

- UNDP sponsored workshops on:
 - Media
 - Women in development
 - NGOs
 - Population
 - Research and technology
- Workshops focused on familiarization with the NCS process; inputs into the NCS document; identifying the relationship of different sectors to conservation and sustainable development; mobilization of people, groups, and organizations; and implementation of the NCS.

NCS completed

July 1991

- Transition to implementation phase begins.

NCS institutional design consultancy

August 1991

- Nine one-day workshops focused on the institutional development required to implement the NCS in the following areas:
 - Federal institutions
 - Provincial institutions
 - Legal and judicial institutions
 - Research institutions
 - Education and training institutions
 - Urban institutions
 - Business and industry
 - Community development
 - Media and communications
- Each workshop discussed the sector-specific NCS recommendations, debated the suggestions with the authors and examined the feasibility of the steps required for implementation.
- Discussion also focused on cross-cutting issues such as the role of women in development, the role of NGOs, health issues, land use regulations, environmental economics and the role of grassroots institutions.
- One of the most important workshops was the one on provincial institutions held at Peshawar.

Participants from the four provinces discussed the NCS and in particular, the implementation phase.

- The government of the NWFP decided to take the lead and develop a provincial strategy.
- A decision was taken to establish an environment section in the Planning and Development Department of the NWFP.
- The task of the environment section would be to develop the Sarhad Provincial Conservation Strategy.

Participatory review of the NCS

Nathiagali, November 15-16, 1991

- Focused on recommendations to CIDA for the implementation phase of the NCS.

First board meeting of the Sustainable Development Policy Institute

Islamabad, December 23, 1991

- The Board of Governors met to confirm and approve its composition.

Planning workshop for the Sarhad Provincial Conservation Strategy

Peshawar, January 8-9, 1992

- There were 10 presentations on problems confronting sustainable development in the NWFP. The issues were then debated in subgroups and the recommendations fed back into the SPCS planning process.
- High priority areas were identified: clean air; Kabul river clean up; the sustainable management of forests, grazing lands, wildlife; fisheries; sustainable agriculture; disposal of urban waste; domestic energy and cultural heritage.
- Funded by CIDA.

Conference on Environment and Law in Pakistan

Karachi, January 11, 1992

- Organized by IUCN.
- Conference aimed at increasing judicial interest in environmental matters.

Federal Cabinet approves the NCS

Islamabad, March 1, 1992

Second board meeting of Sustainable Development Policy Institute
May 19, 1992

- Board approved the SDPI Charter.

NCS launch

Islamabad, May 21, 1992

- Launch presided over by Minister of Environment.
- Occasion marked by the screening of the NCS documentary Greening our Future on TV stations.

First meeting of the Cabinet-level NCS Implementation Committee

Islamabad, July 8, 1992

- Decision taken to present a portfolio of NCS-related projects to the donors.

Second meeting of the Cabinet-level NCS Implementation Committee

Islamabad, September 1992

- Approved the parameters of an NCS plan of action, to be presented to donors.
- Components included institutional strengthening; creation of a supportive framework of regulations/economic incentives; formulation of a broad-based communications campaign for public awareness; project implementation in NCS priority areas.

Meeting on development of a communication and education strategy for the NCS

Karachi, September - October 1992

- Attended by a small group of people, from IUCN and other agencies.
- Participants divided into two working groups, one to discuss an action plan for a communications strategy and the other to discuss reforms in the education sector.
- Developed a draft strategy to be circulated to a wider audience.

NGOs and Pakistan's NCS

October 15, 1992

- Meeting to discuss and decide on how NGOs could best be assisted in implementing the NCS.

Business and Environment Round Table

1992- 1993

- Round Table discussions took place in each province:

- Sindh	May 1992
- NWFP	July 1992
- Punjab	September 1992
- Balochistan	January 1993

- PILER, Sungi Development Foundation and IUCN collaborated to initiate dialogue between three parties — labour, industry and government — on issues relating to business and the environment.
- To form a consensus on ways and means of controlling industrial pollution in Pakistan.

Donors' Conference

Islamabad, January 17, 1993

- To brief donors on funding the implementation of the NCS. The Plan of Action, 1993-1998 defined four strategic areas: institutional strengthening, framework of regulation and economic incentives, broad-based communications for public awareness, and implementation of projects in NCS priority areas.

Workshop to present the draft communications strategy

Islamabad, March 15, 1993

- Recommendations from the workshop led to the development of a demonstration project, to be tested in Karachi, as a means of practically applying the strategy.

Workshops to develop the communication planning frameworks

December 1993

- Eight workshops were held to develop communication planning frameworks for the 14 core areas of the NCS.

ANNEX 3

CHRONOLOGY

1980 Publication of the World Conservation Strategy

- The first global strategy for the rational development and conservation of natural resources is published by IUCN-The World Conservation Union, the United Nations Environment Programme and the World Wildlife Fund. The Strategy looks at how sustainable modes of development can be adopted by countries around the world, particularly in response to the increasing population pressure that is leading to the unsustainable exploitation of natural resources. It includes a redefinition of development planning to stimulate a more focused approach to the management of living resources, and provides policy guidance on how this can be carried out. The Strategy can be used as a model by individual nations to develop their own conservation strategies.

1983 Seeds for a Pakistan NCS are sown

- The National Council for the Conservation of Wildlife in the Ministry of Food, Agriculture and Cooperatives is the first government organization to receive the WCS.
- W.A. Kermani in the Ministry of Food, Agriculture and Cooperatives requests IUCN's assistance in the preparation of an NCS.
- At the government's invitation, Mark Halle and Brian Johnson visit Pakistan to conduct a feasibility study between November 28 and December 6. Meetings are held with representatives of many different ministries. Their mission evaluates the benefits that could accrue to Pakistan from formulating an NCS.

- President Zia-ul-Haq promulgates the Pakistan Environmental Protection Ordinance. This Ordinance provides a framework under which environmental protection policies can be formulated and enforced nationwide and allows for the establishment of the Pakistan Environmental Protection Council, a high-powered policy making body, and its executive arm, the Pakistan Environmental Protection Agency.

1984 First steps are taken

- Mark Halle and Brian Johnson submit their report A National Conservation Strategy for Pakistan — First Steps to government. It is received by Mahbub-ul-Haq, W.A. Kermani, and A.N. Gardezi in government.
- In anticipation of the approval of the NCS concept, IUCN starts seeking donor assistance. The UN Food and Agriculture Organization and the US Agency for International Development both express interest. The Canadian Government indicates its interest in the second, working phase of the Strategy.
- Aban Marker Kabraji is asked by WWF and IUCN to assist in the development of the Pakistan NCS.
- A consultative process starts within government to decide which ministry should house the NCS. Fazil Janjua, Minister for Food, Agriculture and Cooperatives and IUCN feel that the Planning and Development Division — where the actions of different economic sectors are deliberated and linkages between them are sorted out — should take the lead in developing the Strategy.
- Brian Johnson visits Pakistan for a period of 10 days. He discusses the development of the NCS with various government officials and concludes that the highest priority is to develop a true picture of the degree of environmental deterioration in the country. This is required to raise awareness of the negative impact of current resource use policies and practices in Pakistan and the critical need for remedies. Johnson also recommends pursuing Syed Babar Ali's idea that a watchdog committee outside government be established to promote action on the NCS within GOP. His

final recommendation is that Aban Marker Kabraji should become an important link, getting strategic advice on the government perspective from W.A. Kermani, liaising with both Syed Babar Ali on the interventions to be made within government, and IUCN on the need for external interventions.

- GOP accepts IUCN's proposal. The Environment and Urban Affairs Division within the Ministry of Housing and Works is given responsibility for taking the lead — this fits in well with EUAD's responsibility to implement the 1983 Environmental Ordinance.
- The NCS process slows down considerably with the departure of three of the main players whose strong personal commitment had helped the NCS gain acceptance within government. They are: W.A. Kermani, Inspector General of Forests who retires; and A.N. Gardezi, Additional Secretary, EUAD and Dr. Moinuddin Baqai, Secretary, P&D Division who are transferred.

1985 Setbacks and delays

- The United States Agency for International Development's interest does not materialize into action — they are unwilling to support the project.
- FAO communicates its inability to provide a three-month long consultancy that the government feels is necessary to complete Phase I of the NCS.
- CIDA agrees to support IUCN in providing necessary assistance to the government. CIDA's first contribution is in the preparation of a prospectus for the NCS, to be prepared by Rodger Schwass.

1986 The NCS gets underway

- The NCS now has the solid support of several of Pakistan's most influential decision makers including: Mahbub-ul-Haq, A.G.N. Kazi and V.A. Jafarey.
- Rodger Schwass embarks on an extensive series of interviews with government officials, representatives of NGOs, university professors and other experts to determine

the present situation and probable trends for the future. The interviews generate background material for the first draft of the prospectus as well as the information necessary for the initial conception of an NCS. Dr. Schwass now has the material necessary for a national workshop in August 1986. His work culminates in a report *Conservation Strategy For Sustainable Development in Pakistan: Some Key Issues*.

- An inter-ministerial Steering Committee is instituted to organize the workshop in August 1986. Papers are commissioned on a comprehensive range of conservation and development issues.
- The national workshop on a Pakistan NCS is held in Islamabad between August 25-28. It marks the first step towards the actual preparation of the NCS. There is general consensus at the end of the workshop that not only is there a definite need to address current problems but also that it must be done urgently.
- Syed Ayub Qutub is asked to edit the proceedings of the workshop.
- GOP gives its formal approval for Phase II of the NCS.

1987 Phase II delayed

- Phase II proposal is submitted to CIDA in January but CIDA does not agree on the project design and budget until September. A January 1988 start is anticipated.
- 1987 sees discussions on the NCS Steering Committee's composition.
- IUCN starts headhunting key Phase II staff in October.
- Proceedings of the Pakistan workshop are printed.

1988 The process speeds up

- CIDA signs the contract for Phase II and Pakistan becomes the forty-first country to commence work on an NCS.
- Proceedings of the national workshop are circulated to government agencies to retain their interest in the process. Feedback indicates that the proceedings are one of the best publications on environmental issues in Pakistan.

- A decision is taken to house the NCS Secretariat within EUAD. The Secretariat will function autonomously yet in close collaboration with government agencies.
- Syed Ayub Qutub joins the NCS Secretariat on April 1 as the Pakistani Coordinator. Alistair Crerar joins the NCS Secretariat on May 1 as the Canadian Coordinator. Initially, it is planned that the expatriate coordinator will focus on technical issues and liaise with outside agencies, while the local coordinator will deal with administrative and social issues and liaise with government agencies. The role of the administrator, Azharuddin Khan, is to run the day-to-day operations of the NCS Secretariat.
- The NCS Secretariat creates the NCS process diagram which brings out the cross-sectoral nature of environment and development issues.
- The Journalists' Resource Centre for the Environment is established in Karachi to promote and disseminate information on the NCS to the media. Its core function is to create an information bank on all environmental matters.
- The first meeting of the NCS Steering Committee is held on August 8. They discuss: the work-plan and approach; the need for sectoral papers to be prepared by an author, and peer reviewed by 4 to 5 specialists with a strong background in their own and some other aspect of the sector; and the need for the NCS to be viewed both as a "product" (namely a document) and as a "process of disseminating environmental awareness among decision makers".
- An authors' start-up conference is held on September 15.
- Eighteen authors are commissioned to write papers on their specific sectors: agriculture, energy, environmental health, fisheries, forestry, heritage conservation, human settlements, industrial discharge, industry, livestock, marine and coastal fisheries, mining, municipal discharges, natural capital, over-harvesting, population, soils, tourism and recreation, water use and misuse.
- Nancy MacPherson, CIDA's monitor for the NCS, visits Pakistan to evaluate progress.

- Second meeting of the NCS Steering Committee is held on October 29. The decision to have a separate sector on grassroots institutions is taken. It is also decided to hold provincial workshops.
- JRC decides to launch an NCS Bulletin on environmental news.
- NCS provincial workshops are held in Peshawar, Karachi, Lahore and Quetta.

1989 The work continues

- The third meeting of the NCS Steering Committee takes place on June 6.
- Alistair Crerar decides to leave.
- The NCS Steering Committee meets for the fourth time on August 24. The first and second chapters of the NCS are cleared for circulation. The third and fourth chapters are due mid-October. The committee feels that as chapters are completed, they should be circulated for comments, criticisms, reviews, suggestions and revisions to government officials, NGOs and the larger environmental community.
- George Greene starts work with Syed Ayub Qutub, Aban Marker Kabraji and Mark Halle on the development of a detailed plan for the completion of Phase II and the bridging phase project, leading from Phase II to Phase III. Phase III envisages the establishment and maintenance of an institutional infrastructure to guide the first five years of the NCS. It also aims at implementing several high level projects to demonstrate the significance of fundamental strategies proposed in the NCS.
- The fifth meeting of the NCS Steering Committee takes place on October 31.
- CIDA pledges additional support for the NCS bridging phase as well as part of the next phase of the NCS. A four-step process, including an institutional design phase leading up to a full-fledged implementation plan, is envisaged.

1990 The NCS goes public

- The sector papers on agriculture, energy, forestry, human settlements, industrial discharges, industry, livestock, municipal discharges, natural capital, population, soils,

tourism and water are completed in January. Sector papers on fisheries, health effects, mining, over-harvesting and transportation remain to be completed.

- Conference on population-environment linkages in the NCS in March.
- The NCS Secretariat holds five village meetings and three public hearings. These meetings are envisaged as an integral part of the process of testing the relevance of strategic solutions recommended by the NCS. Meetings in Sindh and Balochistan have to be cancelled.
- The sixth meeting of the NCS Steering Committee takes place on March 24.
- By May, the first draft of the NCS nears completion — as chapters are completed they are circulated to various government divisions/departments and sector authors for comments.
- IUCN in collaboration with UNDP holds special focus sector workshops on: media, women in development, NGOs, population, research and technology.
- From May to July, the NCS Secretariat holds meetings with various government officials to obtain feedback on the NCS draft.
- CIDA agrees to the request for an additional Canadian \$50,000 for bridge financing after Phase II.
- As the year comes to a close, Ralph Cobham and Syed Ayub Qutub complete the balance of the NCS chapters. A second draft of the document is near completion and undergoes extensive review and improvement.
- The seventh and eighth meetings of the NCS Steering Committee are held on October 17 and November 10 respectively.

1991 Implementation becomes a focus

- One of the recommendations of the NCS is the establishment of a number of institutional mechanisms to guide and assist in the implementation of its policy and technical recommendations. These include: a new environment section to be established within the federal P&D Division; a strengthened EUAD; a federal coordinating com-

mittee for NCS implementation; an independent Sustainable Development Policy Institute; non-governmental and private sector initiatives to follow up on the NCS.

- At the ninth meeting of the NCS Steering Committee is held on April 3, Part III of the NCS document on implementation arrangements is considered.
- The institutional design consultancy begins with the arrival of Rodger Schwass. A small steering committee of people from the NCS Secretariat, IUCN Pakistan, GOP and NCS sector specialists is formed to discuss and finalize the work-plan for the NCS implementation design process. It is felt that the pursuit of sustainable development is not possible without a supportive system of research and analysis and that there is a need for an institute in the non-governmental sector oriented towards policy research in the areas of development, social justice and environmental conservation. As a result the concept of a Sustainable Development Policy Institute is strongly endorsed as a recommendation that should emanate from the NCS.
- At the tenth and final meeting of the NCS Steering Committee on July 18 NCS obtains committee approval. It is then sent by EUAD to the Chief Secretaries of the provinces for comment and final approval, after which it goes to Cabinet.
- Nine one-day implementation design workshops focusing on the need for institutional development in key areas are held.
- The NCS index is prepared and the document is given to JRC for publication.
- A workshop on the role of provincial institutions in the implementation of the NCS is held in Peshawar.
- A 25-minute film on the NCS in English and Urdu is produced for the NCS launch.
- Participatory review of the NCS in Nathiagali. The review focuses on recommendations for CIDA regarding Phase III.
- A draft charter for the establishment of SDPI is formulated by the planning committee and membership for a Board of Governors is proposed. Tariq Banuri, part of the implementation design and SDPI planning team, develops the research agenda for the institute.

1992 The NCS is approved

- A planning workshop for the SPCS takes place between January 8-9 in Peshawar.
- The SPCS Unit is established in Peshawar to spearhead the SPCS.
- A conference, organized by IUCN, on the NCS and the judiciary helps increase judicial interest in environmental matters. Sessions are chaired by Justice Nasim Hassan Shah, Justice Saleem Akhtar, and Justice (Retd) Dorab Patel in addition to Anwar Saifullah Khan, Minister for Environment.
- Pakistan's National Report to United Nations Conference on Environment and Development is prepared by a team of experts led by Tariq Banuri under the supervision of an inter-ministerial government committee. The NCS also plays an important role in prevailing upon Pakistan's agenda at the UNCED. The NCS is viewed as Pakistan's domestic agenda on the environment while the National Report expresses the international agenda and draws heavily upon the philosophy and recommendations of the NCS.
- The federal Cabinet approves the NCS on March 1, 1992.
- The Prime Minister establishes an NCS Cabinet-level Implementation Committee, headed by Anwar Saifullah Khan, to coordinate the implementation of the NCS.
- The SDPI board-designates meet to approve the charter of SDPI.
- The local delegation to the Aid to Pakistan Consortium, Paris, led by Sartaj Aziz, Finance Minister, announces that it will hold a special session for the donors of the NCS at a conference in Islamabad in early 1993.
- The NCS is formally launched in May. The occasion is marked by the screening of the NCS documentary Greening Our Future, on the PTV network and STN stations.
- The NCS Unit is created in EUAD to coordinate and monitor the NCS implementation process. The Unit's primary role is to support agencies and institutions, both within and outside the government, that are directly involved in implementing various aspects of the Strategy. The NCS Unit would, amongst other activities, be responsible for managing an NGO Fund worth Rs. 30 million, created to provide

financial assistance to NGOs in developing and implementing environment related projects.

- The first Urdu version of the NCS Bulletin, the NCS Jareeda, is published.
- In collaboration with Sungi Development Foundation and the Pakistan Institute of Labour, Education and Research, IUCN initiates dialogue between industry, labour and government on issues relating to business and environment. Round Table meetings are held in Sindh, the NWFP and the Punjab.
- Ian Smillie completes a report on the feasibility of the NCS recommendations with respect to NGOs.
- The first meeting of the NCS Cabinet-level Implementation Committee. It is decided that a portfolio of NCS-related projects should be prepared for presentation and funding at a donors' conference.
- SDPI is established as an NGO on August 4. Tariq Banuri joins as the Executive Director and starts commissioning research proposals, preparing a work-plan, recruiting staff for SDPI and identifying donors for the Institute.
- The NCS Implementation Committee approves the broad components and framework of the Plan of Action.
- A meeting on the development of a communication and education strategy for the NCS is held.
- Based on Ian Smillie's report a workshop is held in October to discuss NGOs and the NCS.
- Linda Starke is asked to write a 'popular version' of the NCS.

1993 The interim phase continues

- The Plan of Action, 1993-1998 for the implementation of the Pakistan NCS is presented to donors at a one-day conference in Islamabad, on January 17.
- In Balochistan, the fourth and final business, trade union and government Round Table is held in January.

- NCS communication and education strategies workshop in Islamabad.
- An initial planning workshop is held with the Balochistan P&D Department for the preparation of a proposal for the development of a Provincial Conservation Strategy and then submitted to the provincial government as well as donors for funding.
- Publication of the Inception Report of the SPCS.
- The development of a strategy for industrial pollution control, based on the outcome of the Round Table process. Follow-up meetings are held to maintain the momentum on the Round Table process.
- Several communications planning framework workshops held in December.
- The SPCS team takes its document to public hearings and village meetings in 16 towns and cities of the province throughout December and January 1994.

1994 Delays in funding

- At the request of the federal government, a panel of legal experts is established by IUCN to review and build upon the existing Ordinance of 1983. The first draft of the revised version entitled Environmental Protection Ordinance 1994 is circulated for comment and feedback. The new Ordinance is intended to be more comprehensive and responsive to current environmental issues.
- Meetings held in Peshawar, Mardan, Swabi, Charsadda and Nowshera to discuss the feasibility of the recommendations of the SPCS Inception Report.
- CIDA intimates Phase III funding has been approved. Full implementation can now take place.

ANNEX 4

A SELECT ANNOTATED BIBLIOGRAPHY

Abidi-Habib, Mehjabeen. National Conservation Strategy: Overharvesting.

Islamabad: NCS Secretariat.

This paper examines the impact of overharvesting on various economic sectors, namely, fisheries, forests, rangelands and wildlife and emphasizes that "optimum sustainable yields would be achieved by a deliberate melding of biological, economical, social and political values, designed to produce the maximum benefit to society from stocks that are sought for human use."

Ahmed, Junaid. National Conservation Strategy: Research and Technology.

Islamabad: NCS Secretariat.

In this report the means of the research and new technology sector and its importance for Pakistan is examined.

Akhtar, Nasim. National Conservation Strategy: Fisheries. Islamabad: NCS

Secretariat.

The study describes the status of fisheries in Pakistan, and addresses the technical and non-technical problems that face the development and management of the fisheries sector. Key problems are a lack of strong research programmes, unreliability of the available data base and inadequate extension and conservation programmes.

Ata, Farooq. National Conservation Strategy: Tourism. Islamabad: NCS Secretariat.

The main purpose of this sector paper is to examine "the concerns of conservation vis-a-vis the role of the growing sector of tourism" and to assess the physical and socio-cultural impact of tourism with other economic sectors.

Aziz, Khalid, et al. 1994. Environmental Issues and Problems in Pakistan. Pakistan Administration, 31 (1): 5-69.

A paper written for the Administrative Staff College's term project.

Banuri, Tariq (ed). 1991. Pakistan National Report to UNCED 1992. Karachi: EUAD and IUCN.

The report, prepared before the conference, presents Pakistan's agenda at the Rio Summit. It provides information on key economic and demographic features, looks at the natural resource base of the country, discusses environmental problems, existing and envisaged solutions to these problems and existing and desired forms of international cooperation. The concluding chapter summarizes the discussion by listing the expectations and recommendations of the people of Pakistan.

Burney, M.I. National Conservation Strategy: Environment and Health. Islamabad: NCS Secretariat.

The study highlights the implications of environmental degradation on human health by citing examples such as the impact of air and water pollution on people.

Chatterjee, Ashoke and Farida Sher. 1992. Pakistan Mission for Environmental Awareness Campaign: Mission Report. Islamabad: CIDA.

The report reflects the consensus on priorities for an overall communication strategy for the implementation phase of the NCS. The report highlights how the goal of

the mission is to design a communication programme complementary to that of the NCS.

EUAD. 1991. Government Response to the Recommendations of the World Bank's Medium-Term Policy Agenda for Improving Natural Resource and Environmental Management in Pakistan. Islamabad: EUAD.

The study is a useful survey of the large and growing number of serious environmental problems facing Pakistan. In response to the World Bank medium-term agenda, the study suggests recommendations for improving natural resource and environmental management.

EUAD. 1992. Pakistan's National Conservation Strategy: from Conceptual to Implementation Issues. Background Paper for the NCS Implementation Conference, to be held in Islamabad on 17 October, 1992. Executive Summary. Islamabad: EUAD.

A summary of the two reports produced for the NCS Implementation Conference to be held in Islamabad.

EUAD. 1992. Pakistan's National Conservation Strategy: from Conceptual to Implementation Issues. Background Paper for the NCS Implementation Conference, to be held in Islamabad on 17 October, 1992. Islamabad: EUAD.

The report's principle recommendation is the adoption of a four-component action plan for implementing the NCS. The four components are: (i) institutional strengthening, (ii) communications campaign, (iii) economic incentives and legal regulations, and (iv) prioritized projects. Significant emphasis is placed on the institutional structure required for implementation. Along with public sector responsibilities,

the importance of the roles to be played by the private sector and NGOs is stressed. It is suggested that 10 high visibility projects be announced.

EUAD. 1992. Examples of Project Concept Summaries Prepared upto 2 September, 1992. For the NCS Implementation Conference, to be held in Islamabad on 17 October, 1992. Islamabad: EUAD.

The document selects concept papers for projects in areas suggested as priorities for the first phase of NCS implementation.

EUAD. 1993. The Pakistan National Conservation Strategy: Plan of Action 1993-98. Document for the Donors' Conference, Islamabad, 17 January 1993. Islamabad: EUAD.

A plan of action for the implementation of the NCS during the Eighth Five-Year Plan, 1993-1998. In addition to a brief overview (Part I), the document includes a brief description of the current environment situation (Part II), actions already taken in the government and elsewhere (Part III), and a plan of action in the areas of institutional development, supportive regulatory and economic incentives, mass awareness, development programmes and projects to be undertaken during the Eighth Five-Year Plan period (Part IV). The objectives of the action plan and the project proposals are both to strengthen the initiatives in hand, and complement them with new actions.

Government of NWFP, Swiss Development Corporation and IUCN. 1993. The Sarhad Provincial Conservation Strategy, Inception Report. Peshawar: IUCN, SDC and Government of NWFP.

The report summarizes the work that has occurred to date on the SPCS and proposes an action plan for 1993-1995. It outlines environment and development issues in the NWFP, the SPCS process, SPCS partnerships and SPCS management.

Government of Pakistan and IUCN. 1992. The Pakistan National Conservation Strategy: Where We Are, Where We Should Be, and How to Get There. Karachi: GOP and IUCN.

The Pakistan NCS is a policy document approved by the Cabinet in 1992. Part I of the Strategy outlines the state of Pakistan's environment. Part II focuses on elements of the Pakistan NCS and Part III concentrates on the implementation arrangements of the Strategy. Its recommendations aim to incorporate environmental considerations into decision making processes in Pakistan.

Halle, Mark and Brian Johnson. 1984. National Conservation Strategy for Pakistan: First Steps. Gland: IUCN.

This paper was written following an in-country study to determine the feasibility of an NCS for Pakistan.

Hanif, Muhammad. National Conservation Strategy: Industrial Discharges. Islamabad: NCS Secretariat.

The objective of the report is to present the problem of industrial discharges in Pakistan. It recommends the formulation of a strategy to limit and safely dispose of such effluents, given that in the absence of a legislative framework to regulate the activity of the industrial sector, industries continue to pollute soils, air and water through their waste.

Husain, Tariq. 1992. Community Participation: The First Principle. A Pakistan National Conservation Strategy Paper 1. Karachi: IUCN.

The paper proposes an institutional framework within which self-sustaining participatory institutions can be created at the local level. This proposal is preceded by an overview of community institutions and development approaches for environmental management.

IUCN. 1989. Evaluation of the National Conservation Strategy Provincial Workshops. Karachi: IUCN.

The report gives a detailed summary of the proceedings of the provincial workshops, evaluates them and suggests recommendations for the future.

IUCN. 1990. Conference on Population-Environment Linkages in the NCS, March 17-18, 1990. Islamabad: NCS Secretariat.
A report on the conference and its recommendations.

IUCN. 1992. Implementation Design for the NCS for Pakistan. Karachi: IUCN.

The implementation design team of Rodger Schwass, Syed Ayub Qutub and Tariq Banuri led the consultancy in 1991. The document reports on the consultancy and in particular the nine one-day implementation design workshops of August 1991.

IUCN. 1991-1993. The Pakistan National Conservation Strategy: The Transition to Implementation, Progress Report.

A series of quarterly and then half-yearly reports on activities during the implementation design phase of the NCS. They cover the period August 1991 to June 1993.

IUCN. 1992. Sarhad Provincial Conservation Strategy Planning Workshop. Peshawar: IUCN.

The report presents the proceedings of the planning workshop for the SPCS. It gives a summary of the key presentations made at the workshop and suggests a preliminary action plan which recommends institutional development, legislation and regulation, financing sustainable development, industrial and business initiatives, and environmental education and training.

IUCN, PILER and Sungi. 1992-1993. The Business and Environment Round Table Process, Sindh and Balochistan. The Business and Environment Round Table Process, NWFP. The Business and Environment Round Table Process, Punjab. Karachi: IUCN, Sungi and Pakistan Institute of Labour Education and Research.

A series of reports on the provincial Round Tables that took place between 1992 and 1993 in all four provinces. Each report provides the background and methodology to the Round Table process in Pakistan. It goes on to present issues that were examined and discussed at each of the Round Tables between representatives of the business sector, trade unions and the government, to try and achieve some consensus on specific issues.

IUCN, UNEP and WWF. 1980. World Conservation Strategy. Gland: IUCN, UNEP and WWF.

The WCS is a policy document which outlines a single, united approach to global problems. It warns that the basic life support systems of the Earth must be preserved intact if life is to continue. It stresses that genetic diversity is the major key to the future health of the planet and that mineral and fossil fuels are finite, and if they were exploited further by industrial development, it would lead to serious degeneration of the quality of the biosphere. A revised version of the strategy Caring for the Earth: A Strategy for Sustainable Living was published in 1991 by the same three organizations.

Ishaq, S.M. National Conservation Strategy: Livestock. Islamabad: NCS Secretariat.

The paper outlines the fact that livestock supplies products such as milk, meat and eggs, and that special efforts are needed to conserve/develop livestock to an extent that the gap between demand and supply is bridged.

Johnson, Brian. 1984. Summary of Results of Brian Johnson's Mission to Pakistan 13th-21st September 1984. Gland: IUCN.

The report was written following Brian Johnson's visit to Pakistan and highlights conclusions drawn following meetings with various key government officials on the issue of developing an NCS.

Journalists' Resource Centre and the Education Unit, IUCN. 1992. The NCS Communication and Education Strategies. Draft for Comments. Karachi: IUCN.

The report outlines the rationale and framework in developing independent and interdependent communication and education strategies. The report was written in two sections, one by an education and the other by a communication team, following a four-day strategy development meeting in Karachi.

Journalists' Resource Centre, IUCN. 1994. The NCS Communication Strategy. Karachi: IUCN.

Communication as a process of behavioural change should be seen as the need to identify what behaviours must change, whose behaviours need changing, and how behavioural change should be encouraged through communication activity. To plan for this, a framework for research-based communication planning was developed and completed for the 14 NCS core areas through nine separate workshops in Karachi, Lahore, Islamabad and Peshawar. The report documents the workshops and the ensuing frameworks.

Kabraji, Aban Marker. 1994. Provincial Conservation Strategies in Pakistan and their Role in the Implementation of National Conservation Strategy. Pakistan Administration, 31 (1):115-125.

A paper presented at the Administrative Staff College, Lahore.

EUAD, UNDP and IUCN. 1990. The Pakistan National Conservation Strategy: Special Focus Sectors' Response. An Overview. Karachi: IUCN.

This report is a synthesis of what the workshops conveyed, reproduced for a wider audience, since the issues raised and solutions recommended are relevant to all levels of social, developmental and environmental planning in Pakistan. It is hoped that the information will contribute to the knowledge that exists in these sectors, and enhance it from an environmentally strategic perspective.

EUAD, UNDP and IUCN. 1990. The Pakistan National Conservation Strategy: Special Focus Sector Workshops. Karachi: IUCN.

The document is a detailed report on the proceedings of the five sector workshops on media, women in development, NGOs, population, and research and technology. It also provides a list of participants at the sector workshops.

Kabraji, Aban Marker and Rashida Dohad. 1994. Catalyzing a Change in Course — IUCN's Business Programme in Pakistan.

Paper presented at 2nd Southern African International Conference on Environmental Management, October 18-21, 1994, Victoria Falls, Zimbabwe.

Khan, Anwar Saifullah. 1993. Partnership for Sustainable Development: The National Conservation Strategy. Islamabad.

This speech was delivered at the NCS Donors' Conference in January 1993. It reviews the progress made on the NCS, discusses implementation plans for the future and solicits donor cooperation.

Khan, Mohammad Aslam. National Conservation Strategy: Human Settlements. NCS Secretariat.

This paper presents a strategy for the promotion of the environmentally-sound

development of human settlements given that "human settlements in general and in large cities in Pakistan, in particular, are facing the crisis of availability and management of such resources as land, water and energy."

Khan, M. Nawaz. National Conservation Strategy: Mining. Islamabad: NCS Secretariat.

This paper describes present mining resources and highlights the need for an appropriate institutional and legislative framework to develop a sustainable mining strategy in the future, as most mining activity in Pakistan is small-scale and as such does not present a major threat to the environment.

MacPherson, Nancy. 1988-91. Monitoring Report, Pakistan's National Conservation Strategy. Ottawa: CIDA.

A series of reports on the NCS by CIDA's Monitor.

MacPherson, Nancy. 1992. Participatory Review of the Pakistan National Conservation Strategy. Nathiagali, November 15-16, 1991. CIDA.

This document records the proceedings of a participatory review of the Pakistan NCS and provides recommendations for CIDA to incorporate in the implementation phase of the NCS.

Mahmood, Ashfaq. National Conservation Strategy: Energy. Islamabad: NCS Secretariat.

This paper analyzes the major energy sources in Pakistan and the environmental impacts of energy sector activities. It describes the energy sector as a source of pollutants: one significant example is emissions from various economic sectors such as industry and transport. With the rise in population pressure, the increasing demand for energy sources has led to depletion of non-renewable energy sources.

This paper highlights the need for a sustainable energy policy which will increase the "supply of energy for fuelling economic growth".

Mian, M. Alim and M. Yasin Javed. 1993. Pakistan's Soil Resources. A Pakistan National Conservation Strategy Paper 4. Karachi: IUCN.

The paper presents an overview of the soil resources of Pakistan and points out the important activities of various sectors which are degrading and affecting the sustainability of this resource.

Motadullah, Khalid, Ch. Atta-ur-Rehman and Ch. M. Munir. 1993. Water for the 21st Century. A Pakistan National Conservation Strategy Paper 3. Karachi: IUCN.

The paper reviews the development of water resources, the environmental impact of this development and prospects for the future. The primary recommendation of the paper is development of a strategy to achieve sustainable water use.

Mumtaz, Khawar. 1993. Women, Environment and Development. A Pakistan National Conservation Strategy Paper 10. Karachi: IUCN.

This paper reviews the role of women in conservation and development and identifies the pervasive constraints, including cultural, that prevent women from fulfilling their potential. In addition, this paper examines trends that indicate a more active and positive role for women in the future.

Najam, Adil. Communicating Conservation. Islamabad: NCS Secretariat.

This prescriptive study suggests strategies for environmental communication in Pakistan, all leading to the process of encouraging and sustaining behavioural change.

NCS Secretariat. 1988-1991. Pakistan National Conservation Strategy, Progress Report.

A series of reports documenting the work of the NCS Secretariat. This includes general minutes of the NCS Steering Committee meetings and their comments on the NCS document. They cover the period August 1988 to April 1991.

Planning Commission. 1992. Implementing National Conservation Strategy: Toward a National Environmental Action Programme. A Report for the Consortium Meeting, April 1992. Islamabad: Planning Commission.

The report prepared for the consortium meeting in April 1992 explains the Pakistan NCS and provides a detailed summary of steps taken to implement the Strategy.

Qureshi, Fauzia. 1994. Conserving Pakistan's Built Heritage. A Pakistan National Conservation Strategy Sector Paper 12. Karachi: IUCN.

The report provides an overview of the state of heritage conservation in Pakistan, its potential and hazards affecting it. It highlights the constraints and obstacles for undertaking work in this field and recommendations are made keeping these factors in view.

Qutub, Syed Ayub (ed). 1987. Toward a National Conservation Strategy for Pakistan: Proceedings of the Pakistan Workshop, August 1986. Islamabad: EUAD/GOP, CIDA and IUCN.

This document presents the proceedings of a national workshop organized to identify and reach consensus on key environmental issues in Pakistan. It outlines the basis for Phases I and II of the NCS.

Ramsay, James, Diane Beckett, Francois Bregha and Tota Gangopadhyay. 1992.

Building on Success: Directions for Canadian Support for Implementation of the National Conservation Strategy in Pakistan. Islamabad: CIDA.

The document is the result of a mission to Pakistan by a team of independent consultants. It was intended to act as a basis for discussion between CIDA, GOP and other Pakistani and Canadian partners in the implementation of the NCS.

Rao, Abdul Latif and Abeeullah Jan. National Conservation Strategy: Natural Capital. Islamabad: NCS Secretariat.

This paper gives an overview of the economic and social significance of natural capital in Pakistan. It highlights the declining state of natural capital due to activities such as commercial forestry practices, increased use of fertilizers and pesticides, industrial pollution and increasing numbers of livestock. The principal recommendation of the paper is to prioritize and raise awareness of conservation benefits to arrest the mismanagement of natural capital. Other recommendations include strengthening the legislative, institutional and administrative frameworks to enhance the enforcement of a strategy for the sustainable use of natural capital.

Rizvi, Azhar. National Conservation Strategy: Education. Islamabad: NCS Secretariat.

This sector paper presents a comprehensive curriculum in environmental education to be introduced in various schools and colleges in Pakistan.

Sandhu, G.R. 1993. Sustainable Agriculture. A Pakistan National Conservation Strategy Paper 2. Karachi: IUCN.

This sector paper presents the agricultural scenario and major resources for agriculture in Pakistan. Within this context, the performance of the agricultural sector

has been impressive although much below its real potential. The paper recommends that agricultural practices in Pakistan should focus on developing production practices that raise productivity without causing environmental degradation.

Schwass, Rodger. 1986. Summary Report of the National Conservation Strategy for Pakistan Workshop. Karachi: IUCN.

The report gives a summary of the background to the workshop together with a description. It goes on to explain the situation in Pakistan, likely trends to the year 2000, conservation goals to the year 2000, and recommendations for action.

Sheikh, M.I. and Abeedullah Jan. Role of Forests and Forestry in National Conservation Strategy of Pakistan. Islamabad: NCS Secretariat.

The paper recommends that social, economic and environmental aspects of forestry programmes be improved through increased awareness and motivation of people, and technology transfer. A comprehensive forest policy should enhance facilities to apprehend offenders by checking rent seeking activities, better demarcation of forest lands, and countering political and administrative pressures.

Smillie, Ian. 1992. NGOs and Pakistan's National Conservation Strategy. Karachi: IUCN.

The report studies the Pakistan NCS to assess the feasibility of the recommendations it makes with regard to NGOs. Part I of the report deals with NGOs in Pakistan and Part II deals with IUCN, NGOs and the NCS.

Smillie, Ian. 1992. NGOs and Pakistan's National Conservation Strategy: The Next Step. Karachi: IUCN.

Following the June report, NGOs and Pakistan's NCS, a participatory planning exercise, held on October 15, to make some choices is reported on here.

SWECO. 1993. Pakistan. Support to the Implementation of the National Conservation Strategy. Stage 1 Final Report.

A report commissioned by the World Bank. It evaluates the extent to which the NCS has met the requirements of the World Bank on a NEAP. It outlines the further actions that need to be taken to integrate the NCS into a NEAP. The key recommendations of this report are addressed to GOP, to undertake several comprehensive measures aimed at improving the modus operandi of the strategy.

Tariq, Nawaz M. and Waris Ali. 1993. Managing Municipal Wastes. A

Pakistan National Conservation Strategy Paper 11. Karachi: IUCN.

The paper addresses the interaction of municipal waste, urban transportation, agricultural practices and deforestation with the assimilative capacities of water, soil and air and suggests strategies for the conservation of these resources in Pakistan.