

BGD/96/007/A/01/99
SUSTAINABLE ENVIRONMENT MANAGEMENT
PROGRAMME

COMPONENT 4.5
SUSTAINABLE DEVELOPMENT NETWORK PROJECT (SDNP)

PROJECT IMPLEMENTATION PLAN

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COMPONENT 4.5 – SUSTAINABLE DEVELOPMENT NETWORK PROJECT

1. The Context

Bangladesh is overwhelmingly dependent on environmental and natural resources, but the economic and societal forces at work coupled with other natural and technical factors, may have already seriously eroded the natural resource base of the country which could have serious adverse impact on output, income and employment.

In the present state of development in Bangladesh, the overriding considerations are eradication of poverty and the assurance of basic needs and employment for all. Over time, the awareness has been generated, however, that on a longer term perspective, the development process must be environmentally sound for the other goals to be achieved on a sustainable basis. This issue has gained more prominence because the Bangladesh economy is characterised by an almost total dependence on the extraction, use and management of natural resources and the physical environment.

In Bangladesh, widespread poverty, low land-man ratio, recurring natural hazards, illiteracy, lack of environmental awareness and the lack of appreciation of the linkage between the natural resource base and human action - be it for economic, social, or cultural - have already put enormous pressure on the natural resource (capital) stock. Environmental degradation on a large scale, in such a situation, is therefore likely to slow down the pace of economic growth and development. Such an outcome has a greater probability to affect the poor more adversely than the rich by exacerbating the existing economic and social inequities in the society. Environmental issues, thus, assume a critical role for the future development prospects and poverty eradication in Bangladesh.

Many of these problems are long-term in nature. However, measures taken in earnest, such as investing in analyses of the underlying processes and developing institutional frameworks for management of the environment, can help to better address the problems that the country faces in the seven identified sectors of land, fisheries, forestry, water, natural hazards, health and sanitation, and climate change.

Efforts are being made to address these issues by the Government, donors, political parties, NGOs and other advocacy groups. Institutions such as the Coalition of Environmental NGOs (CEN), Bangladesh Environment Lawyers Association

(BELA), and the Forum of Environmental Journalists (FEJ), are in operation and have begun to raise issues on various environmental concerns from their own perspective as well as from the perspectives of different sections of the population¹.

The Government has been giving some attention to this sector, and since 1982 has signed/ratified 24 international treaties, protocols, and conventions on environmental issues. The key state institutions involved in environmental policy making are the Planning Commission, Ministry of Environment and Forest (MOEF) and the Department of Environment (DOE). The MOEF with advisory support of the Planning Commission, formulates environment related policies using the information inputs provided by the DOE.

To date the Government has:

- Approved the National Environment Policy in 1992;
- Created the Department of Environment (DOE) within the Ministry of Environment and Forest (MOEF) in 1989;
- Created the Ozone Cell with the Department of Environment;
- Adopted the Wildlife Act in 1992;
- Adopted the Master Forestry Plan in 1993;
- Established the National Environmental Council (headed by the Prime Minister) in 1993;
- Approved the Forestry Policy in 1994;
- Declared that Environment Impact Assessment should be carried out for all major development projects;
- Initiated the process for the formulation of a National Conservation Strategy;
- Approved the National Environment Management Action Plan (NEMAP) in 1996.

Among the more innovative initiatives, NEMAP was formulated through a massive consultative process involving 23 grassroots workshops, 7 regional workshops and 7 professional and expert group workshops. The Plan has prioritised 57 actions on the environmental front and the Government is in the process of

¹ Source: Asaduzzaman, M. and K.A. Toufique 1998, *Environment in Bangladesh: Now and in Future*, BIDS mimeo.

creating a second-order priority list for immediate implementation. NEMAP is in line with Agenda 21 and the Rio Earth Summit of 1992.

The four major issues that have been highlighted by NEMAP are:

1. Institutional/Policies relating to inter-sectoral issues.
2. Sectoral issues for which fourteen different sectors have been identified.
3. Regional issues e. g. regarding the coastal zone and the Wetlands.
4. Long term issues regarding e. g. urbanisation, climate change and sea level rise.

In 1997, as a follow-up to NEMAP, the Government approved the UNDP-assisted Sustainable Environment Management Programme (SEMP). There are five sub-programmes under SEM: Policy and Institutions, Participatory Eco-System Management, Community Based Environmental Sanitation, Awareness and Advocacy, and Training and Education. Participatory Eco-System Management, Community Based Environmental Sanitation, Awareness and Advocacy, and Training and Education.

The Bangladesh Institute of Development Studies (BIDS) is the implementing agency for two of the 26 components in SEM - The Policy Analysis Studies which falls under the Policy and Institutions Sub-Programme, and the Sustainable Development Network (SDN) falls under the Awareness and Advocacy Sub-Programme.

One of the strategies for promoting Awareness and Advocacy is enabling easy access to information and knowledge². To effectively implement such a strategy, the Sustainable Development Network (SDN) aims to capitalise on the revolution in electronic communications and provide a new set of tools to achieve sustainable human development³ through a sharing of vital information, experience and expertise both within the country and globally.

² The distinction made here is that information can be ephemeral, that is transitory and short lived, but can act as an index or guide to knowledge. Knowledge on the other hand is the accepted and acceptable theoretical developments proven either by logical arguments or by proof.

³ Sustainable Human Development is defined as development that generates economic growth and distributes benefits equitable; regenerates the environment; empowers people, enables people's participation in the decision-making process; and expands their opportunities and choices.

To date UNDP has assisted several countries, including China, Indonesia, Korea, Pakistan, the Philippines, Angola, Chad, Tunisia, Poland, Bolivia, Guatemala, and the Honduras, in setting up pilot SDNs.

2. The Institution

The Bangladesh Institute of Development Studies (BIDS) is a multi-disciplinary organisation that conducts policy-oriented research on development issues mainly in the context of Bangladesh. BIDS frequently offers training in socioeconomic analysis and research methodology for its own professional staff as well as for members of other organizations concerned in development and other related topics. BIDS also serves as a conduit for information dissemination through its publications, library services and regular seminars and workshops.

The BIDS mandate is therefore:

- ❑ To function as an agency for undertaking and promoting study, research and dissemination of knowledge in the field of development economics, demography, and other social sciences related to planning for national development and social welfare;
- ❑ To collect information and generate data, conduct investigations, and undertake research projects for purposes of planning, formulation and implementation of plans and policies;
- ❑ To provide facilities and training in economics, development issues, demography, and other social sciences; and
- ❑ To provide information and offer advice on modern research techniques and methodology in economics, demography, and other social sciences.

There are five Research Divisions within BIDS - the Agriculture and Rural Development Division, the General Economics Division, the Human Resources Development Division, the Industries and Physical Infrastructure Division, and the Population Studies Division.

However, as the academic areas of interest as well as the expertise of the researchers are cross-sectoral, membership to a Division does not preclude a researcher from participating in research activities and projects under other Divisions. A case in point is SEMP in which research staff from several Divisions are participating.

Several support services assist the staff in conducting research. These include:

- The **BIDS Library** that is the largest library in Bangladesh specializing in the social sciences.
- The **Publications Section** which publishes and disseminates BIDS research output, including the Bangladesh Development Studies, the quarterly journal of the Institute; the *Bangladesh Unnayan Samikkhya* which is published annually in the vernacular; Research Monographs; and Research Reports.
- The **Computer Unit** which was established in 1982 with the objective of providing data processing support for BIDS research. The SDN will operate within the BIDS Computer Unit.

3. The Objective of SDNP

The objective of the Sustainable Development Network Project (SDNP) is to create an appropriate tool - the SDN - for achieving and facilitating exchange of information/knowledge among development partners, academia, policy makers and the civil society, both national and international, in order to design and implement unique plans for sustainable development in Bangladesh.

4. The Methodology

The methodology for developing the SDN is to establish a non-profit internet service provider (ISP) having a central hub in Dhaka city at the Bangladesh Institute of Development Studies (BIDS), which is the implementing agency of SDNP. Five regional nodes will be established in Chittagong, Khulna, Barisal, Sylhet, and Rajshahi, through a combination of systems that include Local Area Networking, Wide Area Networking, Microwave links, and Online networking.

Subscribers to the SDN will be given access to standard Internet services as well as to a database maintained by BIDS. The subscribers will include Ministries of the Government of Bangladesh and other agencies that are implementing the various components of SEMP. These agencies may also contribute to the database, and/or through the SDN, set up websites which will disseminate information on their activities and achievements.

In addition the SDN will cater to other corporate users wishing to access the database and to standard Internet services. Such users may include national and regional press clubs, academic and research institutions, and public libraries.

SDN will furthermore, network with:

- All UN agencies working in Bangladesh;
- Earthwatch and Environment Information Networking/INFOTERRA of UNEP;
- The Sustainable Development Commission of UNCED;
- The Advisory Committee for Coordination of Information Systems (ACCIS) which helps users gain access to UN databases and information resources;
- The Global Environment Facility (GEF);
- The Asia-Pacific development Information Programme of UNDP.

To assist in the establishment of the SDN, UNDP is providing BIDS with a starter kit comprising computer hardware and software, key databases, management and training tools, decision support tools, and other resources which will meet individual needs and ensure long-term compatibility with SDNs operating in other developing countries.

A Steering Committee will provide advisory support to BIDS. The Committee will comprise IT specialists as well as representatives of the Government, of the SEMP partners, of the media, of academic/research institutions, of the private sector, and other stakeholders (see Annex 1 for the terms of reference of the Steering Committee).

5. The Five-Year Work Plan

SDNP is a five-year project, and although the Letter of Agreement between BIDS, the Ministry of Environment, and the UNDP was signed on 19 August 1998, this component faced some initial delay in take-off and for all practical purposes has come into effect since 1 February 1999. The broad Work Plan is envisaged as follows (see Annex 2 for details of the Work Plan).

Year 1 (1 February 1999 – January 2000):

- Prepare Project Implementation Plan;
- Prepare Five-Year Work Plan;
- Set up Steering Committee and define its terms of reference;
- Contract National Consultant with IT expertise (see Annex 3 for terms of reference);

- Request UNDP for an SDN Expert Mission to BIDS to assist in an advisory capacity for SDN installation and operation (see Annex 4 for the terms of reference of the mission);
- With assistance from UN SDN Expert Mission:
 - identify Internet Service Provider (ISP) in Bangladesh to engage as consultant for setting up, operationalising and providing maintenance services for SDN;
 - Define terms of reference of consultant ISP (see Annex 5 for draft terms of reference);
- Contract selected ISP;
- Recruit project staff;
- Train project and other BIDS staff;
- Procure necessary hardware and software for SDN;
- Prepare site and arrange communication systems and other necessary facilities such as electricity, a stand-by generator, UPS, etc.;
- Install and operationalise central hub in BIDS, including LAN, intranet, etc.;
- Develop database
 - Recruit consultant (see Annex 6 for terms of reference);
 - Design database.
- Develop BIDS policy for SDN usage by BIDS staff;
- Develop Inception Report;
- Recast/revise budget with approval of UNDP and the Ministry of Environment;
- Operationalise desktop publication section of SDNP for printing/publishing brochures/reports for information dissemination on SDN;
- Conduct a workshop to introduce the concept of SDN to potential subscribers. Participants will include relevant Government representatives, SEMP implementing partners, representatives from academic/research institutions, representatives of donor agencies, representatives from information technology sector, and representatives from the private sector and the civil society.

Year 2 (February 2000 – January 2001)

- Develop database:
 - retrieval system;

- data sources;
- data entry.
- Develop terms of agreement with SEMP partners and others for subscribing to SDN;
- Develop terms of agreement between SDNP and SEMP partners, BIDS projects, GOs, NGOs, private sector, individuals and others for contributing to the database;
- Actively search for subscribers to SDN;
- Search for institutions as potential candidates for the regional nodes;
- Test run the central hub on pilot basis.

Year 3 (February 2001 – January 2002)

- Identify one partner institution for setting up the first regional node;
- Set up *modus operandi* for the regional node, including terms of agreement and monitoring system;
- Contract national ISP to operationalise the first regional node;
- If necessary, procure hardware and software for the first regional node;
- If necessary, recruit and/or train staff for the first regional node;
- Operationalise the first regional node on a pilot basis;
- Tentatively select institutions for second and third regional nodes;
- Hold workshops, seminars, and release publications for information dissemination on SDN;
- Promote central hub from pilot to main phase;
- Place major focus on making SDN financially sustainable through increased memberships, improved services, and enhanced database and access to information.

Year 4 (February 2002 – January 2003)

- Contract national ISP for setting up the second and third regional nodes;
- If necessary, procure hardware and software for the second and third regional nodes;
- If necessary, recruit and/or train staff for the second and third regional nodes;
- Operationalise the second and third regional nodes on pilot basis;

- Promote first regional node from pilot to main phase;
- Continue efforts to increase memberships to SDN;
- Identify institutions for fourth and fifth regional nodes;
- Hold workshops, seminars, and release publications for information dissemination on SDN;
- Continue to focus on making SDN financially sustainable.

Year 5 (February 2003 – January 2004)

- Contract national ISP for setting up the fourth and fifth regional nodes;
- If necessary, procure hardware and software for the fourth and fifth regional nodes;
- If necessary, recruit and/or train staff for the fourth and fifth regional nodes;
- Operationalise the fourth and fifth regional nodes on pilot basis;
- Promote the second and third regional nodes from pilot to main phase;
- Continue efforts to increase memberships to SDN;
- Hold workshops, seminars, and release publications for information dissemination on SDN.

6. Monitoring of SDNP

Annual reports will be submitted individually from the central hub and from each of the regional nodes, starting from the pilot phases. The reports will attempt to cover the following issues:

- Technical set up including hardware, software, and manpower;
- Details of procurement such as items, sources and cost;
- Details of training provided to project and other staff;
- Lists of users/subscribers;
- Details/pattern of usage of users/subscribers e.g. number of times database is accessed;
- An assessment of needs requirements of database users based on information collected through discussions, workshops, and if necessary, questionnaires;
- Problems faced in operationalising/running SDN;
- Solutions found;

- Performance of consultant ISP, including maintenance and troubleshooting capability;
- Income/expenditure accounts;
- Status of the database;
- Workshops/seminars held;
- Publications released;
- Other relevant issues not mentioned above;
- Suggestions and recommendations for improving the performance of SDN.

ANNEX 1

**TERMS OF REFERENCE
OF
THE SDNP STEERING COMMITTEE**

The SDNP Steering Committee is an integral part of the overall implementation process of the project. The role of the Steering Committee is to provide advice, direction and support to the SDNP implementing unit (SDNPIU) on an ongoing basis. The Committee will comprise IT specialists as well as representatives of the Government, of the SEMP partners, of the media, of academic/research institutions, of the private sector, and other stakeholders. The Steering Committee thus ensures stakeholder participation in the management and operation of the SDNP, without being directly responsible for any aspects of project implementation such as financial management.

The Committee will seek consensus on decisions, and where consensus is not possible, a majority vote will carry weight with any dissenting notes recorded in the minutes if so desired.

The Chairperson of the Committee will be selected from among the members and will be appointed for a period of one year. The Secretary of the Committee will be the SDNP Administrator from within BIDS. Quorum for a meeting of the Committee is 50 percent of membership and meetings will initially take place quarterly which may later be reduced to half-yearly if SDNP progresses satisfactorily. Extra-ordinary meetings may be called as and when necessary.

The Steering Committee will advise on:

- Plans, activities and achievements with the SDNP Coordinator;
- Long-term planning measures;
- Sustainable operation of the SDN on a non-profit basis;
- Contents of database;
- Policy issues regarding operation of SDN;
- Resolving conflicts between SDN users/members;
- Sensitising and promoting actual and potential user groups;
- Any other relevant issues that may arise from time to time.

ANNEX 2

FIVE-YEAR WORK PLAN

ANNEX 2

PLANNED PHASES OF THE CENTRAL HUB AND THE REGIONAL NODES OF SDN

SDN	Year 1	Year 2	Year 3	Year 4	Year 5
Central hub	Pilot	Pilot	Main	Main	Main
Regional node 1	-	-	Pilot	Pilot	Main
Regional nodes 2 & 3	-	-	-	Pilot	Main
Regional nodes 4 & 5	-	-	-	-	Pilot

ANNEX 3

TERMS OF REFERENCE OF NATIONAL EXPERT ON INFORMATION TECHNOLOGY

A national consultant will be contracted for the overall supervision and monitoring at the initial stages of the SDNP. The consultant will be an IT specialist with engineering background. The consultant will:

- Participate as a team member of the UN-SDN Expert Mission;
- Ensure that a consensus is reached on SDN hardware and software requirement between consultant ISP, Mission, and himself/herself;
- Ensure compatibility and feasibility of Mission recommendations;
- Ensure that consultant ISP fulfills its contractual obligations regarding installation and operationalising SDN, staff training, and other related matters;
- Provide troubleshooting advice/services;
- Recommend ways to improve SDN operations;
- Assist in any other related work as seen necessary by the SDNP Coordinator.

ANNEX 4

TERMS OF REFERENCE

OF

UN SDN EXPERT MISSION TO BIDS

In 1997 the Government of Bangladesh approved the UNDP-funded Sustainable Environment Management Programme (SEMP) which is a follow-up to the implementation of the National Environment Management Action Plan (NEMAP) which is in line with Agenda 21 and the Rio Earth Summit of 1992.

There are five sub-programmes under SEMP: Policy and Institutions, Participatory Eco-System Management, Community Based Environmental Sanitation, Awareness and Advocacy, and Training and Education. BIDS is the implementing agency for two of the 26 components in SEMP. The component Policy Analysis Studies falls under the Policy and Institutions Sub-Programme while the Sustainable Development Network (SDN) falls under the Awareness and Advocacy Sub-Programme.

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To date UNDP has assisted in setting up pilot SDNs in several countries including China, Indonesia, Korea, Pakistan, the Philippines, Angola, Chad, Tunisia Poland, Bolivia, Guatemala and the Honduras.

The objective of the Sustainable Development Network Project (SDNP) is to create an appropriate tool - the SDN - for achieving and facilitating exchange of information/knowledge among development partners, academia, policy makers and the civil society, both national and international, in order to design and implement unique plans for sustainable development in Bangladesh.

The SDN is expected to operate as a non-profit internet service provider (ISP) having a central hub in Dhaka city at the Bangladesh Institute of Development Studies (BIDS). Five regional nodes will be established in Chittagong, Khulna, Barisal, Sylhet, and Rajshahi, through a combination of systems that include Local Area Networking, Wide Area Networking, Microwave links, and Online networking.

SDN subscribers will be given access to a database maintained by BIDS, and to standard Internet services. The subscribers will include Ministries of the Government of Bangladesh and other agencies that are implementing the various components of SEMP. These agencies may also contribute to the database, and/or through the SDN, set up websites which will disseminate information on their activities and achievements.

SDN will also cater to other corporate users wishing to access the database, and/or to standard Internet services. Such users may include national and regional press clubs, academic and research institutions, and public libraries.

SDN will also network with

- All UN agencies working in Bangladesh;
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- The Advisory Committee for Coordination of Information Systems (ACCIS) which helps users gain access to UN databases and information resources;
- The Global Environment Facility (GEF);
- The Asia-Pacific development Information Programme of UNDP.

A Steering Committee will be created to provide advisory support to BIDS. The Committee will comprise IT specialists as well as representatives of the Government, of the SEMP partners, of the media, of academic/research institutions, of the private sector, and other stakeholders.

A UN SDN Expert Mission will assist BIDS in an advisory capacity in the initial stages of the SDN. A national consultant with IT expertise and engineering background will be attached to the Mission for the duration of its visit to Dhaka.

**TERMS OF REFERENCE
Of
The UN SDN Expert Mission to BIDS**

The UN SDN Expert Mission will visit Bangladesh for three weeks. Its member(s) will comprise IT experts preferably with experience in successfully setting up SDNs in other developing countries. The Mission will fulfill the following responsibilities:

- Interview prospective ISPs who will provide consultancy services to BIDS for setting up the SDN;
- Visit the institutional set-ups of the prospective ISPs in order to assess their capability/capacity of the ISPs to provide the necessary services;
- Critically examine the various proposals submitted by the prospective ISPs in order to assess the feasibility and adequacy of the proposals to meet the stated objectives of the SDN;
- Address a workshop explaining the SDN concept and its successes and failures in other countries. The participants of the workshop will be representatives of agencies implementing the various components of SEMP, government organisations, interested NGOs, donor agencies and other stakeholders.
- Ascertain requirements of potential subscribers to SDN services;
- Address any other related issues that may arise;
- Submit a report to BIDS which will:
 - Make a list of the ISPs in order of their assessed efficiency and capability and recommend the best ISP;
 - Make technical recommendations on the hardware, software, and manpower requirements of the SDN which are to be incorporated by the selected ISP in the proposal that the ISP submits to BIDS;
 - Make recommendations for the most efficient system of operation and maintenance of the SDN;
 - Based on lessons learnt from past experiences with SDNs in other countries, highlight the best practices as well as the problems and pitfalls to be avoided;
 - Suggest initial directions for a database creation.

**Proposed Programme
For
UN SDN Expert Mission to BIDS**

First and second week	Arrive in Dhaka; Visit Ministry of Environment/PMU; Visit UNDP and other donor agencies; Visit ISP institutions; Interview prospective ISP consultants; Visit hardware and software vendors; Visit some prospective clients of SDN such as NGOs and national press clubs; Address workshop.
Third week	Write draft report; Incorporate BIDS/UNDP comments; Submit final report; Depart from Dhaka.

ANNEX 5

**TERMS OF REFERENCE
OF
CONSULTANT ISP**

To help install and operationalise the SDN, BIDS will seek the services of a national ISP on a consultancy basis. The consulting firm must have proven expertise and experience in installing and successfully operating as an ISP in Bangladesh, both in financial and administrative management terms. The firm will:

- Conduct a needs assessment survey of BIDS facilities and staff;
- Make recommendations for hardware and software requirements;
- Make recommendations for manpower requirements;
- Make recommendations for training needs of SDN staff;
- Identify and recommend national institutions capable of providing the training;
- Install and operationalise the SDN as an internet service provider;
- Make recommendations on financial, administrative and other management modalities to enable SDN to operate on a sustainable non-profit basis;
- Recommend and operationalise the maintenance system of the SDN;
- Design and install an attractive user-friendly website for BIDS/SDN, with hyperlinks and other accessories;
- Address any other relevant issues that may arise in the process.

ANNEX 6

**TERMS OF REFERENCE
OF
INFORMATION TECHNOLOGY (SOFTWARE) CONSULTANT
FOR
DATABASE CREATION AND MAINTENANCE**

An integral part of the SDN services is providing its subscribers access to a database. To assist in setting up this database, BIDS will seek the services of a national IT software expert on a consultancy basis. The consultant will:

- Assess the needs requirement of actual and potential users of the SDN database;
- Based on this assessment, make recommendations on the contents of the database, and if possible, the sources of the data;
- Design and install the database including:
 - Data entry system;
 - User-friendly retrieval system with hyperlinks and other accessories;
 - Any other aspects that will facilitate the SDN.
- Train designated BIDS/project staff on operation, maintenance, updating, and troubleshooting of the database;
- Address any other related issues that may arise in the process.