Sustainable Development Networking Programme,

Bangladesh

Final Report

Seán Ó Siochrú,
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Contents

1. CONTEXT AND INTRODUCTION TO SDNP

1.1 Origins and SDNP Context

Unusually among SDNP projects globally, SDNP in Bangladesh[1] from the outset was conceived an integral part of a much larger $26 million UNDP-supported initiative, *the Sustainable Environment Management Programme* (SEMP). This provenance accounts for its exceptionally large budget as compared to other SDNPs of almost us$1.5 million, but also for some delays and ambiguities around objectives.

SEMP is a Programme of twenty six components, under the Ministry of Environment and Forest (MoEF). It follows on from the National Environment Management Plan (NEMAP) which ran from 1997 until 1999 and traces its lineage to Agenda 21 and the Rio Summit. SEMP components are organised into five sub-programmes: Policy and Institutions; Participatory Eco-System Management; Community-based Environmental Sanitation; Awareness and Advocacy; and Training and Education. It is quite a decentralised in structure, the components being implemented by selected Sub-Implementing Agencies (SIAs). Most of these are autonomous entities, including statutory agencies, several NGOs, and even the World Bank.

The *Sustainable Development Networking Programme* in Bangladesh comprises one component of SEMP under the Sub-Programme: Awareness and Advocacy, and the SIA responsible for it is the *Bangladesh Institute of Development Studies* (BIDS).[2] BIDS is, by all accounts, a highly-respected, influential and relatively impartial policy-oriented research organisation, working across many disciplines. It has a major national information dissemination function through publications, library services, regular seminars and workshops. Its central role in research and information dissemination made it a candidate to implement SDNP.

UNDP had floated the idea of SDNP as early as mid-1996, but initially it had not been taken up. A UNDP visit to SDNP in Pakistan had developed some ideas relating to ISO development. But by 1997 there were already about 20 ISPs operating in Bangladesh (though full internet services were available only in Dhaka and perhaps one to two other urban areas) so that the Pakistan model (at that time, the leading national ISP) would not easily slot into place.[3] At government level, there was also little initial interest in SDNP.

In early 1997, SEMP appeared on the horizon and UNDP found a more welcoming context. It was promoted primarily as an 'internal' resource for SEMP, but always had its broader SDNP objectives alongside. Without the SDNP input, SEMP would undoubtedly have had a support component for interaction and dissemination, but it would probably have lacked the ICT dimension and the specific experience and approaches of SDNP.

1 Occasionally, we refer to this as SDNBD, a term they use themselves, to avoid confusion with the global SDNP Programme.

2 Each SIA has a specific contract to implement one or more components. The letter of agreement with BIDS (an appendix to the SEMP Programme Support Document) was signed in August 1998 (BGD/96/007/445). BIDS is also responsible for another component, *Policy Analysis Studies.*

3 SDNP in Bangladesh has from the outset been in close communication with the national association of ISPs, the ISP Forum, and a representative site on the Steering Committee. Although they provide certain overlapping services, the distinction has been clear and relations are good.

1.2 Initial Objectives and Goals

The objectives of the Project went through a number of changes.

Although no explicit objective was presented in the SEMP Programme Support Document of August 1997, the general description noted:

> "SDNP will help to facilitate access to information for all sections of users at grassroots to national level to move towards the goal of sustainable development."

It also provided a list of activities, which can be regrouped under three headings. The main features were:

Project Launch and infrastructure:

- Recruit staff;
- Institutionalise the participation of all stakeholders;
- Undertake a needs assessment;
- Create the technological framework at the central hub and at least five nodal points in the Bangladesh regions

Project Implementation

- Connect at least 500 users, 100 per nodal points;
- Undertake a major training programme and monitor network use;
- Mobilise and disseminate sustainable development related information
- Deploy four levels of networking: LANs; WANs; Micro-wave links; Online-
- Run dissemination workshops and seminars

Evaluation and Reporting:

- Establish monitoring system; Conduct annual review; Modify based on mid-term review; Produce a terminal report; document the implementation process (impact lessons etc.); and disseminate the findings of the Project

However, these were modified by the time the first Project Implementation Plan (PIP) was drafted in March 1999. Here the objective was stated as:

> "To create an appropriate tool – SDN [Sustainable Development Network] – 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"

This was to be achieved by means of a "non-profit ISP" based in Dhaka with five regional nodes. Subscribers were to include Ministries and other agencies involved in SEMP. A database was to be created, and support given to create Websites and collect information.

The SDN was also to cater for non-SIA users, which may include "national and regional press-clubs, academic and research institutions, and public libraries" as well as all UN agencies in Bangladesh and international sustainable development related entities. A five year Work Plan then broke each of these into a number of bullets.

Formally, the objectives were not revised until a second Project Implement Plan was produced in July 2001 (after a long period in which the Project was suspended: see below).

In this, the Development Goal supplemented the earlier PIP Objective to comprise not just "exchange of information" but also "encouraging collaboration, communications and networking among development actors…".

The "main objective" was to provide an open, inclusive and participatory IT-based information content and service network;

Other "broad objectives were:

- To create conditions for all stakeholders to work together and separately for quality and transparent governance, through knowledge and information sharing;
- To influence public opinion on development issues, facilitate exchange of experience and "follow-up civil society actions"
- "To facilitate social, economic, cultural and intellectual development of individuals and groups in society";
- "To facilitate the development of the private sector through e-commerce";
- "To facilitate proper development of a knowledge management system";
- "To promote the Bengali culture and heritage".

A further list of "specific objectives" was added:

- Establish a Web Portal and database;
- Provide sustainable access to information and resources;
- Create a "common platform" for sharing and interaction, with easy quick access;
- Generate, design and disseminate information for stakeholders;
- Provide links to development activities, bet practice etc.;
- Support local government, community representatives and NGOs in their development activities "thus increasing transparency, speed of action and better governance".

The report continued on to give an account of what had been achieved to date and what remained.

Overall, successive sets of objectives and proposed activities left significant margins for interpretation by the Project itself, and by others with influence on the Project. And, apart from a few in the earliest documentation, no quantitative or qualitative indicators for progress or success were devised.

1.3 Phases of the Project

The agreement for this project was signed in August 1998 but for all practical purposes, it began in February 1999 with the task of producing a Project Implementation Plan. It is a five year Project, scheduled for completion in January 2004.

Three phases can be identified.

PHASE 1: DEFINITION AND OPERATIONALISATION (FEBRUARY 1999 – JUNE 2000)

In February 1999, the Project had little to work on, its goals defined in a page or two. Devising the initial Project Implementation Plan (to March), an external UNDP mission (July), Project Inception Workshop (July), Steering Committee formation and first meeting (August), recruitment of staff and training, needs assessment, basic equipment and premises (October to December), took the project to the end of 1999. The Project Coordinator was also appointed at the end of the year.

The year 2000 saw the first steps in creating serious technical capabilities, building a LAN in BIDS, gaining 24 hour internet connectivity (March), more advanced training of SDNP and BIDS in Linux, the setting up of the central hub, and the second meeting of the Steering Committee (April to June).

From the beginning, the Project has been physically located within the BIDS premises in Dhaka. The offices themselves are of relatively high quality, but considerable work was necessary to make it suitable for a full-time Internet service provider.

PHASE 2: THE DOLDRUMS (JULY 2000 – MARCH 2001)

Before the Project could really launch its operations in relation to its objectives, however, political factors struck the entire SEMP project. A change of government in Bangladesh brought a new Minister, Secretary in the MoEP, and National Programme Director in SEMP. Attempts were made to significantly change the Project, which halted progress. From July 2000 effectively until March 2001, SDNP and the entire SEMP programme was virtually halted. Some activities continued, and there was an inevitable loss of SDNP staff (BIDS assisted the project with a loan during this period, and the Coordinator was on half salary).

In March 2001, a new National Programme Director was appointed, and SEMP was back on track.

PHASE 3: IMPLEMENTATION (APRIL 2001 – JANUARY 2004)

Although there was a cost in terms of staff and inevitable loss of impetus, SDNP was ready to begin activities across several fronts. Both SIA and non-SIA related actions were launched, ranging across information gathering and dissemination, infrastructure development, connectivity provision, initiating partnership projects, cyber cafés, training and capacity building, schools programmes, database and Website development. Indeed, the SDNP in Bangladesh covers virtually the entire range of activities seen in SDNP projects globally.

Currently, SDNP is facing a number of real challenges: Satisfying its obligations to SEMP and the SIAs; successfully implementing its other SDNP activities; and devising and executing a plan for sustainability beyond 2004.

1.4 Summary of Income and Expenditure

A summary of SEMP/UNDP grant is attached in Annex-1.

2. ASSESSMENT OF OBJECTIVES

The initial question posed for this evaluation is whether the SDNP Bangladesh objectives accorded well with SDNP global priorities as well as with those of national stakeholders.[4] As presented in the series of documents above, they are in accordance with all of these. Many objectives, at different times, were vague or highly generalised, and some elements could reasonably dovetail with almost any initiative promoting sustainable development.

The shifting list of objectives outlined earlier reflected a degree of uncertainly both before and during the Project. Underlying this was the dual nature of the origins of and expectations on the Project – as an SDNP inspired project and as a component of SEMP - a dual nature that is nowhere explicitly drawn out and strategically dealt with.

Thus while the objectives can reasonably be seen to coincide with those of global SDNP and national policy, the real issue here is whether they at any point, and especially later, offered a clear destination to the Project, and a general map of how to proceed about getting there.

The short answer is that, judged solely on the documentation reviewed above, these dual objectives were never clearly formulated in a consistent or useful manner, such as (to retain the language used in these reports themselves) as a set of Project ultimate development objectives, its immediate objectives, and the actions to be taken to achieve them.

But a few elements in each of the two strands surfaced frequently, or could be discerned just beneath the top layer of words:

- First, the project was expected to support SEMP programme SIAs in networking, information provision and dissemination, and in ICT use.
- Second, the Project was to engage in a set of traditional SDNP activities, targeted at sustainable development stakeholders in general. The clearest among these was the creation of five networking 'hubs' in Bangladesh's administrative regions and the provision of connectivity to a significant number of users.
- Third was the development of a Web-based database, to act as a central clearing house.

Assistance was at hand, however, for the Project to further interpret and implement its objectives. A UNDP mission in mid 1999[5] produced a series of recommendations which helped focus the objectives and the Implementation Plan, and in practice extended and specified the scope of possible networking, connectivity and dissemination activities.

Following up one recommendation, a SEMP *Needs and Resources Assessment Report* was completed by independent consultants in April 2000[6]. This employed a mainly quantitative methodology focusing especially physical and conventional training needs, to investigate what was largely a qualitative, dynamic and programmatic set of issues. But it painted an overall picture of the needs of SIAs in information, networking and capacity building, and offered insights into individual SIA needs.

4 The issue of whether the actual SDNP Bangladesh *activities* were in accordance with SDNP objectives is considered in the concluding section below.

5 *Mission Report: SDNP Bangladesh* July 1-9, 1999, Radhika Lal.

6 *Needs and Assessment Report*, April 2000, Partha Pratim Sarker.

3. PROJECT ACTIVITIES

Developing a typology of SDNP activities in Bangladesh proved quite difficult, partly because there are so varied, and partly because (for reasons given above) they were not pursued according to a clearly documented strategy. This is not to suggest that they were in any significant way, haphazard; only that the logic behind them was to be found in an implicit understanding among senior management of what the Project was about and could achieve, and their capacity to seek out and identify development opportunities as they arose.

As indicated earlier, a basic distinction can be discerned between activities that were geared to assist and support the SEMP programme, and those that were aimed at other sustainable development actors. Thus we separate them out below, covering first the SIA services and then non-SIA services provided. Two activities are singled out for separate description: Database and Web Portal development, which is a major activity and serves all stakeholders alike; and the Regional Nodes, which have been promoted from the outset as the other major plank of activity outside the SEMP Programme.

3.1 Support to the SEMP Programme and SIAs

SDNP provided, and continues to provide, a range of services to SEMP SIAs.

INTERNET CONNECTIVITY

SDNP is connected to the Internet via a 128Kbps radio link obtained from a private ISP, NEKSUS. However, to ensure trouble-free and uninterrupted e-mail, it is linked with a more reliable ISP, BOL Online through a 24 hour dial-up leased line. Thus even if the radio link is suspended, email service remains uninterrupted. The project feels that it is time to acquire its own VSAT and become independent in terms of more reliable service offer to the clients.

The first and primary group given connectivity was the Sub-Implementing Agencies of the 26 SEMP Programme components. Beginning with BIDS in April 2000, all were provided with Internet connectivity and an e-mail address during the year. They are based in Dhaka or have the responsible office there, so that access was by dial-up to SDNP. (In Bangladesh, local-call access to the Internet is unmetered – a connection can be maintained indefinitely for the price of a local call. It is ISP charges that mount up, as these are on a timed basis.)

This service is free and use is unlimited to the SIAs.

WEBSITE DEVELOPMENT AND MAINTENANCE

All SIAs were also offered Web hosting and development. Seven or eight already had an active Website, and a further three availed of the offer and have been supported to develop and maintain a Website, including a domain name.

LAN DESIGN AND DEVELOPMENT

This was a service offered to any of the SIA and SEMP related entities, and a number availed of it so far.

- An early activity was to develop a Local Area Network in BIDS, the executing agency for SDNP and also where the Project is physically housed. This hooked up a total of 120 BIDS staff members throughout the building.

- Smaller LANs were supported in the SEMP Project Management Unit itself; in the IUCN Bangladesh and Waste Concern, both NGO SIAs within SEMP.

- The MoEF availed of SDNP to connect about twenty of its staff through dial-up connectivity to SDNP server and to design a much larger Metropolitan Area Network (MAN) including the preparation of tender documentation for procurement and contract.

In all cases, SDNP provided the design, and oversaw or actually installed the networks. Internet access through the LAN was also provided.

DISSEMINATION AND COMMUNICATION

A section on the SDNP Portal is reserved for SEMP (http://www.sdnbd.org/sia/index.htm), including pages for an account of achievements, a news section, profiles of partners and SIAs, and so forth. For information, this relies mainly on submissions from SIAs. Links to existing SIA Websites are also included.

A NewsBoard Bulletin was set up for all SEMP stakeholders and interested parties. About ninety five are subscribed and SDNP send out perhaps an average of one message daily.

TRAINING:

SDNP provided training to staff in SIAs, both in a series of Workshops and in one-to-one sessions. It included basic Internet up to whatever level was required, which in general did not go beyond basic web-design and Website updating via ftp.

3.2 Services to Non-SEMP Actors

In general, services to the SIAs were begun earlier on, given that the SEMP programme was ongoing and that it comprised a key priority.

Non SEMP activities have begun mainly in the current phase, that is since the middle of 2001. These have risen to become the main preoccupation of SDNP.

TARGETED CONNECTIVITY AND TRAINING SERVICES

SDNP is not an ISP in that it does not publicly promote Internet access to general groups of users, but only very selectively; and it does not (with the exception of one group) currently charge tariffs. Also, connectivity is usually offered as part of a larger package or in a specific context of collaboration.

Outside the SEMP programme, about 300 other organisations and individuals are now provided with connectivity. These fall into a number of categories.

A few are members of the SDNP Steering Committee, all of whom were offered the service.

Others are in more extended partnerships or have signed MoUs with SDNP (such as the Bangladesh Press Club and Sandhani: see further on). Such 'corporate' users, receive 60 hours a month free of charge, and more on request.

For a sizeable number, their relationship with SDNP is confined to connectivity, an e-mail account and some Web support and training (see below). These comprise NGOs, some state bodies, line ministries, UNDP Projects, academic institutions, and others. They range from

the Dhaka Chamber of Commerce and Industries, to community based organisations, to Export Promotion Bureau, to the Asiatic Society and educational institutions.

In general, they contact SDNP having heard of them through newspapers reports, Workshops activities or by other means – SDNP does not solicit subscribers. They are all offered initial training, and six hours a month free of charge, a volume seldom exceeded though any fee would probably be waived on request (the normal charge is 0.25 Taka per minute, well below the lowest commercial rate). Many, but not all, also receive support for Web page development , for which they pay. (see further on)

A final group, and the only ones who pay purely for connectivity, are students. On the production of evidence of enrolment in a second or third level institution, they can connect at the heavily subsidised rate of 0.25 Taka per minute. This service is pre-paid. About fifty currently avail of this.

This motley collection of non-SIA users are offered the service because of their perceived respective contributions to sustainable development.

SDNP does provide further connectivity, for instance through its schools programmes and a CyberCafé in the BIDS premises, but these are covered under other headings below.

Finally, SDNP has also provided training in basic computer, word processing and Internet use to a number of UN and Government agencies, up on request. [UNHCR, UNFPA, UNDP, Bangladesh Law Commission, etc.]

TARGETED WEB SUPPORT

As mentioned, SDNP also offers Web development services. These are offered as a single set of services, and hosting is not offered on its own– partly because this might directly compete with ISPs.

Web development services are given to sustainable development stakeholders, broadly defined. They again do not solicit customers, and in general work with those with whom they expect to have a long-term relationship, in current or future partnerships or in other ways. They all have non-profit status, many have relatively limited resources and some relevance to sustainable development in terms of content provision or other activities.

SDNP charges a once-off fee of 25,000 Taka, which includes the Website design and development, hosting on their Website in a server in the USA, and maintenance. Training to whatever level is required is given. At least 200 megabytes is available to each. Most have also been trained to update their sites, using ftp; a few send electronic updates to SDNP, who service the site.

About a dozen (non-SIA) Websites have so far been constructed in this way, all since mid 2001.

SDNP has developed significant expertise in Linux. Additional training has been provided to key personnel, including a member of BIDS staff.

COMMUNITY ACCESS CENTRE (CYBER CAFÉ)

SDNP has developed a number of Community Access Centres (sometimes referred to less accurately as Cyber Cafés), some long-term and others for a temporary event. Each targets a specific group or community.

- In the BIDS offices itself, a facility has been established with six computers for Internet access. It is used by approximately 10 schools and colleges in the general area, and is open from 10:00 a.m. to 1:00 p.m. and then from 2:00 p.m. to 5:00 p.m. catering for over 100 students a week.
- A second has been established in a trainer of trainers college in Dhaka, the Institute of Computer Management and Science (ICMS) a community training institute with whom SDNP is also in partnership on a schools computer programme (see below). This has a capacity of 18 and caters to teachers/trainers of the SDNP school programme.
- A number of temporary Cyber Cafés have also been set up, focused around specific events. In addition to the agreements signed with Press Clubs to provide connectivity (see below), for instance, in June 2002 a five day Cyber Café was run with Jatyo Press Club members to coincide with World Environment Day 2002 (a CD was also published to mark the event, see below); and another during the General Election 2001. Another two day workshop was held at the National Press Club for the Bangladesh Science Writers' Journalists Forum.

ADVOCACY AND AWARENESS RAISING

SDNP in Bangladesh does not regard itself as an advocacy organisation. Constituted as a component in a national Programme, and not yet having institutional autonomy, it is unsurprising that it has not moved far in this direction.

However, the nature of its activities have driven SDNP to become involved in one issue, that of Internet governance and Top Level Domain-names. SDNP has become an active member of ICANN and successfully lobbied at their international gathering to secure funding for poorer countries in ICANN activities. With the ccTLD Secretariat, SDNP initiated a training programme for small ccTLDs to learn how to operate them efficiently. A two day workshop and training programme has been run, with the national ISPs and other stakeholders related to Country Code Top Level Domain in September 2002.

When SDNP began, Bangladesh had not yet secured .bd for its TLD, as it had been spuriously claimed by a pharmaceutical organisation. Even now, administered by the government, only a tiny number of addresses have been registered. SDNP is involved in discussions with Government Ministries, the telecommunication Regulator and others on how the domain might be made available more widely and easily, and may play a role in implementation in the future.

A further initiative in this area is a plan, with the ISP Forum, to develop a nationwide system of Internet exchange between ISPs, so that Internet traffic within Bangladesh need not be routed via the USA, the usual default position in the absence of such an exchange. The cost to ISP of such unnecessary international Internet access is high.

Under awareness raising might be included a Workshop run in July 2002 along with the Bangladesh Development Gateway on a Bangladesh E-Readiness study carried out in the first half of the year.

INSTITUTIONAL PARTNERSHIPS AND REGIONAL DEVELOPMENT

A key area of service provision, in which SDNP offers a tailored package of services in return for agreed commitments, is through developing more or less formal partnerships. They vary greatly in nature and in their current level of advancement, and several more are in the pipeline.

The Schools Programme (www.sdnbd.org)

This programme was developed following a suggestion of SDNP in New York, and is a collaboration between World Computer Exchange (which developed and elaborated the model elsewhere), SDNP, Foundation for Education and Development (FED), Internet Society of Bangladesh (ISOCBD) and Institute of Computer Management and Science (ICMS). So far 400 computers have been imported; 200 for distribution by the FED, and the rest by SDNP. It involves a careful process of schools selection, followed by the signature of an MoU, and two days initial training for teachers (taken in groups of 15 to 20 at the ICMS), followed up by a more intensive five day training later. The computers are for use in the classroom, for training and work projects, and the schools pay a small one off payment to participate (which goes back to the FED). So far, about ninety have been installed around Bangladesh, and are operating, but only a small number are connected to the Internet.

A second phase is planned in which a smaller number of schools will be equipped with five PCs and one printer each, and provided with connectivity – these will in turn provide support to other schools in their area, and develop applications such as e-newsletters between schools.

Press Clubs

Beginning in December 2000 with the National Press Club in Dhaka, and followed by Press Clubs in Dinajpur, Mymensingh, and Rajshahi. SDNP has entered into collaborations that enable journalists in the capital and outside to use the Internet to research and deliver their stories. Under the signed agreements, SDNP gives each a computer, dial-up connectivity and internet services initially for free, training and technical back up the Press Club provides the phone connections and tariffs, and a separate room with air conditioning. In a recent upgrade, SDNP is in the state of signing MoUs with four more press clubs, approved by the NPC, namely, Panchagar (at the remote north), Cox's Bazar (at the remote South), Barisal (at remote East) and Jessore (at the West) press clubs.

An advantage of this collaboration is that the journalists are more likely to notice and use the stories on sustainable development fed to them through the Project, and generally to gain a deeper understanding of the concept.

Virtual Library Information Systems (VLIS)

The VLIS initiative is putting bibliographic information online of the major libraries and information centres in Bangladesh. Several libraries have so far been included in this system. SDNP ran a workshops April 5, 2002 with participants from about 15 organizations and it is expected to expand rapidly. The service allows searching by subject, keyword, author, and so forth, of major book and information depositories in Bangladesh. A remote library administrator can add, edit and modify databases for efficient searching.

Bangladesh Public Administration Training Centre

This is a particularly ambitious collaboration as it involves an infrastructural element as well collaboration on ongoing Web, connectivity, LAN development and other services. The Bangladesh Public Administration Training Centre (BPATC) is the main public services advanced training college located about 15 Kms from the SDNP office in Dhaka.

The link is by micro-wave and can handle up to 10Mbs of data, and up to 64kb for Internet use; and a LAN has been installed in the Centre.

SDNP is also active at course level. A Website for an advanced senior-level management training course (MATT) has been created, designed for graduates of the course to remain in

contact around educational and work issues. Over 100 so far have participated in this course, in six ten week groups.

A cyber-café is being planned that will be used by the local population. (The Memorandum of Understanding is similar to those with the Regional Nodes discussed further on.)

Bangladesh Environmental Movement (BAPA)

An active NGO working for conservation of environment in Bangladesh. SDNP has designed, developed and hosted their web site for mass dissemination.

JOBS

JOBS is a USAID funded project implemented by University of Maryland to support the development of small and medium industries in Bangladesh. Jobs sees a role for ICTs in this, and SDNP entered into a "technical collaboration" in July 2002 to jointly implement this. JOBS is in the process of identifying key areas and partners for activity, under three headings: E-Policy, E-Governance and E-Commerce for SMEs. Under the agreement, SDNP will organise IT related training activities; design, develop and host Websites; share partial costs for the above (actual and in-kind); advocate with JOBS IT issues at policy level; and organise seminars, workshops and technical sessions.

As the JOBS {Programme gains momentum, there is considerable scope for growth in activities here}.

Bangladesh Sangbad Sangstha: BSS

SDNP developed a website for Bangladesh Sangbad Sangstha (BSS), the government managed news agency. Launched on May 5th, the Website contains political and economic news, daily weather bulletin, facts about Bangladesh, life-sketches of politicians and others, news and views of the government and the opposition.

The Website also carries breaking news on important events and happenings of the country.

More recently, in October 26th 2002 (just after the evaluation visit) BSS signed an MoU with SDNP. Under its terms, SDNP will extend technical support to BSS for its project, a Financial Information Service (BFIS) and Financial Databank, which was launched at a ceremony in the National Press Club by the Finance Minister on December 11, 2002.

The press release (October 26, 2002) and (December 12, 2002) are follows:

> October 26, 2002: "With a view to disseminating financial information and economic activities, the BFIS is committed to rendering wide-range coverage on the financial sector as well as to provide updated data and news on various fields like money markets, capital markets, corporate activities, trade and commerce, country's investment scenario, day-to-day business activities of different companies, commodities prices, etc, for its clients in the financial sector."
>
> December 12, 2002: "Finance and Planning Minister M Saifur Rahman formally launched the service by switching on its online wide area network at a function at the National Press Club. Speaking on the occasion the finance minister praised the initiative pointing out that the economic and financial sector information has so far remained a `virtual empty area' in the country, causing disadvantage to vital decision making. Underlining the growing importance of information economics in recent time, the finance minister

> said, the BFIS would go a long way to fill the growing information gap in the financial sector."

BFIS is expected to go into operation by January 2003. If successful this is expected to generate an income for SDNP in the medium term.

Sandahni Raktakarabi (Online Blood Bank)

Bangladesh does not have a national blood bank, and in general obtaining blood for emergency or other medical purposes is the responsibility of the patient and family. Private blood banks are costly, and voluntary contributions is the only option for many.

Working with the Sandhani Medical College Unit, comprising volunteer doctors working to source blood for patients, they developed an Online Blood Bank (Raktakarabi). Starting in February 2002, requests for blood are submitted via the Internet, and an attempt is made to match them with donors who can also register by Internet.

A summary analysis for this evaluation showed that the average number of requests per day was about 35, with about 66% successfully arranging the donation. (Crisis times for blood needs are during May to July with a serious outbreak of Dengu Fever, and during Ramadan; whereas donations tends to come after major national holidays.)

Under the agreement, SDNP provided a PC, connectivity, technical back-up, and Website development, training and support.[7]

Bangladesh Telemedicine Project

SDNP has designed and established the LAN of Bangladesh Telemedicine Association at their site and provide with an Internet connectivity. An MoU is in progress, which will enable SDNP to host data, queries, FAQs related to simple telemedicine treatments in its server.

Bangladesh Gateway

The Development Gateway, a World Bank supported project to create national Gateways of Web based information, is considering setting up a Gateway in Bangladesh. After a call for tenders and some negotiation, SDNP in collaboration with Grameen Cybernet completed the feasibility and pilot stage. Although the process was reportedly in some respects unsatisfactory from the SDNP perspective, the next stage may see the setting up of a Gateway Foundation in Bangladesh. The SDNP Portal is more sophisticated and contains more content than do many Country Gateways. It is therefore difficult to see how a Bangladesh Gateway could or should proceed without a major role for SDNP.

Future Collaborations

Possible future collaborations include the Bangladesh Planning Commission in pattern similar to that of BPATC; extended MoUs with Bangladesh Rice Research Institute at Gazipur, GanaShathya Shangstha at Savar, Jahangir Nagar University (the only resident university in Bangladesh) at Savar; and setting up these bases to collaborate towards local e-governance.

7 http://www.sdnbd.org/sandhani/

3.3 The SDNBD Portal

SDNP has developed a Web-Portal at www.sdnbd.org. It is far more than a Website, and the back end of the portal is supported by a sophisticated database containing several gigabytes of data. At the moment it runs an Open Source software, MYSQL, and research is progress to make the dynamically generated database available from distributed locations.

Currently the data is held within the database in seventy one categories. Categories include items such as: Environment; Climate Change; Sustainable Development; Biodiversity; Information Technology; Economy; Floods and Drainage; Energy; Fisheries; Forestry; Health; Indigenous People; Poverty Alleviation; Women and Children; Water Supply & Sanitation; Budget; Agriculture; Disaster Management; Five Year Plans; and so forth. These were selected following United Nations guidelines and similar web sites.

Multiple avenues are offered to reach the desired information, taking advantage of the powerful underlying database. It is sorted into various headings such as News and Views, Conventions and Treaties; Current Issues, the SEMP programme, Data and Maps, UN Days and Summit information, and so forth. It can be searched by keyword, or in more advanced format with multiple search options by field.

A wide diversity of information is available, from full databases; to maps; to archived articles; to reports downloaded in various forms; to a daily updated news service relating to sustainable development. The last, daily news, is thanks to the link to the press Clubs, but significant updating and supplementation is undertaken every day. Apart from these, after launching BFIS, users will be fed the latest financial news, stock exchange rates, commodity prices, and other financial data related to development activities in the country. At the launch, the Finance Minister noted that since BSS is a government owned organization, he would see it setting a standard, and so favoured wide use of the resources from the BFIS and Financial Databank.

The data is received from many sources, the mina ones being:

- Ministries and Government Agencies
- SEMP Partners
- International sources, including ongoing searches conducted by SDNP
- Daily news report from the Press Clubs
- SDNP Partnerships and collaborations
- Door to door collection by SDNP team
- Supplements, publications in news papers and other documents publicly available.

In addition to the Web Portal per se, SDNP has also engaged in related non-Web based dissemination activities:

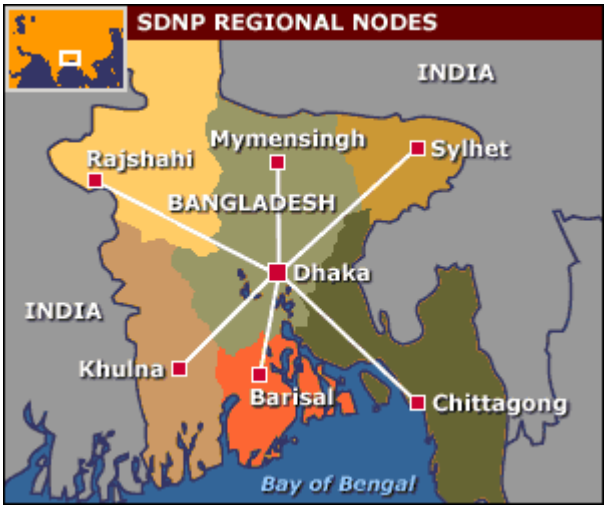
- Production and circulation of CDs of sustainable development topics. The first was produced on World Environment Day on July 6th 2001; repeated in 2002. They contain a wide selection of reports and other material on topical issues, on the World Summit on Sustainable Development, SDNP activities and others.
- An Electronic List, called SDIBD (Sustainable Development Information for Bangladesh), which posts about twenty to thirty message weekly to about 170 subscribers relating to sustainable development in Bangladesh, culled from the volume of material gathered by SDNP.
- SDNP has also taken out newspaper advertisement to draw attention to various relevant UN International Days.

3.4 Regional Node Development

The development of regional nodes, one in each of Bangladesh's main regions and including physical connectivity, has consistently been included amongst SDNP prime objectives. It is a major and ambitious undertaking, and suffered significantly from delays and evolving circumstances.

The nodes proposed are in Sylhet, Chittagong, Barisal, Khulna and Rajshahji and Mymensingh[8]

The process of establishing these nodes was always seen as incremental, building one at a time over the period o the project. The original plan envisaged that four would be completed and one being piloted by the end. Identifying local partners has been the central to the strategy; as well as selecting the appropriate means to establish connectivity.



MYMENSINGH

The main effort so has been on the link to Mymensingh, a city north of Dhaka, and very significant progress has been made. The main elements are as follows.

An MoU was signed in January 2001 between the Bangladesh Agricultural University (BAU) in Mymensingh to deliver "e-mail, Internet and database facilities". SDNP supplies the main connectivity (via microwave) and high-speed database access; a server and a few computers, and for the most part provides technical assistance to a range of other activities. BAU supplies not only the office space and services, but undertakes to construct an open access 'cyber centre' on campus, to provide connectivity to development partners, to run training, workshops and awareness seminars, and to contribute to the SDNP database.

Between them, the following is thus to be completed:

- A micro-wave link of 10 megabits to Dhaka, including a 64kbit connection (expandable) to the Internet. Most of the bandwidth is for high speed access to the SDNP database, but videoconferencing, for instance, could easily be accommodated.
- A campus LAN, connected to the Internet;
- The provision of data and information to enhance the SDNP database;
- A Community Access Centre on or near Campus, which is open not just to college students but to "school and college students in and around the campus, farmers and rural students being education under non-formal education".
- Connectivity delivered (dial-up or other) to "field level development partners and research bases in and around Mymensingh, acting as a regional node of SDNP";
- Promotion, training, awareness raising and Workshops;
- A sustainability plan, for the future development of the activities.

8 Being in the same region as Dhaka, Mymensingh was not on the original plan, but was added later raising the original five to six.

The plan does not stop there. For the physical micro-wave link to Dhaka in via a series of towers, one in Dhaka and another in each of two towns along the route: Salna and Bhaluka. At each, similar agreements have been entered into containing more or less the same ingredients as above.

- In Salna, the first node after Dhaka en route to Mymensingh, MoUs have been signed with two partners, Bangabandhu Sheihk Mujibur Rahman University (BSMRAU) in November 2001; and with the Bangladaesh Rice Research Institute, Gazipur in March 2001;
- In Bhaluka, the second node, the MoU is with the Mymensingh Pally Buddyut Samity-2, a successful rural electricity company. The contribute of the company to the database could be very significant since the company has a huge database on rural electrification in the region.

So far, physical link to Dhaka is virtually complete, and by the first quarter of 2003, all of them are expected to be activated officially (Salna in January, Bhaluka in February and BAU in March).

Although installation of a further five Nodes is in the plan, Mymensingh will remain the most ambitious. It is the only one for which dedicated infrastructure of this capacity is being built, and hence also the only one which can in effect be developed into a string of high-speed connected nodes along a corridor running 107 kilometres (aerial distance) north of Dhaka.

So far, agreement in principle has been reached with a university in Khulna; and discussions are underway in the other areas. Similar MoUs and connectivity is likely. However, it is felt that, by forming collaboration with the Council of BITs (Bangladesh Institute of Technology), all four BITs at Gazipur, Khulna, Rajshahi and Chittagong can be reached at minimum cost and effort. CBITs has four successful outreach institutes in those regions. In the Sylhet region, the MoU has been signed with LEARN Foundation, an NGO running ICT initiatives in rural schools for the last four to five years.

4. PROJECT ASSESSMENT: ACTIVITIES, OUTPUTS AND ACHIEVEMENTS -

4.1: Measuring against SDNP Objectives

A difficulty of measuring success of SDNP is that the original objectives and criteria for success were relatively vague and general. Nevertheless, the general aim was clear enough in many cases. We can also consider the activities in terms of conception and implementation as well as their potential to contribute to sustainable development

4.1.1 Activities in Relation to SEMP

SDNP was to provide a set of networking and dissemination tools for SEMP implementing agencies the SIAs. The independent needs assessment study of April 2000 identified a set of individual SIA needs. But these could not always be related to the networking/ interactivity requirements or to the needs of SEMP as a whole. The terms of reference stressed the individual ICT needs of the SIAs, rather than the information dynamics and needs of the SEMP programme and how ICTS could assist these.

A Workshop on "Online Networking Aspects under SEMP" was also held in March 2002 to explore SIA needs. Participants suggested more frequent workshops of similar nature.

Overall, the limited investigation of this issue suggests that only a few of the SIAs are actively attempting to apply ICTs to their SEMP activities. Certainly, connectivity and training has been provided, and a few Websites built and LANs supported into existence. But these appear to have been somewhat sporadic.

Furthermore, there seems to be a limited conception of how ICTs can be used at the Programme level. The SEMP Electronic Bulletin Board, SDNBD, is useful, but falls far short of a networking strategy, and so far SDNP seems to play a limited and relatively passive role in relation to disseminating SEMP activities. Only the Portal and Database (see further on) have achieved more general use among SIAs – reportedly, many SIA make considerable use of these resources. But here too very few SIAs complete the quarterly activity or progress reports that are to be posted on to the SEMP/SDNP Website.

Thus both internally within SIAs and the Programme, and externally with other stakeholders, SIAs are failing to optimise the use of ICTs and of SDNP services

Why is this?

Again, only limited research could be undertaken here. But a number of circumstances may combine to yield the current situation.

- Some of the SIAs exhibit a limited interest in information sharing, and have never had such a culture, either internally or externally. Rightly or wrongly, some may also feel that information networking or dissemination is not a priority.
- The SEMP Project Management Unit, which coordinates the SIAs from within the Department of the Environment, has very limited resources and is not in a position to explore in-depth the potential of ICTs and what measures might support them;
- SDNP has been insufficiently proactive in determining and needs and dynamics of the SEMP programme and SIA, and in identifying blockages as well as opportunities for greater and more effective ICT use. Although SDNP may be somewhat removed from the mainstream SEMP programme (to the extent, that is, that SEMP is more than a

collection of individual components), as a horizontal activity with responsibilities across all other components it has an obligation to actively explore its role here.

These factors may mutually reinforce each other in a negative cycle, such that moving forward will require action on several fronts at once.

4.1.2. Activities in Relation to non-SEMP Stakeholders

This is the most difficult category to pin down, largely because these activities are not clearly specified in the Project Plans or other documentation, and neither are the criteria for their selection. Some would reasonably fall under the goal of creating an SDN (sustainable development network) linking a range of stakeholders. But the specific services and activities have been developed mainly through SDNP taking the initiative, seeking out possibilities consistent with its remit, capacity and resources, and to a lesser extent through responding to requests and proposals put to it.

Before considering this category, attention should be drawn to one non-SIA objective mentioned in the later Project Implementation Plan, that is: "To promote the Bengali culture and heritage". Although some actions in this area is planned (see below), so far virtually nothing has been achieved.

Connectivity, Web and other Services

Included here are the provision of connectivity to NGOs, institutions, government agencies and students; as well as the Cyber Cafés (Community Access Centres) and advanced networking.

SDNPs connectivity and web services deliver benefits to a variety of users - though they are currently selected in an uncertain and slightly haphazard manner. Although we held only a few individual interviews, group discussions with users and teachers from the local school of the Community Access Centre (Cyber Café) showed enthusiastic use and great interest in the potential of the Internet. The level of use is high, and pupils are gaining basic computer and Internet literacy. Web sites developed are competent and user-friendly.

Presumably, others provided with connectivity also use it to their benefit, since many are online for considerable hours. The general criteria for selection – students, educational institutions, NGOs and others involved in development activity – are compatible with usage in the interests of sustainable development. The specific benefit that SDNP brings is that:

1) Some of these users would not in the first place have considered using the Internet, had not the potential benefits come to their attention through SDNP;
2) Some, if not most, could not afford to use a commercial ISP, the cheapest of whom charges 0.6 Taka for off-peak hours and about 1 taka during peak hours. It is expected that this level will not decrease for some time, due to the introduction of a licensing fee by BTRC – though eventually they are bound to fall.
3) Users are more likely to access and make of the SDNP Portal information.

Advocacy

The limited advocacy work around Internet Domain Names and capacity building for ISPs has been, and is likely to continue to be very positive, having funding and training as a direct outcome, and some progress in relation to the Top Level Domain Name.

Indeed, there is a possibility that SDNP, because of this work and its technical capabilities, may be selected to provide technical administration role for the (Bangladesh national) .bd domain in plans to make it more easily and widely available. Such an outcome has some capacity to generate income, but is valuable especially for the credibility and profile it confers.

Institutional Collaborations and Partnerships

The various Project documents do not lay heavy stress on partnership and collaboration. The second PIP in July 2001 identified institutional collaborations as an area of current development, though with few specifics[9]. But they have proved to be the most effective, and in some cases, the only, means to move forward

As mentioned, its location within BIDS as well as its role within a government UNDP programme probably significantly simplified the process of partnership development especially around establishing trust and credibility. Being a well-funded Project, they can also offer partners some attractive resources, though the MoUs and agreements signed are clear on the need for both partners to contribute in a broadly proportional manner.

A number of these collaborations are already yielding concrete benefits.

- The collaboration with Press Clubs outside the capital is particularly welcomes by users, since work that was previously done by phone or fax is now completed on the Internet through dial-up access. It enables the transmission of formatted copy and photos, saving time and costs, and producing higher quality text and images. In a highly centralised country, this has definite advantages for reporters outside of the capital.
- The benefits of the Sandhani Blood Bank collaboration are immediate and obvious. With about a two-thirds success rate of those seeking blood for themselves or relatives, and with huge potential for growth, this is both innovative and useful.
- Based on a visit to two schools, the Schools computer programme is bringing computer skills to students many located in remote parts, and Internet skills to those who have connectivity. Teachers are also embracing the technologies, and belief that employment prospects for students will be improved.
- The BPATC collaboration, another site visited, has significantly improved the curriculum development process for lecturer and course directors. The Internet is routinely used to source material and whole modules on occasion, enhancing quality and reducing cost and the time taken. Connectivity during training has enabled advanced skills to be imparted, particularly useful for the high level administrators and officials that the Centre caters for and carried back to their placed of employment.

A comment on the obvious diversity of these collaborations, in terms of development goals and underlying development implications, is reserved for the conclusions. Here it is noted that:

- These collaborations have enabled the Project to genuinely leverage significant additional resources towards achieving the general SDNP goals, sometimes in funding as well as in kind;

9 The three mentioned at that time were with the Bangladesh Open University; the Information Centres for Cyclone Shelters, and the Schools programme.

- They have already generated perceptible benefits in at least several cases, and the potential for future benefits is large;
- They have brought SDNP into contact with a huge range of sustainable development stakeholders, enabling SDNP to demonstrate its technical and organisational capacity and generating significant goodwill
- They have forwarded the dissemination of the philosophy of sustainable development, and of the existence and value of the Portal.

These are not inconsiderable achievements.

4.1.3 SDNBD Portal

Based on an examination of the SDNP Portal, interviews with SDNP staff and a limited number of users, the SDNP Portal exhibits the following features:

- It contains a very significant volume of data and information, certainly as compared to other high-end Portal such as Pakistan.
- The quality, depth and scope of that information in the area of sustainable development is impressive.
- Much of this is unavailable elsewhere, and is of interest to the general as well as the specialist browser.
- It is clearly and attractively laid out, if a little cluttered.
- Information is easily identified and readily accessed using the various sorting and search strategies.
- The volume of updated information daily and at other intervals is significant enough to attract users on a regular basis.
- It is underpinned by (as soon to be upgraded) powerful database software that should be flexible and expandable.
- Access speed are reasonable, though limitations around Bangladesh are usually local in nature.

The first steps in achieving the goal of supporting Bengali culture and language will be available on the Portal very soon, with the introduction of Bengali translation of some of the daily news Bulletin produced in the Press Clubs. SDNP is paying the additional cost (about Tk. 1,000 per month) of translation.

4.1.4 Regional Node Development

The development of the regional nodes are, for several reasons, behind schedule. First was the nine months interruption of the SEMP Programme as a whole. Second were a series of delays in the procurement procedures, which as mentioned, must be administered through UNDP procedures and offices. The process of identifying and securing agreement of partners is also necessarily time-consuming, though this was always anticipated.

Progress

However, the first node at Mymensingh is on the brink of launch, and being the most important (since in effect it comprises three nodes), it will be a good test of the concept. All the sub-nodes on the way to BAU have been made active and awaiting official inaugurations.

The Concept

The concept itself deserves a little elaboration beyond a set of local Internet related activities.

Basically, the vision is to introduce a range of sustainable development related activities, enabled by ICTs, into a relatively marginalised agricultural region. Based around a core educational facility, availability is to gradually extend outwards to a range of stakeholders, from lecturers to farmers, who will develop a diverse set of applications. Thus an ICT enabled 'cluster' of interlinked but also autonomous activity will grow within the region, with the potential to catalyse, by example, best practice promotion and capacity building, the entire region in its use of ICT for sustainable development.

The MoUs specify a critical aspect of the partnership. SDNP provides identified resources for free; and the local partner also provides resources in kind and in investment. But the local partner also agreed to extend linkages outside its immediate domain towards other groups and entities in the locality. It is this further extension that is critical, and has the potential not only of cascading benefits outwards but of also linking the node more integrally into the surrounding community.

In Mymensingh the node is centred on the University, beginning with staff and students. But the Community Access Centre (Cyber Café) will enable access to be extended to other groups in the surrounding areas, including field activities, development projects and farmers. This will be reinforced through the planned outreach, promotion and training activities. Finally, dial-up access will also be possible, at local call rate, to enable more remote access to a further set of stakeholders. And as the node progresses, the goal would be to build in additional partners and possibilities. With the skills, users and applications in place, it is hoped to begin to charge for some services to raise the additional income, beyond institutional support, needed to achieve sustainability.

The concept is an exciting one for integrated and gradually extended sustainable development in more remote areas, although it faced a range of challenges at every step.

The Choice of Infrastructure

Underpinning it all is the introduction of a low-cost high-bandwidth access for the region, and internal networking capabilities. Without significantly improved access, the range and utility of applications to be developed would be far more restricted, constrained by bandwidth bottlenecks, network failures, and cost. Thus the implementation of a high bandwidth connection is critical.

There has been some criticism of the choice of technology for Mymensingh, perhaps reflected in a BBC report on the Project in which the UNDP Resident Representative is quoted as the regarding the micro-wave technology: "The idea is still valid but the technology has moved on". Given these comments, the evaluation considered this question in a little depth. The following is a summary of the issues and conclusions.

It is true that several options for connectivity in Mymensingh have emerged since the early days of the project, when a long-distance phone call was the only means to gain slow and poor quality access. The project considered three other possibilities (including micro-wave):

- The first would take advantage of an optical fibre network laid along the railway line. In mid 2002, the railway company agreed to allow Grameen to sell on some of the capacity, and Grameen entered into a lease agreement with RANKS IT, a retail bandwidth seller. A 64kbit internet connection (potentially in principle expandable to 1mbit) is available at Mymensingh for about 30,000 taka per month (about $500).

- A second option is to set up a local dial-up node in Mymensingh with the national telecoms operator. This would mean a once off charge of about 300,000 Taka (about $5000), and the connection for dial-up users would be at 9.6 kb.

- The micro-wave link has cost about 350,000 Taka (per node), and provides a 10 Mb data link, 64kb of which is for Internet (the limitation on Internet access is in SDNP in Dhaka, where the link to the Internet is currently established. This could be hugely extended, but at significant cost).

The first difference is thus in the volume of bandwidth provided. Although the first and last options provide similar Internet bandwidth, microwave offers broadband access to the SDNP database for university-based users (and other, depending on the local link) potentially also opening services such as videoconferences. Furthermore, all three options permit (in different forms) local-dial up access to the Internet.

The major deciding factor, however, relates to establishing connectivity to the other two centres between Mymensingh and Dhaka: i.e. Salna and Bhaluka. For the first option is, at least for the foreseeable future, available only in the larger town of Mymensingh. Offering 64kbps off the railway optical fibre in Salna and Bhaluka would require very significant investment in equipment – which would be passed on to users – and is not currently envisaged by the suppliers. Similarly, dial-up nodes in Salna and Bhaluka would cost as much again in each, bringing the cost well above the micro-wave option and still offering a far more limited service.

Further factors favour microwave. SDNP and its partners would have control over maintenance, and micro-wave is anyhow a relatively trouble free and easily maintained technology. Furthermore, the micro-wave option creates a permanent asset in the towers and equipment which can be relatively easily upgraded and indeed used for additional purposes. Finally, notwithstanding procurement or licensing difficulties, micro-wave links can be established very rapidly: the (single step) micro-wave link to PATC discussed above was installed from beginning to end in twenty days.

All in all, we concluded that the micro-wave option was and remains by far the best and most cost effective choice.

The physical link to other nodes, however, will look very different. Here the comment about technology having 'moved on' is more relevant in that there may at least be realistic alternatives. SDNP therefore plans to use the available DDN (Digital Data Network of BTTB) where available. It should be noted, however, that this service, even when it is fully available, offers far less than micro-wave in terms of bandwidth and flexibility. In one case, that of Sylhet, the Project has applied for permission of a DDN link and is awaiting the demand note to be issued by BTTB.

5. MANAGEMENT AND INSTITUTIONAL ARRANGEMENTS

SDNP in Bangladesh did not from the beginning have a 'natural' home, as happened in some other countries. The idea did not originate with an organisation or entity that would later become the obvious candidate in which to house it. Rather, integrated as a component in a larger programme solely on the merits of the concept, an implementing agency had to be found, and SDNP had to be incorporated into this context or beneath its umbrella. BIDS was chosen because of its national reputation and national information generation and dissemination capacity and role.

However, it did take a little time for the more or less autonomous form of SDNP, housed within but not integrated within BIDS, to emerge, and this followed a number of discussions between BIDS and UNDP. The current institutional form and management structure were secured at the end of the first year with the appointment of the Project Coordinator.

The Project Director is also the Research Director of BIDS, and devotes part-time only to the Project – though in general his time commitment goes well beyond what is expected. The Project Coordinator is the full-time manager. The two work well together. The Project Director provides high level guidance and advice, often some ideas and contacts, and ensures a smooth and productive relationship with BIDS. SDNP has benefited from BIDS' good reputation.

The role of the Steering Committee is to provide "advice, direction and support", and is intended also to provide broad stakeholder input into the Project. It has met four times in the life of the Project so far, first in mid 1999, and includes representatives of BIDS, UNDP, PMU, the Ministry of Posts and Telecommunications, IUCN Bangladesh, MoEF, IUCN, the ISP Forum, and the SDNP Coordinator (member-secretary). It has been chaired from the beginning by Professor Jamilur Choudury, the Vice Chancellor of BRAC University and a renowned ICT specialist in the country.

Though only four meetings have been held, it offers at least some link to major stakeholders including the MoEF, the PMU and UNDP. It also facilitates positive relations with non-SEMP stakeholders such as the ISP Forum (representing private ISPs) - although they have other occasions to interact. Meetings have given advice and, as far as can be ascertained, that advice has been acted upon.

The Project interacts more frequently with some individual members of the Steering Committee on an informal basis, especially with the Chair. Professor Choudury is a highly experienced and respected professor from BRAC University, with a strong commitment to the Project and with a broad vision of its potential. His support continues to be an important element.

Overall then, the management oversight structure and functions reasonably well. It has allowed flexibility and not hindered progress. It has met and given advice which has largely been followed. And, as is often the case, it is at the personal level of commitment and calibre of individuals that the positive value has arisen, and here the Project is served well.

Internal management is distinct.

SDNP has a total of 14 staff, with at present only the Project Coordinator (advised by the Director) engaging in management activities *per se.* The SDNP team appears to be appropriately-qualified, very committed and highly motivated, and the technical quality and outputs of activities is high. The Coordinator is well-qualified and suited to the job, experienced and extremely committed. But he is personally responsible for a huge range of

simultaneous tasks that are generated by the project's large, diverse and demanding portfolio. The fact that delays resulted in the need to move concurrently on many fronts compounds the challenge.

As a result, management is extremely stretched and cannot possibly handle all the demands currently upon it, no matter the level of commitment. Understandably, the highest priority is given to designing, launching and running the main activities.

This probably explains, at least in part, the relatively poor communication, in level and quality, between SDNP and the PMU and UNDP. Exacerbated by the accelerated rate of implementation, the result is that the UNDP and PMU appear to underestimate the potential and actual achievements of the SDNP Project; whilst SDNP is failing to report on its strategies and ideas and even successes.

A further contributory factor may be the dual origins of this Project. SDNP reports to the PMU on both SEMP and non-SEMP related activities; but the PMU is understandably focused on SEMP. UNDP provided the original inspiration for many of the non-SEMP SDNP activities, yet with its changing personnel and removed relationship, it cannot offer the continuity in direction. Thus the non-SEMP activities are somewhat out on a limb.

Perhaps the Steering Committee might have been expected to bring together the several objectives of SDNP into a more coherent whole. However, the first step would have been to identify the issue of the dual objectives, and the strains it causes internally within the Project and in relation to communications with major stakeholders. This was not done, but the question could be raised again now.

SDNP has not so far suffered materially from the relatively poor lines of communication. However, as the SEMP Programme comes under review, it will be essential that all sides are communicating well and understand their challenges and achievements.

The PMU itself also seems to be under pressure in terms of its management and coordination burden. It appears to have made little effort to familiarise itself with non-SEMP activities of SDNP, or indeed to prioritise the networking and dissemination activities of SEMP to which SDNP is to act as the key partner.

This points to another area in which SDNP is not achieving as much as it might – serving the SEMP programme. This was already considered above, but the pressure on management, combined with poor communication with PMU, probably results in less creative energy on both sides being devoted to devising ways in which the SEMP programme can be better supported and disseminated through the use of ICTS and networking.

A third area receiving insufficient attention is around monitoring and evaluation of activities. This is not merely a question of learning abstract lessons. It is about feeding into the ongoing management design of the activities, reporting on successes, and building for future sustainability. It also related to formulating and reformulating objectives and resources usage. We return to this below.

6. SUSTAINABILITY AND THE FUTURE

The issue of SDNP Bangladesh's long-term sustainability, as in a number of other SDNPs, has been somewhat ambiguous. The original Programme Support Document of August 1998 for SEMP talks of a 'Terminal report' to evaluate the project and draw lessons. But the first Project Implementation Plan in March 1999 proposes by Year 3 to "place major focus on making SDN financially sustainable…" and the UNDP mission there in July 1999 takes it for granted that sustainability is "a major concern for the implementing agency and UNDP" but points to the absence of plan. The July 2001 Project Implementation Plan argues that if the Project is given additional funding until the end of 2004, sustainability will be possible. A Section is devoted to the topic, under a page in length, noting that many of its activities can contribute to sustainability. It singles out services such as training, Website development, UUCP and other Internet services, and professional networking consultancy. The Steering Committee of July 23rd 2001 approved a 'sustainability plan', which it has to be said amounted to no more than a revised tariff sheet for e-mail, Web browsing, UUCP, Web hosting and leased line, and (proposed) WAP services.

At present, the project still lacks a coherent model of what sustainability might look like, what it means in terms of its development goals, and how it can be achieved. Ultimately, the prevarication and uncertainty probably comes back to a combination of having two masters, as well as the frantic level of activity imposed on the Project in an attempt to make up lost time.

But some months back, both project management and the Steering Committee fully acknowledged the urgent need for a Business Plan to follow this evaluation, that will address sustainability in a comprehensive manner.

Here, we make merely a few comments on the potential for sustainability evident in the various activities; as well as the avenues suggested by those interviewed. In the Recommendations at the end, we suggest a few first steps that could begin even before the business Plan is developed.

The following are relevant to a future sustainability plan and emerged in discussion with the various SDNP stakeholders:

1. Most believe that SDNP has a future as an autonomous entity, a registered non-profit company with development goals. SDNP management would favour this.

2. BIDS, whose status is as an implementing agency of a Project, would also be satisfied with this, and might consider prolonging its close association with the continued use of the space and transmission tower, in return for the provision of services. BIDS has benefited from the SDNP project, especially in building up its LAN and general ICT capacity. At this point, however, BIDS has reached a reasonable ICT capacity, and Internet services generally are less costly and more readily available than before.

3. All the income generated by SDNP has been held by BIDS for the Project. There is a general will to utilise this towards sustainability.

4. The not inconsiderable bank of equipment in SDNP could also go forward as an asset, and UNDP would probably be happy to see it used to development ends. This would include the Regional nodes, infrastructure links, Community Access Centres, as well as the ISP technologies. Of course, as assets, these are rapidly decreasing with the pace of technological change.

The more important assets in terms of sustainability are somewhat less tangible:

1. As noted, the team at SDNP is highly skilled and motivated, and works well together. But their institutional capacity goes beyond the sum of individual staff members. There can be few groups in Bangladesh with this combination of technological, applications, and content development capability, and surely none with a development orientation. Technical skills include: IT system design and specification; Open Source software development; content sourcing, analysis and processing; advanced online database and Portal design; Domain name maintenance; Web design and maintenance; ISP service provision; and training and capacity building. Management skills in terms of identifying opportunities, building partnerships, project design and implementation are particularly strong.
2. SDNP has, as far as we could ascertain, already gained a reputation for work of integrity and efficiency, among educational circles, with the press, and with some agencies and NGOs. This can be built upon.
3. Partnerships entered into represent a net cost to SDNP, and are likely to continue to do so (at least overall) until the end of the funded period. Where income is generated, there is no assumption that it should match the cost, since this is a development project funded by the UN. These partnerships, as outlined earlier, have significant potential to support a sustainability plan through the contacts made, the experience gained, the reputation earned. But in addition, a few may seamlessly evolve in the short to medium term from a net cost to a net income earner, such as Financial Information Service (BFIS) and the JOBS initiatives.
4. The Regional Nodes may also have significant potential for income generation, much of it as yet unrecognised and emerging when services are rolled out around the nodes.
5. When SDNP is confronted with private sector competitors for some of its activities, it may retain a certain cost advantage. There is evidence that private sector consultants currently charge very high prices – SDNP as a non-profit could offer similar services for considerably less (notwithstanding issues of unfair competition, which must be guarded against.) Furthermore, government ministries and agencies may be more comfortable working with an organisation like SDNP in relation to the internal organisation, networking and dissemination of its information. Both these points were made during interviews with well-placed non-SDNP informants.
6. Although income generation is bound to comprise at least part of a sustainability package, the demonstrable success of its current activities would place the project well to attract further international grant funding.

Finally, it may soon be an opportune time to seek work in the ICT area. In September 2002, the Government endorsed a national *Information and Communication Technology Policy*, which proclaims the intention of using ICTs "as the key driving element for social-economic development". It covers a huge range of topics, from infrastructure to regulation to education and training. Although it is as yet low on specifics, a number clearly could relate to SDNP. For instance, objectives include:

- To "set up national databases that are reliable and easily accessible to all the people"; and
- "special allocations for ICT project implementation in the public sector";

There are proposals around extensive ICT education in public and private educational institutions, for the creation of an Internet-exchange, 'cyber kiosks' in Post Offices; the provision of ICT facilities to NGOs; and much more. SDNP is well placed to bid for or implement many of these, if and when these aspirations are translated into an Action Plan, budget lines and concrete projects.

7. CONCLUSIONS AND RECOMMENDATIONS

Overall, this Project is ambitious, dynamic, capable and could potentially make a significant contribution to sustainable development, using ICTs, in Bangladesh. As SDNP Project's go, it is very well funded, but it expends these resources in a responsible and well directed manner. If anything, it risks taking on too much, to the extent that its management can barely stay on top of developments. The solution at this point is not to scale back on activities, but to redefine and refocus them, improve the monitoring and management information systems, provide additional management support, and design and implement a meaningful and robust sustainability plan.

As well as successes and great potential, there are shortcomings, and limitations.

7.1 SEMP Activities

The Project has not progressed as well as it might in relation to its SEMP role, for reasons tentatively presented above.

Recommendation 1: Refocus SEMP Activities

There is an urgent requirement to reassess SIA needs, through a Workshop and other means. This could be followed up by:

- Small-scale, targeted, qualitative research in SIAs around networking needs at this stage of their activities;
- Capacity building in networking where this has proved to be a blockage;
- Support for content analysis and development as well as for technical needs.

There may be opportunities for working in collaboration with several SIAs, in areas of contiguity or overlap within SEMP.

Clearly, this work must be planned and executed in close consultation with, and with the full support of, the PMU.

7.2 Non SEMP Activities

CONNECTIVITY AND WEB SERVICES

SDNP's connectivity and Web services, including the community access centres, are valuable activities, very much in line with global SDNP activities. Although the Internet, as everywhere, is expanding, this does not always bring it within reach of important sustainable development stakeholders. As a market driven activity, businesses, urban areas and wealthy users are the first to gain access, and the rate of affordable dissemination to more marginalised groups, is often slow. In many areas, it is virtually at a standstill.

SDNPs activities here (the regional nodes are considered separately below) provide a useful service to stakeholders such as students, NGOs and agencies, one otherwise largely unavailable to them, that is also more geared towards development needs. These activities are somewhat arbitrary in terms of user selection, and do not (nor do they claim to) target the most excluded. Rather, they benefit primarily a rung or two down on the market access ladder, and as such are widening the net of access and support beyond commercial ISPs. They thus offer some prospect for revenue generation, but the risk of coming into conflict with commercial ISP services limits this. (Whilst SDNP could in principle compete as an

ISP, subsidisation of ISP services to customers who could otherwise afford a commercial ISP clearly would not contribute to development. The Project is well aware of this.)

Recommendation 2: Pursue Connectivity and Web services, but keep under review.

Connectivity, Web and Community Access Centre activities should be pursued, but kept under review in the context of a clarification of development priorities and objectives, of future sustainability, and of developments in the commercial sector. (see below)

It may also be noted under this heading that the advocacy and capacity building activities in relation to Internet Domain Names is valuable, and will remain so for some considerable time, until Bangladesh can fully claim its rights and effectively and efficiently administer and manage Internet Domain Names and the infrastructure itself. This can also contribute to the standing of SDNP and, especially if combined with a growing Open Source expertise (in Linux and databases), enhance its sustainability.

Recommendation 3: Maintain Internet Advocacy

The work in relation to Internet advocacy and capacity building is of national value and should be sustained and reinforced as the need arises.

INSTITUTIONAL COLLABORATIONS

This is an area of major strength.

The diversity in focus of these collaborations is striking. Their development goals straddle a huge range; and their *modus operandi* vary enormously. The contrast between an online blood-donor service run by a voluntary doctor's association for low-income people; and a partnership in the creation of online financial services to the business sector, seems almost irreconcilable within the same framework or organisational objectives. Even within the one sector, education, the subsidisation of computers in schools in the poorest areas is a far cry from subsidising the country's most prestigious government training centre. (Further on, we focus on the challenges such diversity pose.)

Partnership are also at different levels of development. A few are well established, achieving results, and need minimal servicing. Others are in the throws of formulation and initial implementation, a hugely time and resource consuming effort. A third group is just on the horizon and in early conception phase.

Results to date suggest that the development potential of at least some is very significant, and that benefits may in some cases accrue to excluded and marginalised groups. Collaborations could also be a critical factor in achieving sustainability.

Yet in grasping almost every opportunity, and creating many, the precise development value and prioritisation of resources, as compared to the volume of investment, has become unclear. Furthermore, their sheer number and the heavy management overhead that each requires is a significant drain on management resources and severely tests its capacity.

Recommendation 4: Consolidate and Deepen Collaborations

With the finalisation of funding within sight, it is probably necessary to concentrate on consolidating existing collaborations, and taking on new ones where the design and implementation resources are manageable. As in other areas, the issue of re-evaluating the long-term objectives and focus of collaborations is also recommended below.

7.3 SDNBD Portal

The SDNP Portal is a sophisticated and relatively comprehensive resource. It is regularly updated with current material, is user-friendly, and achieves a reasonably high level of usage. The limited evidence is that it is highly regarded by sustainable development users. In addition to the direct contribution of SDNP staff to the Portal, it is significantly reinforced by other SDNP collaborations and associations.

It is also expensive, and will require considerable effort to approach sustainability. A partial source of funding is the World Bank-sponsored Development Gateway, currently exploring a presence in Bangladesh and for which SDNP is one obvious home. Some uncertainty and disagreement has developed between SDNP and Development Gateway. It would be in neither's interest – and especially not in the interest of development – should a separate Bangladesh Gateway be set up, or the Gateway decide to abandon Bangladesh.

The sustainability and further development of the Portal will also depend on encouraging ever greater usage.

Recommendation 5: A Sustainable SDNBD Portal

Long-term, post-funding arrangements for the uploaded of data and information on a regular basis might be explored at this early stage to relieve some of the in-house burden on SDNP. SDNP should further pursue the Development Gateway option, though only on terms that will add to its sustainability. Further effort should also be devoted to increasing usage, and gathering evidence of impact, a factor that might influence external donors.

7.4 Regional Node Development

The Mymensingh node represents a very ambitious experiment in bringing ICTs out of Dhaka along a sting of cities to the north. It will be a crucial test of the concept, in particular how the benefits of broadband capacity can be translated into useful applications in a wide variety of sectors and to a diversity of groups, from professors to farmers. It has, and will continue, to consume significant resources, but this is justified. It is very important that it has the resources to deploy the concept right down to the applications stage, outside the hosting nodes – in some cases literally out into the countryside. This is where the real value added will lie and where an example of international relevance might be achieved.

The other proposed nodes are relatively simpler in design and cost, but will also require considerable effort to translate into maximum benefits.

Recommendations 6: Proving the Concept of Regional Nodes

In order to test the concept of regional nodes, Mymensingh must proceed as far and deep as possible. Additional nodes will be added, but the completion of the full network must not be at the expense of any individual one. It is more important to explore fully the stand-alone potential of each, that to have a larger number at different stages of development. It may be necessary to scale back, and omit one or more nodes from the final configuration. Given the additional nodes added during the project, and the unavoidable delays encountered, the original objectives would still be attained.

7.5 SDNP Objectives Globally and in the SDNBD Project

Having dealt with the activities above, we now turn to conclusions and recommendations around objectives, management and sustainability.

We conclude that all major initiatives taken or proposed by Bangladesh SDNP are in accordance with the general SDNP philosophy. The informal and sometimes uncertain criteria used to select them by Project Management have kept them *within the bounds of supporting sustainable development*. This is not a trivial conclusion since the Project for much of the time was, as stated, acting on its own initiative and lacking clear external guidance. There had also been suggestions that a few activities went beyond what a development-oriented UNDP-funded project should support. Although we understand these concerns, we do not believe this to be the case for two reasons: the development circumstance in Bangladesh, and of the challenge of sustainability facing SDNBD.

First, Bangladesh is amongst the poorest in the world.[10] It is reportedly very corrupt[11], in both government and business, and the environment for development and for productive enterprise is difficult in the extreme. The array of social, economic, environmental challenges faced by the people of Bangladesh is enormous. In this context, the range of projects that might be judged to contribute to sustainable development is somewhat wider than in some other places.

Second, SDNBD, in common with many SDNPs elsewhere, is expected to become self-sustaining in terms of income generation. In the only model available to SDNBD, at least part of this income must be generated by selling services on the market. Thus one end of a 'development-contribution' spectrum of activities can in the long term potentially subsidise the other– for instance, a business-oriented service that could in principle be undertaken by a commercial organisation could cross-subsidise services targeted at excluded and marginalised groups.

The BSS Financial Information Service (BFIS) and Financial Databank Project, described earlier, offers an interesting example. SDNP recently signed a collaboration agreement to provide online business information services. SDNP does not subsidise this – they are in partnership with BSS, the government managed news agency, and will receive payment as a proportion of income generated. Nevertheless, it does represent an initial investment and is, like all ventures, risky. It also consumes valuable management time. Such an activity in 'normal' development circumstances might be deemed to offer nothing to sustainable development. In Bangladesh, it is somewhat more justifiable as a contribution to the development of a legitimate business sector. Furthermore, in the context of the sustainability

10 It is ranked 145th of 173 countries in the Human Development Index; and 72nd of 88 in terms of the Poverty index of developing countries. (UNDP Development report 2002)

11 Transparency International's 2001 Corruption Perception Index (which measures the perception of corruption in each country) rates Bangladesh as last of 91 countries. http://www.globalcorruptionreport.org/

possibilities of SDNP, it is justified as a small risk that might generate revenues to subsidise firmer development activities for which no revenue is likely to accrue.

The case is cited at length as it illustrates a dilemma for SDNP in relation to its objectives and sustainability. The project so far has, we claim, managed to maintain a reasonably balanced focus in sustainable development. But this is likely to be severely tested as the pressure of achieving its own sustainability, by means almost certainly of a large income-driven component, rises. In other words, if nothing changes and grant funding dries up, SDNP is more likely to get gradually diverted into revenue generation activities, and away from sustainable development.

This would be a pity, as we believe the project has, more than most SDNPs, the capacity to achieve sustainability at the same time as maintaining a clear focus on sustainable development. A number of areas need to be considered, and no doubt will soon be. The following cover just a few arising directly from this evaluation.

Refine Objectives and Information Systems

At best the objectives of this Project have been ambiguous, pointing in two directions at once neither clearly mapped out. Combining the two objectives of sustainability existence and supporting sustainable development will be a far bigger and more complex challenge. The first requirement is clear thinking and good management information systems. The goal must be to build a management information system that will simultaneously achieve several goals:

- Provide detailed information on the cost (in money, management and other) of each activity, and how and when they arise;
- Assess the immediate, medium term, and long-term potential for achieving income, if any;
- Evaluate the nature and level of benefit of each activity in terms of sustainable development of each activity, much of which is qualitative.

Detailed knowledge of how the target group benefits, to what extent, what it costs, and how sustainable it are also invaluable tools when approaching external donors!

If these goals can be achieved, then each activity can be balanced against the benefits and the net costs. Activities can be prioritised against overall objectives (e.g. focusing on specific target groups), and rational decisions made for future actions.

Such a process would look very different for different activities. The impact of a Portal is notoriously difficult to assess, though levels, purpose and even satisfaction with use can be tracked with some effort. Many portals have also virtually given up the idea of generating income and so rely on distributing costs and effort.

The various SDNP collaborations have mostly been implemented without serious consideration of income generation – which is understandable given their speculative nature. Like the Connectivity and Web serves, however, there are limited efforts in place to understand and monitor their development benefits.

Recommendation 7: MIS to Merge Business Management and Development Impact

Although we do not pretend it will be easy, the transition to sustainability and the formulation of clear objectives will demand a comprehensive and innovative information system: Cost and resource accounting, activity monitoring, impact evaluation, and analysis will all have to be developed to quite a sophisticated level.

We therefore recommend that as part of the business plan, these aspects are greatly reinforced and systematised. Since this is a problem faced by many development Projects, perhaps UNDP or other agencies might either already have solutions or be willing to support their development.

With this information, a tailored constellation of development activities can be in principle be designed, each with an income generating capacity ranging from very negative (i.e. costly but significant development impact) to very positive (significant income but minimal impact), that will optimise the prospects of sustainability and the sustainable development impact.

This brings us to the business plan.

A BUSINESS PLAN, AND AN EVOLUTION STRATEGY

The Project is about to develop a much needed Business Plan. More is needed. A Business Plan conventionally is applied to a new product. In this case, we must consider the evolution of one set of 'products' which were grant funded; to another set that is largely self-financing or locates new funding sources; along with the accompanying institutional, management and human and other resource implications. To get from here (a project status and capability) to there (an autonomous initiative equipped with the required set of tools and capabilities) requires an Evolution Strategy.

The strategy will have to retain the most valuable parts of the current situation, whilst supplementing the Project with the new requirements. This applies across the Steering Committee, management, the institutional structure, the activities, the resources, and so forth.

This report does not go into that Strategy. But the following points can be made.

Recommendation 8: Supplementing and reinforcing Management Capacity

Management, already strong in innovation, conception, design and implementation, should be supplemented with management information, external communication, project documentation and business planning and skills. These skills are essential to extracting the maximum value from current activities for sustainability (for instance by communicating effectively with stakeholders). focusing activities and objectives for the future, and achieving sustainability.

The transition to a more sustainable entity, surviving on a mix of grant-aid, semi-commercial support and commercial activity will be difficult to achieve. Yet we believe the Project, because of its significant scale, the calibre of its resources, and the innovative range of activities is it pursuing, stands a good chance of succeeding. Any reduction in resources could seriously compromise that opportunity.

Recommendation 9: To Continue, and Supplement Funding for Sustainability Trained

We are recommending that budgeted resources be utilised in a more focussed manner, to consolidate existing activities and bring them to a level of fruition before funding terminates and sustainability become critical. Furthermore we would recommend that any additional resources coming available from the SEMP Programme should be devoted to a set of actions that will underpin sustainability and a realistic Business Plan and Evolution Strategy, including the recommendations immediately above.

ANNEX 1: SUMMARY OF SEMP/UNDP GRANT

Summary of (grant) income and expenditure: SEMP Component No.# 4.4.5

Component Name : Sustainable Development Networking Programme(SDNP) (US$)

		1999	2000	2001	2002	2003-June 2004 Projected	Total
SEMP/UNDP (Expendable)		61917.07	50270.43	134513.57	118261.45	496037.48	861,000.00
SEMP/UNDP (Non-Expendable)		1660.93	88749.07	547.72	86861.93	422180.36	600,000.00
SEMP/UNDP (Total)		**63578.00**	**139019.50**	**135061.29**	**205123.38**	**918217.84**	**1,461,000.00**
Expenditure:							
Description	**CMBL**						
Administrative Support Personnel	13.00	4448.58	6632.81	7164.87	8040.82	50304.92	76592.00
UNV	14.00					30000.00	30000.00
Duty Travel	15.00	4392.51	6876.20	7060.12	5740.56	930.61	25000.00
Mission Cost(Evaluation)	16.02	720.00			428.73	19851.27	21000.00
National Professionals(NPP)	17.00	1935.66	36974.26	42614.10	59334.01	282106.97	422965.00
Technical Installation	20.00	2438.42	22250.00	8485.58	22411.87	10414.13	66000.00
Fellowships	30.00					2500.00	2500.00
Study Tour (SDN visit)	32.01		4286.04			10995.96	15282.00
In-Service training/Workshop	33.02	1341.37	2368.47	153.85	2181.50	16401.81	22447.00
Expendable Supplies	45.02	547.46	2745.34	20875.80	9721.49	16109.91	50000.00
Non expendable**	45.04	1660.93	88749.07	547.72	86861.93	422180.36	600000.00
Operation & Maintenance	45.05		597.64	290.01	4630.76	39481.59	45000.00
Report & Documentation	52.01			212.20	348.13	2939.67	3500.00
Sundries	53.01	3906.03	9077.76	8587.15	24550.48	4592.58	50714.00
UNDP Admin. @ 5% of BL 45.04						30000.00	30000.00
Grand Total		**21390.96**	**180557.59**	**95991.40**	**224250.28**	**938809.78**	**1,461,000.00**

**The Equipment of US$ 60,000.00 already Purchased by UNDP(in the year 2002) according to requirement by said Component but not yet been received by the Project.

ANNEX 2: LIST OF PERSONS INTERVIEWED

1. Prof. Jamilur Reza Choudhury, the Chairperson, SDNP Steering Committee
2. Mr. Karar Mahmudul Hassan, Secretary, Ministry of Science and ICT, Govt. of Bangladesh
3. Dr. A.M. Choudhury, Executive Director, Bangladesh Computer Council
4. Mr. Syed Ziaul Huque, Secretary, Bangladesh Computer Council
5. Mr. Yannick Glemarrec, DRR, UNDP Bangladesh
6. Ms. Shireen K. Sayeed, ARR, UNDP Bangladesh
7. Dr. Aminul Islam, SDA, UNDP Bangladesh
8. Mr. Tarik ul Islam, PO, UNDP Bangladesh
9. Mr. Saleh Khan, ICT Specialist, UNDP Bangladesh
10. Dr. Babar N Kabir, Programme Coordinator, PMU, SEMP
11. Dr. Abu Mohammad Yusuf, Environment Specialist, PMU, SEMP

Project Personnel

1. Dr. M. Asaduzzaman, Project Director
2. Dr. M. Hakikur Rahman, Project Coordinator
3. Tauhid Uz Zaman, Web Designer
4. Md. Habibur Rahman, Database Manager
5. Md. Mamun S Sherif, Research Officer
6. Md. Ash Shakur Rahman, Database Programmer
7. Md. Muzahidul Islam, Maintenance Engineer
8. Pranab Banik, Asstt. Systems Administrator
9. Md. Asaduzzaman, Research Officer
10. Md. Abdul Hadi, Maintenance Engineer
11. Riton K Roy, Asstt. Systems Administrator
12. Nasima Akter, Data Entry Operator
13. Abdul Gaffar Dhali, Asstt. Accountant
14. Md. Tofail Ahmed, Secretary

ANNEX 3: TERMS OF REFERENCE

Terms of Reference:
Project Evaluation of the
Sustainable Development Networking Programme, Bangladesh

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1. INTRODUCTION

UNDP has decided to undertake an ex-post evaluation of the SDNP Programme internationally. Integral to this is a set of national level evaluations, which will feed into the international evaluation. These Terms of Reference are for the national level evaluation. They are based on generic ToRs, which are to ensure both that all the necessary analysis is undertaken at national level, and that the national reports are comparable.

2. THE CONTEXT

2.1 The Origin of SDNP

The SDNP (Sustainable Development Networking Programme) was established by UNDP in 1992 as part of UNDP's response to Agenda 21, the UN action plan for sustainable development that was agreed at the Earth Summit, the United Nations Conference on Environment and Development (UNCED) in June 1992 in Rio de Janeiro. SDNP was conceived as a support mechanism for Agenda 21 with two objectives:

1. To facilitate access to information for decision making by development stakeholders
2. To encourage greater participation by all development actors and stakeholders in the development process.

These were summarised in the 1994 strategic evaluation report as:

> To help countries to access sources of information and technologies that would enable and empower them to take care of their environments while improving economic growth for present and future generations. It was to be achieved through the creation of networks linking institutions working on environmental and development issues at the national level for the purpose of facilitating access to national and global sources of information and promoting consultative processes among different segments of society.[12]

Chapter 40 of Agenda 21, the Information Chapter, addressed the role of information as a tool for development in the following way: information to facilitate decision making and also bridging the information gap between the information haves and have-nots. In practice, if not explicitly in the objectives, it was clear from the outset that information and communication technologies, especially electronic networking, was to be a central instrument in the implementation of SDNP.

Operationally, the SDNP worked in collaboration with governments, NGOs, the academic and other development actors to enhance the capacity and efforts of development stakeholders to use and apply Information and Communication Technologies (ICTs) for sustainable

12 Kate Wild, SDNP 1994 Strategy/Evaluation Report, Paragraphs 19-20, UNDP 1994.

development. From 1992 to present, over 80 countries expressed an interest in the SDNP idea and projects were negotiated and established in about 40 countries around the developing world[13].

Most SDNPs began with a focus on creating organisational structures and on establishing network connections that would allow participants to exchange information and ideas among themselves and access international sources of data, information and expertise. However, some of the SDNPs went further and began to use the network thus created to disseminate information on development issues that were more topical and relevant to each situation.

2.2 The SDNP Experience

The experience of the SDNP covers several stages in the diffusion of ICTs that took place during the 1990s.

These include the period before the large scale introduction of networking technologies in the developing world, i.e. from 1992 to 1997 when full Internet access was not available in most developing countries and connectivity was nearly exclusively based on telephone dial-up and store and forward technologies for data and email exchange.

This was followed by the introduction of and experimentation with networking technologies and with the Internet, especially the World Wide Web (1997 - 2000). During this period, the advantages of the Internet became apparent to decision-makers in the developing world, resulting in decided efforts to liberalize Internet service provision and access to bandwidth. Most SDNPs started to shift away from pure connectivity and access and focused on content delivery while keeping their capacity-building efforts in the forefront. In most developing countries, the private sector started investing in connectivity and thus filled a gap that SDNP was previously addressing.

This was followed by the period of consolidation, adaptation and experimentation (which to some extent continues to this day) during which time the availability of bandwidth and the exploitation of Internet applications have become more or less recognized as a prerequisite for establishing and strengthening national competitive advantage and as an important enabler of development (2000 - present). Today, there is a rush to acquire some of these technologies and some key applications such as e-enabled services in government, the private sector and in many sectors of human endeavour. As UNDP funding ended for all SDNPs, a few of them folded whereas about 20 were able to find a niche in their countries and converted themselves into autonomous and self-financed operations (in the form of NGOs and foundations) while preserving the goals of SDNP as such.

In some countries, for example countries of the FSU where the SDNP or UNDP has operated or has otherwise gained experience, profound political, social and economic changes have or were also taking place, such as their simultaneous opening up and the introduction of market economies. SDNP and UNDP have also worked in countries engaged in the process of reconstruction after long and protracted conflict (Lebanon). The experience gained of the role of ICTs in the development process under these conditions could be invaluable. The UNDP SDNP experience, properly and broadly documented and evaluated in an impartial and authoritative way could enrich the global knowledge base of ICT experiences at a time where mounting concern about a growing digital divide presses countries and agencies into taking action.

Finally, the SDNP experience offers a unique perspective of the diffusion of ICTs in developing countries and especially as this affects the key stakeholders for sustainable

13 http://www.sdnp.undp.org/cgi-bin/status.cgi

development and the development process as a whole. The SDNP experience is relevant to concerns about sustainable development, human development and the fight against poverty. That experience needs to be further reflected on and the lessons learned shared.

3. PURPOSE AND OBJECTIVES OF THE EVALUATION

At the global level, the SDNP evaluation objectives can be summarized as follows:

1. To review the SDNP experience from the perspectives of:
   - the objectives set by the global SDNP Programme, and the those set by each country;
   - all partners involved, including those within UNDP, other international partners, and national partners from the public, private and civil society spheres;
   - other ICT initiatives that have been taking place or still are taking place, nationally and internationally, with a view to comparing and contrasting them with SDNP.
2. To distil lessons learnt in the light of past objectives and current realities and initiatives internationally.
3. To suggest actions that could be taken to leverage experience gained and to avoid pitfalls encountered, in the light of the lessons learned and of current and future initiatives.
4. To derive "lessons learned" that are relevant to UNDP's present-day programming orientations and six core practice areas (with a special focus on the ICTD practice area) and that are grounded evaluative evidence of specific and collateral SDNP contributions.

The main method for data gathering is a series of eight to ten national evaluations, supplemented by questionnaires and selected interviews in countries not covered by these.

For the national level evaluations and in part to ensure comparability, four specific objectives can be identified:

1. To assess the national project **against its national objectives**, as originally derived from the global programme, and the management, environmental and partnership factors/strategies that led to success and failure in relation to these (This is expected to comprise the greater part of the work.)
2. To identify and explore the **unanticipated or additional SDNP influence on [country]'s emergent/evolving ICTD agenda**, beyond the immediate initial objective of the SDNP Programme; and to relate these experiences and lessons to the UNDP's current approach to ICTDs as an area of practice (see Annex C for summary). Several SDNPs opted to influence the more general ICT environment (for instance, as a prerequisite to progress on initial objectives) or did so as an incidental or unanticipated by-product of other actions.
3. To identify and explore SDNP's wider **influence (including unanticipated) on [country]'s national development objectives** with a specific focus on the UNDP's other current practice areas: energy and environment; governance; poverty alleviation; HIV/AIDS; conflict prevention and recovery, and gender as a cross-cutting UNDP perspective. Some SDNPs went beyond their initial remit (of facilitating information access and widening participation in sustainable development activities) to significantly influence and facilitate directly the achievement of other general development goals.
4. Based on the experience and lessons, to suggest what, if any, **future avenues** the SDNP legacy might usefully and viably pursue. This may relate to benefits identified in points one to three above, particularly as they could potentially be incorporated into UNDP's overall programmes and corporate outlook, but also as they relate to other programmes and agencies/institutions.

A number of general points should be noted:

- The evaluation is not confined to the current (or most recent) phase of the project, but, as much as possible, will trace its evolution from its origins, through the various phases.
- As an ex-post evaluation, it goes beyond a simple assessment to focus especially on lessons learnt, with a view to incorporating them into future strategy and action at national or global level.
- Although national evaluations consider only the national level, the methodology developed contains a number of instruments and actions designed to enable overall synthesis and comparison of national results, and to contribute to the completion of the global evaluation report.

4. KEY TASKS

Key tasks have been defined around the following areas:

Objective 1: Did the SDNP Programme nationally achieve its objectives?

a) To assess the relevance of the national project's objectives, approach and implementation procedures vis-à-vis global objectives of SDNP with a specific focus on [country]'s context. Was the project in line with global SDNP Objectives? What variations and national nuances were included, and why?[14]
b) To assess the project's progress towards the achievement of objectives or indicators set by the country (e.g. information exchange, capacity building, outreach etc.) as derived from the global objectives: Did the SDNP meet the objectives set or expected by country participants, including project beneficiaries and management, government counterparts and others? What worked and what did not work? Were there any region or country-specific issues that should be examined for broader implications?
c) To assess the project's progress towards the achievement of objectives from the perspectives of all partners involved, including those within UNDP and other agencies, and with other partners from the public, private and civil society.
d) To assess the number and impact of strategic alliances established by the project with the public and civil society actors, in relation to these core objectives. What worked and what didn't? Are there any insights from the SDNP partnership experience that can inform UNDP's current emphasis on creating effective partnership strategies?

Objective 2: Influence on the National ICTD Development

a) To assess whether the project exerted any influence on the emergence of broader "ICT-for-development" initiatives or agenda within the country and to explore the circumstances and means by which this was achieved"
b) To assess the implications of these (if any) for UNDP's current approach to ICTDs as an area of practice. (See Annex D)

Objective 3: Influence on the (UNDP related) National Development Agenda

a) To assess whether the project had an (initially) unplanned influence on other national development objectives, as a necessary prerequisite to, a byproduct of, or an unintended

14. The global objectives of SDNP can be broken down into three categories: 1) increased availability/access to information; 2) enhanced communication/information-sharing; 3) improved participation in decision-making.

consequence of its activities, and to explore the circumstances and the means by which this was achieved.

b) To capture insights of these (if any) that are relevant to UNDP's current interest in "mainstreaming" ICT as a "development enabler" within its other core practice areas: governance, poverty alleviation, energy and environment, HIV/AIDs, conflict prevention and recovery and gender (as a cross-cutting perspective). See Annex E.

Objective 4: Building on the SDNP Legacy

a) To assess, as appropriate, the continuing and future relevance of SDNP in initial or reorganised form, and its legacy of experience and practices, to the national development agenda;
b) To identify and specify promising future avenues by which such activities could be continued, and possible sources of support including reengagement with UNDP in the context of its current corporate outlook and funding modalities (e.g. Thematic Trust Funds).

Objective 5: Management and Sustainability

Project Management

a) To trace the evolution of management structures and approaches, including through major stages of the Project.
b) To review the relevance, effectiveness and efficiency of the management structure, mechanisms and systems to plan, coordinate, deliver and oversee the project.
b) To assess the flexibility of project management to integrate the contextual changes in planning and implementation of activities.
c) To assess the quality of donor support and its impact on the project management.
e) To assess the role and effectiveness of the Project Management Committee (PMC) and other key structural elements.

*Sustainability: Resources, Financing, Ownership [apply to **ongoing SDNP-funded** projects only]*[15]

a) To review the cost effectiveness of project activities.
b) To assess the sustainability of the project.
c) To assess the project's capacity for resource mobilization.

*iii. Sustainability: Resources, Financing, Ownership [apply where SDNP completed, but **other funding has been found** – see footnote 4]*

a) To describe the process of transition from SDNP funding.
b) To assess the cost effectiveness of activities and sustainability of the project.

*iii. Sustainability: Resources and Financing [apply to **discontinued** projects only]*

a) To review the cost effectiveness of project activities.
b) To determine and describe the reasons which led up to the ending of the project, including the options that might have been available for continuing, and why these were rejected.
c) To assess whether the legacy of the Project might be valorised within the context of UNDP or other programmes.

15. UNDP defines "sustainability" to be *"determined by evidence of local ownership of [programme objectives] and with systems/institutions in place to carry forward progress in the objectives or cement gains."*

5. ASSESSMENT AND REPORTING FRAMEWORK

The assessment framework, in terms of reporting, comprises two parts: a written report following guidelines below; and a set of related templates which, when completed, summarise the results and enhance their comparability and consistency.

5.1 Reporting Outline: Table of Contents

The following is a *suggested* table of contents for the national report. The national evaluator will follow this as much as possible, but may also revise it, where necessary, in consultation with the lead evaluator. The questions under each heading **are merely indicative** and do not cover the scope of issues involved.

A: CONTEXT AND INTRODUCTION TO SDNP IN [COUNTRY]

What were the main relevant features in [country], such as internet development ISP, teledensity and spread, institutional openness etc.
Why was SDNP introduced and what were its main phases? Was it extended? Is it still going, and how is it facing the future?
What were the stated objectives and goals?
Provide a summary of (grant) income and expenditure.

B: ASSESSMENT OF OBJECTIVES

How well did the stated objectives fit with the national needs, and with objectives of SDNP globally?
Did the objectives evolve over time; how and why? Did they still accord with the needs of main stakeholders?

C: PROJECT ACTIVITIES

Are their discernable phases in activity (consider the Project typology in Annex A, but also other ways of delineating phases.)?
Give a detailed description of the activities of the Project (based on the typology in Annex A and any additional activities). Quantity and describe as much as possible, in terms of numbers of beneficiaries, location, duration, time etc.

D. PROJECT ASSESSMENT: ACTIVITIES, OUTPUTS AND ACHIEVEMENTS –

D1: Measuring against SDNP Objectives (see Annex A&B; Template 1)

What were the *expected* activities and outputs (in each phase), quantitatively and qualitatively (as specified in the project document)?
How do the actual *actual* activities and outputs (described in detail earlier) match these?
Did the project activities and outputs contribute towards achievements within the defined project objectives in the Project Document?
What is the evidence for this, and for benefits? (provide concrete indications – quantitative and/or qualitative — that links project activities with achievements that are in line with the project objectives).
Were these achievements national in scale, or were they more localized in scope?
How do beneficiaries perceive the achievements/inadequacies of SDNP?
How do partners perceive the achievements/inadequacies of SDNP?

D2: Partners, Beneficiaries and Partnership Strategies: (Annex C, Template 1-a)

Who were the main partners? Did these change over time?
Who were the intended beneficiaries? Who were the "actual" beneficiaries? Did these change over time?
Was there a discernible partnership strategy? Did this evolve over time?
What were the coordination fora/mechanisms, and how effective where they?
Are there any lessons learned? (see below)

D3: Exceeding expectations: Wider influences on national development agenda

- **Enabling environment for ICTD.** (Annex D; Template 2)
- Did SDNP exert any influence on the emergence of wider ICTD initiatives or a national ICTD agenda within the country? If applicable, complete this section based on the information contained in Annex C, and using the template provided. Are there any lessons learned? (see below).
- **Wider influences on national development objectives.** (Annex E; Template 3
- Did SDNP exert any influence on the country's wider development objectives (i.e., in specific thematic areas of practice, and/ or in ways beyond information-sharing and participation in decision-making). If applicable, complete this section based on the information contained in Annex D, and using the template provided. Are there any lessons learned? (see below).

E. MANAGEMENT AND INSTITUTIONAL ARRANGEMENTS

Who are the main parties involved and how did the Project begin?
Who made up the Project Management Committee (PMC) and how active was it?
What were the different phases of management, including any post-SDNP phase?
How effective and efficient was management?
Did the project evolve from a project base towards an institutional structure, and how?

F. SUSTAINABILITY AND THE FUTURE

How much funding and income has been received, over what period?
What have been the costs? (Summary table of income and costs, specifying sources, annually or by main phases, and their sources).
For closed projects: provide an assessment of why this occurred, with a special focus on the analysis of local ownership and motivations.
For current projects: outline its prospects for sustainability in different possible contexts and arrangements – in terms of local ownership, institutionalization, partnerships, current funding arrangements and resource mobilization potential. If applicable, delineate possible avenues for UNDP re-engagement, with reference to corporate priorities and funding modalities (i.e., Trust Funds)

G. CONCLUSIONS

Summarise conclusions regarding the objectives of evaluation, roughly as set out above. Did activities achieve their objectives? During what periods? For which stakeholders?
What were/are the limitations of the project and internal ands external constraints on it? What were/ are its strong points, and main achievements?
What is the future likely to hold?

H: RELEVANT INSIGHTS & "LESSONS LEARNED": 4 CATEGORIES

Lessons go beyond conclusions to state what we have learned that may be useful elsewhere. A lesson should not simply include what has been learned from a particular experience, but its wider implications in terms of planning and acting for the future.

a. **General Lessons**: especially those that are helpful to the continuation or re-invention of the specific SDNP project being reviewed.
b. **Partnerships:** Are there any insights from the SDNP partnership experience that can inform UNDP's current emphasis on creating effective partnership strategies?
c. **ICTD:** Are there any insights from the SDNP experience that are relevant to today's efforts to create an "enabling environment" for ICTs, what we can call the ICTD agenda? These "lessons" could be directed towards the current-day national ICTD agenda of the country and/or, more generally, towards UNDP's current corporate orientations and strategies for ICTD (see Annex D).
d. **ICT as a development enabler:** Are there any insights from the SDNP experience that are relevant to current day efforts to channel ICTs in the service of national development goals, and to mainstream ICTs within other development practice areas? (For example, are there insights from the SDNP experience which may help current programme managers who are trying to plan/implement initiatives incorporating ICTs within governance programmes, or those related to HIV/AIDS, or poverty alleviation, or the environment, or gender equality?)

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5.2 Templates for Comparison and Consistency

A number of evaluation templates have been developed, to assist systematic description and analysis of core issues, to allow quantitative and qualitative ranking, and to facilitate cross-country comparability and synthesis. The templates are for each of the first three Evaluation Objectives, and have been identified in the Outline of Table of Contents above. Templates summarise and systematize the results that should be described in detail in the report.

The evaluation templates, with its accompanying advisory note, are found in the Annexes to this ToR, as follows:

Annex A. Elements of an SDNP Typology. This contains an indicative list of activities SDNP projects have implemented in pursuit of their objectives. This listing is used to set up the evaluative template for Objective 1 (Part C of the Reporting Outline. Project Assessment: Activities, Outputs and Achievements**).**

Annex B. Evaluation Objective 1. Reporting Outline Part C: **Assessment** of Activities, Outputs & Achievements**.** Contains analytical template and advisory note.

Annex C. Evaluation Objective 1. Reporting Outline Part D: **Partners**, Beneficiares and Partnership Strategies. Contains analytical template and advisory note.

Annex D. Evaluation Objective 2. Reporting Outline Part E: ICTD. Wider Influences on the ICTD Environment. Contains analytical template and advisory note.

Annex E. Evaluation Objective 3. Reporting Outline Part E: **National Development.** Wider Influences on the National Development Agenda. Contains analytical template and advisory note.

6. Data Gathering and Analysis

The national evaluator will undertake the following:

a) A review of the available literature and documents on the project.
b) An initial organisational briefing by (former) SDNP Project Management, UNDP, and other key participants.
c) Detailed examination of all the relevant issues, as per the above mentioned objectives, including meetings with the project stakeholders (including partners, users and beneficiaries) and various offices and staff (itinerary to be developed by UNDP and SDNP).
d) A de-briefing to the Evaluation Leader, by means to be determined. [Possibly, attendance and participation in de-briefing and review meeting of Evaluation Team.]
e) Drafting and (after comments) finalisation of an evaluation report, following the contents structure and scheme attached
f) A commentary on the relevant portions of the international evaluation, the latter to be produced by the Lead Evaluator.

7. Timelines and Budget

The evaluation would take place between for [3-5] working days in Bangladesh, followed by [3-5] days write up.