Back to External Evaluation Report

SDNP Country Reports

ESTONIA SDNP COUNTRY REPORT, November 23-24, 1997

Consultant: Kate Wild

I. Project Status

1. In 1993 and 1994 SDNP contributed a small amount of resources to the initiation of a sustainable development network funded mainly by CIESIN (Consortium for International Earth Sciences Information). A two year Capacity 21 project, which contains a sustainable development network component, began in January 1997. The SDN component was incorporated into this second project because "the previously established CIESIN network did not develop a sufficiently substantive capacity and did not become fully operational" (Project Document EST/97/G81/A/5G/99, page 12). However in neither of these two projects has SDNP played a determining role. Estonia is a case of an SDNP junior partnership (in the first place with CIESIN, in the second with Capacity 21 and, perhaps particularly, with the UNDP country office) and this report will, inter alia, discuss whether that role has been sufficient to attribute consequences to SDNP itself.

II. Overall objectives

2. SDNP came into Estonia under the CIESIN umbrella. CIESIN was operating in a way that was consistent with SDNP principles, involving a broad national sustainable development community in the development of its network. There does not appear to have been any independent consideration of the benefits or beneficiaries of SDNP as such. There was no independent SDNP operation and no staff contracted to SDNP.

3. The second phase is very much a Capacity 21 project: neither have the project manager and the intern who is working on the database had contact with SDNP nor does the UNDP office see a significant role for SDNP.

4. This Cap 21 project targets local level planning bodies as contributors to and beneficiaries of the information sharing process on which approaches to sustainable development will build. This could align the project closely with UNDP's global efforts to establish community connectivity (through the IT for Development Program and SDNP) and make Estonia an interesting partner for efforts elsewhere. The global information sharing network foreseen by SDNP could be key in linking Estonian knowledge and experience to developing country initiatives.

III. Resources and Finances

5. In April 1994 SDNP funded two Estonians to participate in a CIESIN training program in the US and in July of the same year it delivered two computers (one 486 PC, one Sun Sparc station and several modems) to set up a network node at the National Library of Estonia. There was no SDNP program budget as such. The Estonian who was managing the node - and who was one of the CIESIN trainees - left the project at the end of 1995 upon completion of his 18 month contract. The other trainee is also no longer involved. Neither of the computers at the National Library is still used for SDNP-type work. The PC is out of action and the Sun server is used only for back-ups. The National Library has no role any longer in sustainable development networking.

6. The current Cap 21 project contains $5000 annually for SDN consultants and 12000 for maintenance of equipment. Other budget lines (training, workshops and the stakeholder forum) may be applied to SDN activities.

7. The issue of sustainability was addressed in the context of the new Capacity 21 project which is managed by the Stockholm Environment Institute branch in Tallin.

8. The objectives of this project relate more to content and less to connectivity. A Canadian (International Institute for Sustainable Development) intern is in the process of designing a sustainable development Web site. While considerable information is available through the UNDP and CIESIN sites it does not have an apparent focus on sustainable development but rather provides broad socio-economic, cultural and political information about the country. The intern can make a useful contribution in terms of developing a structure for the site but her ability to build content around the structure is limited by her lack of knowledge of the Estonian language. In any event she is only in the country for a five month assignment. The question of who will develop the site in the future is a key one. The intention exists to assign someone to the task but it will need to be monitored, preferably by the UNDP office.

9. It is probably too early to address the question of commercialising services that might be available through the site. The view of the director of the SEI is that information developed through public money should be freely available. Whether this is or is not the case is probably a moot point at this stage - in an environment in which it reflects the norm it would take exceptional products to create a market - and those products probably should have been designed in a market environment if they are intended to find that market. The issue of sustainability can probably be more effectively addressed from the perspective of the willingness of the host organisation - in this case SEI - to absorb the costs into its own budget once the project ends. History is rife with examples of database projects that died with the end of external funding which explains the SDNP focus on sustainability. Web sites allow for decentralised updating but even so there will be a need for a central function to ensure the consistency and regularity of updates.

10. In short - both projects with which SDNP has been associated in Estonia address the question of sustainability but from the broad development perspective and not from the perspective of underlying networking required to make development sustainable.

IV. Training

11. The only training covered explicitly by SDNP was the CIESIN training mentioned above. Although neither of the participants works now on sustainable development networking one is available to advise the SEI on its Web site and databases and is a key training resource in Tallin.

12. The UNDP country office has been at the forefront of Internet development in Estonia - it has invested $40,000 in the creation of four public access points (one in the national library and three in rural communities) and expects these to expand to more than thirty by next summer. It is exploring a number of different models, including one hosted by a private shop and cafe, and is documenting the relative success of different models. Within this context UNDP has identified the need for training of community managers and users.

13. This UNDP initiative is relevant to the work of the Cap 21 project which seeks to involve local and regional planning units in the search for sustainable approaches to development - inter alia by associating them with the network and as users of the Web site. The project will face the same requirement for user friendly training programs.

14. Toomas Molder - the ex-manager of the SDNP node in the National Library has organised Internet training mainly for NGOs under a grant from the Open Estonia Foundation. One daylong seminar attracted 300 walk in participants. Prof Molder is clearly an active promoter of Internet awareness and training. He believes that the existence of SDNP in the country may have helped stimulate awareness, and facilitated the funding from the OES.

V. Equipment

15. As mentioned earlier, two computers and several modems were provided but are no longer used in the context of SDNP. They are however still located in the National ibrary.

VI. Project Management

16. The original CIESIN SDNP project component was managed within the National Library. The current Capacity 21 project is managed by the Stockholm Environment Institute's Tallin branch. The original stakeholders Steering Committee was apparently a delicate balance between government and academia with little civil society participation. Government took a back seat to academia. The current project does not have a separate Steering Committee for the networking component. The National Sustainable Development Commission may play a role.

VII. Challenges and Opportunities

17. As noted earlier SDNP was a very junior partner in the original CIESIN initiative and appears to be playing a similarly low key role now. During the first phase contacts with SDNP were limited largely to reporting. In the current project, SDNP is largely an unknown to the project staff and in particular to the intern who is developing the Web site. I have given her the SDNP e-mail addresses and suggested she make contact. But the level of contact and knowledge is not such at the moment to make the Estonian activity into an SDNP project. SDNP needs to be more proactive than it has been in this case in making contact and providing support to SDNP components in this Cap 21 project.

18. Nevertheless SDNP may have contributed in a small way to creating an environment that is more hospitable to the expansion of Internet connectivity within the country, along with the UNDP office itself, which was the first country office to mount a Web site and the first to publish the HRD on the Net. Toomas Molder believes that SDNP has played this role.

19. The Estonian SDNP experience may be atypical for two related reasons. The UNDP office has

been a leader in promoting the use of ICTs in support of development initiatives and to promote its own program. No persuasion is needed here - the office is ahead of the game! The office's job has been made easier by the fact that connectivity is wide spread in the country; although I was told that there are still a few black spots in the centre, fibre optic has been used extensively around the borders. There is not much of an infrastructure or connectivity job for SDNP to do.

VIII. Lessons for the bigger SDNP picture

20. There is consensus between the UNDP office and the SEI that SDNP has not been a significant factor in extending connectivity to institutions involved in sustainable development or in building relevant information resources. There is also consensus that the SDN component in the Cap 21 project should focus on content rather than on connectivity. Does this mean that SDNP has a role in supporting the development of relevant content? Probably not, since the key content will come from local sources. What SDNP could do is become an active partner to SEI in helping it link to other SDNP sites to explore common territory - perhaps particularly with respect to the kind of training tools that can build local capacity to feed into and access sustainable development planning tools.

21. In this case, Estonia could help deomonstrate linkages to local level institutions which are of interest to many countries as a basis for decentralisation. The UNDP office, which is a leader in extending Internet connectivity in the country, could work with SDNP to expoit this potential.

Contacts

Mr Toomas Molder - former CIESIN Estonia Director

Mr Ahto Oja - Estonia Agenda 21 Coordinator, SEI

Ms Rochelle Lawson - ISSD intern at SEI

Mr Linnar Viik - Program Officer, UNDP

Mr Robert Jukham - Acting Director, UNDP

LEBANON SDNP COUNTRY REPORT, November 28, 29 1997

Consultant: Kate Wild

I. Project status

1. The project is operational; it is a two year project with an expected end date of September 1998. The current manager has been in post since February 1997. (LEB/95/004/01/99, INT/95/G81/A/5G/99)

II. Overall objectives

2. The project document identifies three objectives:

• to develop and enhance communication and connectivity between the users and suppliers of information related to SD;

• to support other ongoing UNDP projects; and

• to achieve sustainability.

3. Underlying these objectives is a larger one of increasing transparency in governance in Lebanon (and trust among traditionally separate power blocks) by providing access to government information and increasing information exchanges between and among governmental and non-governmental organisations concerned with sustainable development. The culture of information sharing has not taken root in Lebanon with the result that information produced by government departments is available to only a very limited audience and there is resulting duplication of development activity. Computer-mediated communication and Internet use are not common within the government - although the Ministry of Administrative Reform has initiated a program to introduce connectivity, initially into the offices of the Ministers, which is partnering with SDNP.

4. The project was originally championed by the new Ministry of the Environment, the UNDP's adviser on sustainable development and the Council for Scientific Research. The project is housed in the Ministry of Environment although the process which led to this decision was a lengthy one.

5. In spite of its links with the environment sector the project, with the support of the UNDP and of all those interviewed by this consultant, takes a broad view of sustainable development which is reflected both by the membership of the Steering Committee and in its program of work.

III. <u>Resources, Finances and Sustainability</u>

6. The total project budget is $256,600, with $181,200 provided by Capacity 21 and $75,400 by SDNP. In spite of Cap 21 funding the project does not have a close relationship with the Cap 21 project in Lebanon. Expenditure at the end of October was less than $80,000 which suggests that there will be sufficient funds to extend the project; ideally the current manager should be in place for at least a full two year period.

7. Sustainability is a major preoccupation of the project manager and one on which he would appreciate some serious reflection from New York. His comment that UNDP makes much of the rhetoric of sustainability without understanding what makes the concept realistic in a particular environment and without providing advice on how it may come about is a legitimate one.

8. Four sustainability strategies are under consideration - based on the assumption that sustainability does not necessarily require revenue generation; it can also be achieved when organisations incorporate SDNP functions into their own programs.

9. The different strategies being explored are:

• sensitising government departments and NAOS to the importance of exploiting the Internet to meet their communications, public relations and information dissemination needs; identifying low cost options for them to manage connectivity; building commitment to use of the Internet as a core activity;

• setting up a non-profit entity (either within UNDP or independent of it) to market Web design services to the non-commercial sector (for example the Medical Association which keeps track of location of doctors, specialisations, blood supplies etc) or to sell subscriptions to database services

(for example official gazettes, and legislation which is already available in database form from 1906);

• setting up a for-profit enterprise to carry out similar services to those mentioned above; the SDNP contribution would be considered as seed funding for a local private company; alternatively SDNP could continue to invest, through an extension to the project but in a venture capital arrangement;

• finding a partner to sponsor the operation of SDNP; the local YMCA has already indicated willingness to contribute the cost of salaries.

10. The difficulty of generating sufficient revenue to maintain a core staff and the infrastructure required to provide services of the kind mentioned above should not be under-estimated. It is too early in Lebanon to identify which strategy has the highest potential for success. But if any are to be effective SDNP at headquarters needs to more actively involved in documenting successful approaches and identifying the mechanisms that will enable SDNP projects to receive revenue.

11. The SDNP manager in Lebanon does not agree with the recommended strategy for sustainability: to create an SDNP host which would sell connectivity to other organisations starting with the UN family. This arrangement cannot work in Lebanon because there is an existing community of ISPs which can provide higher bandwidth and faster access at cheaper prices. To enter the market, SDNP would need to lease a 64kb line for $1500/month and hire two technical specialists (approximately $2000/month) to provide the support needed to ensure reliable service. Even with this investment it would not be competitive with respect to access time. It is unlikely that revenue would cover costs; the risk is high given UN efforts to reduce operational costs and UNDP would be open to question for subsidising competition with the private sector.

12. SDNP - if it is to maintain its sustainability goal - must develop different models for the different circumstances in which SDNPs operate.

13. The Lebanese SDNP strategy centres on building commitment within government ministries and NAOS initially through the provision of assistance for the development of Websites. Eight websites have been developed to date - for three naos and five government departments. Additional organisations will be incorporated in the next months. The ngo sites have been accessible for the last week; the government sites will come on stream from next week. It is too early to assess their impact in terms of demand for information. The cost of putting up these sites - which have been developed by a young company in Beirut partly as a marketing strategy - has been $6,500.

14. Connectivity has been implemented within the Ministry of the Environment; use of e-mail has increased from 30 hours per month to 185 in a period of five months. Costs have been reduced by identifying and down loading mail manager software which enables the Ministry to manage its own accounts.

IV. Training

15. 80 staff members from government departments and naos have been trained in Windows 95, e-mail and Internet browsing.. Twenty have been trained in information management. All trained staff are still working in their units in SDNP member organisations.

16. Further training is required in Web site development and updating, server management and Internet usage. SDNP does not have the resources to meet these needs. Training is available within the country but SDNP members may not be in a position to organise or fund it in a timely fashion.

17. The SDNP in Lebanon has decided to convert its administrative assistance post into a technical specialist. Once this person is hired he or she could make a contribution on the training side.

18. On the management side, SDNP in Lebanon is well equipped. The manager has sufficient technical knowledge to do his job and considerable business and bureaucratic acumen.

V. Equipment: the technology strategy

19. This SDNP did not follow the 'buy through OPS' strategy. The project purchased one PC and one server locally before the current manager came on board. Four PCs and modems are scheduled to be purchased for NAOS, as well as one server and scanner to host the SDNP site. The manager intends to tender on the local market and through OPS and evaluate the bids. He will purchase locally if the price and other conditions are acceptable. He has reservations about the buy NY policy because of the reluctance of local suppliers to support equipment purchased elsewhere.

20. OPS charged the locally purchased equipment to the wrong budget line which resulted in expenditure being frozen for five months and a subsequent delay in initiating purchase of additional equipment.

21. The manager is considering other options to the purchase of an SDNP server - primarily sharing facilities already established by other organisations. A US/AID project to support administrative reorm is one possibility which would apparently carry no cost.

VI. Project Management

22. The SDNP Steering Committee is made up of:

- Ministry of Administrative Reform (Project leader for IT)

- Commission for Development and Reconstruction (Head of Computer and IT Dept)

- Ministry of Public Works (Head of Planning & Implementation)

- Ministry of Public Health (Head of Computing & Documentation)

- Ministry of the Environment (Focal point for SDNP and head of PR for Minister)

- Ministry of Agriculture (Assistant to head of planning and documentation)

- Ministry of Education (Assistant to DG)

- National Council for Scientific Research (Head of Environment Department)

- Lebanese Academic Research Network (Head of Computer Support at AUB)

- two umbrella NGOs (Lebanese Environmental Forum and Green Forum)

23. The committee is deliberately operational rather than political. It meets on the first Tuesday of every month. It has an advisory role but also 'likes to get things done'. It involves itself in decisions on training participants, sustainability strategies and so forth.

24. Attendance is high; if members report problems with SDNP within their ministries the manager arranges a seminar to brief senior staff.

VII. Challenges and opportunities

25. The main problem in Lebanon is the political history which mitigates in favour of a partisan approach to decision making and against information sharing. A number of people emphasized the importance of SDNP as a long term endeavour in this context, and one with enormous potential to bring increased transparency to governance. Two years is hardly enough to effect this kind of revolution - particularly if it is associated with the sustainability goal; serious consideration should be given to extending the project if it is still making satisfactory progress six months from now.

26. The support that the project has achieved is attributable in large measure to the effectiveness of the project manager and his skills and understanding of computer science and business.He has demonstrated a capacity to target efforts on the most promising clients while at the same time building a broader consensus that will draw other organisations into SDNP in the future.

27. The focus on a broad development understanding of SD was questioned by nobody with whom I talked - but it might provoke some discussion within UNDP since the Cap 21 project in Lebanon does not have a special relationship with the SDNP project - it is one of many projects which SDNP will support. The environment was the entry point but it is not the defining frame for SDNP.

VIII. Lessons for the Global SDNP

28. SDNP in New York needs to be much more active on the revenue generation and sustainability issue - by seeking out successful examples and providing advice on how they could be adapted to particular SDNP environments. In particular it should identify legal mechanisms (private sector, ngo, not-for-profit, etc) which will enable SDNPs to receive money for services.

29. It may be unrealistic in many cases to expect SDNPs to achieve sustainability within a two to three year time frame. Longer projects or second phases should be considered.

30. SDNP should review its own model of sustainability. Connectivity is not a promising niche in many countries. This could impact on the skills required in New York.

31. Some donors could be very interested in the transparency of governance aspect of SDNP in Lebanon (the Bank's Economic Development Institute and the Soros Foundation, for example). There needs to be a decision on who should take the lead in identifying and approaching international donors, some of whom are more interested in national projects than in global programs. An approach could come from NY but specifying particular projects?

32. SDNP NY should ensure that its projects are aware of other development information initiatives - APC members, for example, have faced some of the same sustainability questions that SDNPs are facing now. It should not require an external consultant to introduce an SDNP manager to APC!

Contacts

George Akl, SDNP Manager

Ross Moutain, Resident Representative

Dima Al Khatib, Program Officer, Environment, UNDP

Leila Rhayem, Deputy Director, Planning and Documentation, Ministry of Agriculture

Georges Mansour, Director, Studies and Coordination, Ministry of Agriculture

Roula Moussa, Managing Director, Netways

Andrea Moulla, Environmental Information Centre (NGO)

Naji Chamieh, World Bank project manager, Ministry of Environment

---

MOROCCO SDNP COUNTRY REPORT, December 2, 3 1997

Consultant: Kate Wild

I. Project status

1. This is an operational project (INT/95/G81) launched in July 1995 and due to be completed in June 1998; there are sufficient funds from the total UNDP contribution of $300,000 to extend it until the end of 1998 and UNDP expects to extend the project. The project is unique in that UNFPA is co-funding with a contribution of US$ 80,295.

II. Overall objectives

2. The project responded well to Moroccan interest in environment and sustainable development issues manifested in the run-up to and the follow up of the 1992 Rio Conference. The Department of the Environment was created in 1992 with the objective of integrating economic, social, cultural and environmental issues into a single policy framework. The mandate of the Department requires it to collaborate with other departments and to open the debate on sustainable development issues - although the precise role of the NGO community to play an active role in the debate.

3. The original SDNP project document emphasized connectivity. Morocco launched its own Internet node in January 1996 a step which enabled SDNP to position itself in terms of information access and sharing rather than connectivity per se.

4. The Department hosts a Capacity 21 project which is supporting the development of a National Environmental Protection Plan.

5. UNFPA saw in SDNP a tool which could help it link population and development strategies with environmental issues and ensure their integration into development policy. There is a UNFPA addendum to the SDNP project document which specifies UNFPA inputs: work on the development of a legal framework for sustainability, marketing strategies and training.

III. Resources, Finances and Sustainability

6. The total budget is $380,294.

7. The project is located within the Department of the Environment which has not yet defined a mechanism to enable it to receive funds generated by the project. The CTA for the project is

currently holding two cheques which indicate users' willingness to pay for information retrieval services and training. A high priority for the Department in 1998 is the establishment of such a mechanism. Terms of reference were defined for an international consultant and forwarded to OPS. In the absence of a response the decision was taken to hire a local consultant in the near future.

8. Project sustainability is also a high priority for the UNDP office; discussions between the Ministry and the Office will help identify a mechanism to ensure that monies earned by the project are available to it.

9. The project's CTA has prepared a proposal for revenue generation which is awaiting approval. This proposal identifies the following value-added services which could generate revenue:

• Internet account for users

• subscriptions to use the Internet kiosk established for NGOs in the Department of the Environment

• fees for training

• sale of manuals

• consultation on Web development or Internet connectivity.

10. The CTA has negotiated an agreement with the national Internet provider that SDNP will only service non-profit organisations.

11. Since SDNP is already providing services free there is concern that further delays in establishing a mechanism through which fees can be recovered will entrench habits of non-payment which will be difficult to overcome.

12. UNDP, UNFPA, four UNDP projects, ENDA, a medical NGO and the University Faculty of Medecine - as well as the Department - are currently connected to the SDNP network. The problems in connecting other Steering Committee members are administrative rather than technical (the technical work was complete a year ago) and are a source of considerable concern. SDNP SC membership was in part motivated by the desire for Internet connection and the intention of the project to provide it.

13. ENDA is an interesting case because it represents a network of NGOs many of them with environmental concerns. An agreement has been reached between SDNP and ENDA which will allow ENDA to relay SDNP information to its members. ENDA is a key member of the Association for Progressive Communication and is active in West Africa and the Maghreb.

IV. Training

14. SDNP has organised four seminars on sustainable development thus facilitating contacts between different ministries that had developed sustainable development strategies independently; these demonstrated the interest of collaboration and interaction on issues of mutual interest, for example the development of appropriate indicators. Some members of the Steering Committee contacted by the evaluator indicated that there was a need for further seminars to effectively integrate strategies and link sustainable development concerns across departmental responsibilities.

15. A total of some 300 people have been trained in Internet access and use. Training focused on the departments and institutions which were members of the Steering Committee. Unfortunately the members have not yet been connected by the project to the SDNP host located in the Department and their are fears that, by the time they are, lessons will have been unlearned. The intention was to train trainers who could then transfer their knowledge widely in their departments.

16. Manuals, interactive training materials and presentations to support both seminar interventions and training programs have been prepared and are available to other SDNP sites.

17. Project staff - the technical and administrative assistants have also received training in information retrieval and Web site production.

V. Equipment: the technology strategy

18. Initial project equipment was purchased through New York. No problems in servicing and maintenance have been encountered.

VI. Project Management

19. The project is managed by the Department of the Environment.

20. It has three managers within the Department: the Director who is responsible for the Division of Observation, Studies and Coordination; the Coordinator, who is responsible for the Division of Observation and Studies which provides substantial staff inputs to the project; and the Chief Technical Advisor who is responsible for the day to day management of the project.

21. The Steering Committee appears dissatisfied because it has no mandate and feels as though it is only required to rubber stamp Department of the Environment decisions. Some members recently requested a meeting to set in process a definition of its mandate; the meting has been held bu the report is not yet available. Some members of the Steering Committee have never met the project Director.

22. Rethinking the role of the Steering Committee is also high on the agenda of the Department and UNDP but it is not clear that there is consensus on the need to give it a more effective voice or rather to limit its membership.

23. The project CTA is a not on the staff of the Department but is a consultant with a strong background in information and ICTs. Her style is not that of a bureaucrat.

24. UNDP sees the SDNP project as its own and would like yo see a limit to the use of the direct channel between the CTA and SDNP/NY.

25. With all these problems there is nevertheless a consensus that the project has achieved a great deal in terms of the increased availability of information on the Web and in terms of training.

26. The main difficulty arises from different perceptions of the ownership of the project: within the department or by the organisations represented on the Steering Committee: as the latter expressed it: the Department hosts the project but does not own it.

VII. Challenges and Opportunities

27. The major challenge is the one of ownership outlined above. While a good deal of solid

technical work has been accomplished SDNP in Morocco is not perceived to be an open system serving all stakeholders - nor even all government departments. UNDP is trying to develop a strategy to open the project up to others but must negotiate carefully to bring the Department along. The Department itself might be more comfortable working with a small group of departments with a direct interest in coordinating with Environment.

VIII. Lessons for SDNP

28. Some have suggested that initial project discussions should have involved Ministers or senior officials from other departments in order that they would have recognised their interest from the beginning and have been more reluctant to leave management entirely in the hands of Environment. UNDP itself - the country office - could conceivably have played a more active role in ensuring transparency. But once a project document has been signed by the government it is difficult - and perhaps unreasonable - to try to change the chosen management strategy which may be appropriate to the national circumstance. SDNP can learn from Morocco and try to open up processes more in initial project development. But ultimately it must accept the judgement of the national authorities managing the project.

Contacts

Mrs Layashi, Director, Division of Observation, Studies and Coordination, Dept of Environment

Mr Mdhari Alaoui, Director, Division of Observation and Studies

Mrs Belfakir-Kabbay, Program Officer, UNDP

Mrs Najat Rochdi, CTA

Mrs Cherki El Idrissi Amina, Technical Assistant

Mrs Tanimi Benjelloun, Assistant Representative, UNFPA

Dr Chaouki, Head of Epidemiology, Department of Health (Steering Committee)

Mrs Cherkaoui, Civil Engineering, Universite Mohamed V (Steering Committee)

POLAND SDNP COUNTRY REPORT, November 25, 26 1997

Consultant: Kate Wild

I. Project Status

1. SDNP Poland has little official existence. SDNP has again been the very junior partner of a CIESIN program (September 94 to June 96) which provided the University of Warsaw Computing Centre with a Sun Sparc server and software in order that it could act as the coordinator of loose network of organisations working in sustainable development, broadly defined. This CIESIN network was managed by a Steering Committee chaired by the Director General of the Polish Academy of Sciences. The SC included the Vice Rector of the University, the University's Senate

Office for Studies, the Central Statistical Office, the Ministry of Environmental Protection, the Polish National Committee of Unesco's Man and the Biosphere Program, UNEP's Global Resource Information Data Base (GRID), the Academy of Sciences Institute of Philosophy and Sociology and two public opinion research organisations, one public and one private sector.

2. CIESIN had thus established a broadly representative Steering Committee and was supporting a program consistent with the SDNP program principles. The University Computing Centre which was the coordinator of the network was mandated to build a database profile of Poland, to develop a metadatabase or catalogue of available sources of information developed in Poland and to host relevant databases developed by other organisations. It has accomplished each of these tasks. A Polish Web site is available, 250 databases have been catalogued and a number of databases are made available through the UCC, including those of the Central Statistical Office and the Patent Office.

3. The CIESIN network came into existence in 1994. SDNP's first contact appears to have been in early 1995 when Chuck Lankester participated in a CIESIN workshop. In 1996 the Director of the University Computing Centre (Tadeusz Wegrznowski) was invited to attend the Mexico meeting of the SDNP coordinators as Polish SDNP coordinator. The denomination was an expression of interest rather than agreement to follow a particular SDNP agenda but participation in the workshop fired interest in the linkage between Internet technologies and sustainable development.

II. Overall objectives

4. SDNP came into Poland through the ongoing CIESIN initiative. SDNP goals were almost certainly discussed by Mr Lankester with representatives of the University and probably of the Steering Committee but no official decision appears to have been made. The SDNP concept as outlined by the director at the 1995 CIESIN workshop clearly resonated with both the Rector of the University of Warsaw and with the director of its computing centre. Both have been instrumental in identifying Poland with SDNP.

III. Resources and Finances: Sustainability

5. As noted above SDNP's contribution to-date has been limited to funding the participation of the Polish coordinator in the Mexico Workshop.

6. CIESIN contributed the Sun Sparc server also mentioned above.

7. Other connectivity contributions have come from the Soros Foundation which has funded Internet access in schools.

8. By far the biggest investment has however come from national sources through which the National Academic Research Network (NASK) has been built, as well as metropolitan area networks in nineteen cities. The country is well served from an infrastructure point of view with the transport system and the banking sector supporting networks of their own. The national telecommunications carrier has been partially privatised, cell phone supply has proliferated in the last three years and wireless systems are beginning to enter the market. NASK itself will be open to competition in the near future - it became an independent institution in 1993 - in the future subsidies from the universities will go to users rather than to NASK in order that they can select the network of their choice.

9. Within this environment of increasing competition, the UCC has initiated cost recovery mechanisms of its own: while the university covers the cost of salaries, it charges for leased lines, hosting databases, installation and e-mail accounts. The UCC believes that it has responsibility to

provide service to the NGO and some segments of the public as well as the academic community in Poland. It has, for example provided UNDP with its leased line at a rate of 400 zlotys (approximately $100) per month. The sustainability principle is well established under the dynamic leadership of the director of the computer centre. Sustainability on project completion is not an issue since there is no project funding from UNDP but rather ad hoc provision of specific equipment or for participation in meetings.

IV. Training

10. No specific training workshops have been funded by SDNP although it was a CIESIN workshop on issue oriented information retrieval over the Internet, funded by UNDP which brought SDNP into the country.

11. The UCC provides regular courses which have progressed from electronic mail to Internet retrieval to the creation of content using HTML but these cannot be directly attributed to SDNP. CIESIN did provide $32,000 for creation of the metadatabase, of links to existing databases and training.

V. Equipment

12. To-date SDNP has not provided equipment to the UCC. However the university will receive a donation from Hewlett Packard as part of the $1.1 million agreement with SDNP. This will replace the Sparc server donated by CIESIN and will host the metadatabase. But the director of UCC, currently in negotiation with HP, is searching for more innovative applications. This search, as will be indicated in the last section of this report, could result in an exciting initiative which could be directly attributed to the injection of a small amount of equipment (via the HP agreement) and a significant amount of enthusiastic promotion of sustainable development networking by SDNP.

VI. Project Management

13. At the time of the evaluation the Steering Committee had not met for about a year although the coordinator was in touch with members individually. The main objectives of the CIESIN project had been achieved: the Poland site, the metadatabase and the hosting of other databases. Clearly there is room for network expansion and further elaboration of the sustainable development networking concept. But there does not appear to have been strong motivation for moving in that direction. Unlike in Estonia the focus seems more to be on the networking and less on the substantive sustainable development side.

14. The UCC has considerable operational responsibility for serving over 5000 students, ensuring a secure network environment for university administration, linkages to other universities in Poland and helping ensure that Poland's academic network fits seamlessly into the European network environment. In spite of these significant responsibilities the UCC, because of its links with the key research, academic and government organisations and because of the dynamism of its leadership (and the support it receives from the VR of the University) would seem to be the right location for any SDNP-type network coordination function.

VII. Challenges and opportunities

15. The HP donation offers SDNP an opportunity to capitalise on a very modest investment in SDNP in Poland. The idea developed by the director of UCC, which was subsequently received with interest by both the Director-General of the Polish Academy of Sciences and the Resident Representative, is to use the new server to host an on-line sustainable development festival which would include a number of discussion groups, presentations on key issues, workshops and

conferences. It would culminate in an event in 1999 which would mark the state of sustainable development thinking in Poland on the eve of the next century but would also coincide with the end of UNDP's mandate in the country. The festival would bring public attention not only to sustainable development but also to the value of networking through the Internet.

16. The UCC would be in a position to provide the infrastructure for the network. Besides the computer equipment to be provided by HP, it is in the process of converting its main frame computer room into a large conference room and it has computer conferencing equipment. Clearly conceptual definition of and leadership on the issues would have to come from elsewhere. The Polish Academy of Science, with its 82 research institutions is clearly one source of intellectual leadership. The Council for Scientific Research is another. So is UNDP itself.

17. The Resident Representative seemed interested by this idea and offered to discuss it with the Director of the Council for Scientific Research. The DG of the Polish Academy agreed that it should form the agenda for an upcoming meeting of the Steering Committee.

18. Clearly such an initiative would need funding from a number of sources, including private sector and perhaps UNDP itself, as well as SDNP. The next step is the preparation of a concept paper by the director of UCC for circulation amongst supporters and discussion with the Steering Committee.

VIII. Lessons for the global SDNP picture

19. This is an exciting initiative because it could lead to a new phase of SDNP activities in countries where there is no need for support for connectivity. SDNP itself talks about moving towards content. But it is not easy to see how a HQ-based program could add value in this area when it is manifestly local content that is required. Programs on the ground, with close contacts to organisations working on SD issues are likely to be more productive. The kind of festival outlined very briefly above could bring the two SDNP objectives - sustainable development through sustainable networking - much closer together and give them higher visibility on the public agenda. Much needs to be worked out - but the germ of an effective idea is on the table as result of SDNP interventions, however modest. Partnership between the country office and SDNP/HQ will be helpful in translating the idea into action.

Contacts

Tadeusz Wegrzynowski, Director, Warsaw University Computer Center

Prof Piotr Ploszajski, Director-General, Polish Academy of Sciences

Mathew Kahane, Resident Representative

TUNISIA SDNP COUNTRY REPORT, November 30, December 1 1997

Consultant: Kate Wild

I. Project Status

1. The project (TUN/94/003/A/15/99) was approved at the end of 1994 but has been through several revisions and several phases since then. It is currently operational and due to terminate in December 1998. Delays are attributable to two sets of factors: the evolution of the government's Internet policy and changes in perception with respect to the appropriate institutional home for the

project. For its first eighteen months the project was located within the Institut Regional des Sciences Informatiques and des Telecommunications; beyond the purchase of equipment there was little activity. In August 1996 the Ministry of the Environment undertook to explore the reasons for the project delays and to house the project. The Ministry became the executing agency in July 1997.The UNDP Office in Tunis is responsible for financial control.

II. Overall Objectives

2. Although the project was initiated within the UNDP country office the fact that its functions have now been integrated into the Ministry of the Environment suggest that its objectives accord well with broad government policies. There have been a number of discussions about project design, and in particular its emphasis on connectivity. Connectivity itself is no longer considered to be an issue in Tunisia; although until recently the Internet community was very limited the government has recently licensed two companies to open access to the public at large. The experience of SDNP and the debates it generated between UNDP and the government may have been instrumental in achieving a more open policy with respect to the Internet.

3. Although connectivity is no longer central to the project, networking and the exchange of information on sustainable development are at its core; it is the means of achieving those goals in support of sustainable development that has been at issue, not the goals themselves. However, related to the issue of the organisation to host the project is the underlying question of the relative roles of technology and substance. The position of the Tunisian authorities has been that the project must be driven by those with understanding of the substantive issues and not the network technologies.

4. Approaches to project sustainability have also been the subject of discussion. The project coordinator believes that sustainability can only be achieved through a commitment to fund the network from public funds. He considers that the investment made by SDNP is trivial in comparison to the true costs of the work that has been undertaken thus far to create the Sustainable Development Network (RDD: Reseau de Developpement Durable) and that has been imputed to the budget of the Ministry of the Environment. The coordinator is a senior advisor to the Minister and is in a position to mobilise Ministry resources to develop and implement activities in support of the network.

5. Recognising the value of the RDD to communication among organisations working on sustainable development issues the Ministry has recently included a project for its extension in the country's 9th Development Plan with a budget of DT 2,500,000 (approximately US$ 2,270,000). The project has apparently been approved on condition that 50% of the funding is raised from external sources. If those funds cannot be secured the question of sustainability may become an issue once more.

6. UNDP believes that SDNP has already had an impact in helping open up the Internet environment in Tunisia although more needs to be done. In spite of the fact that the project is perceived by its coordinator as a relatively small contribution to sustainable development networking, the UNDP view is that it could have additional impact by keeping the focus on wider dissemination of the information created through the project and the development of a network that is more representative of civil society through NGO membership.

III. Resources, Finances and Sustainability

7. The total UNDP (Capacity 21 and SDNP) contribution is $225,000. The government contribution in the original project document was given as $51,600. UNDP expenditure to the end of 1996 was $82,928 (of which $32,309 had been spent on computer and communications equipment).

Expenditure in 1997 is expected to be $90,400 and in 1998, $51,672.

8. It was not possible to determine the actual government contribution which could include, apart from office space, the time of a number of Ministry officials.

9. As mentioned above the project coordinator does not accept the SDNP strategy of achieving sustainability through revenue generation. He believes it is neither necessary nor politically feasible for the project to market Internet connectivity. This is the business of the government. It has already issued licenses to two suppliers and UNDP would have no business competing with the private sector in this domain. He also believes that the RDD is the business of government and that government would not be willing to allocate its responsibilities in this field elsewhere.

10. The sustainability of the project rests therefore not on its ability to market its services but on its ability to convince government that it represents an appropriate strategy. If one follows the arguments of the project coordinator further the project has developed because of the governments commitment rather than because of the relatively limited inputs from UNDP: sustainability is guaranteed because the project is key to the government's agenda.

11. Because my discussions were limited to the Ministry of the Environment (and indeed to the project coordinator and UNDP) I was not able to test this assumption. However, the coordinator did indicate that two years did not allow enough time to evaluate the impact of the RDD project; five years would be more appropriate. A second phase of the project could transform it into a permanent mechanism in support of sustainable development.

12. The messages are therefore somewhat ambiguous on the question of sustainability.

13. However the achievements (in terms of Web sites which I viewed and of the creation of subnetworks of specialists to manage them) seemed significant. Twelve sites have been created with different bodies within the Ministry, four sites have been created for NGOs and three for private sector consulting companies working on land use planning and urban development. A site has also been created specifically to support the RDD under which sectoral sites will be developed on desertification, geomatics (these two are in place), biodiversity, rural development, maritime resources. A site has also been created for the town of Monastir which could represent the start of an interesting initiative to establish information bases in each of Tunisia's 23 districts and 280 communes.

IV. Training

14. Sites can only be developed with the cooperation of the organisational units which produce the information. In the case of all sites that are not part of the RDD, responsibility for maintaining and updating the sites will pass to theses units. Monthly meetings are held with the responsible staff members in order to ensure that they have the skills to take on the job: both the information skills to facilitate selection of materials and the Web skills to update the sites. Judging by the number of sites between 20 and 25 people are receiving this ongoing training.

15. Workshops have been organised on sustainable development and on the Internet and geomatics. A ten day workshop is scheduled for next week to introduce computer illiterates to the basics of text processing, information management, e-mail, Internet browsing, etc.

16. The process of creating the specialised sites on desertification and geomatics have involved a series of seminars and meetings which have set out the agreements under which the experts take control of the sites. These will be replicated as additional theme sites are developed.

V. Equipment

17. Equipment has been purchased locally after a tendering process. The coordinator does not agree with the strategy of purchasing in the US because of potential servicing and maintenance problems.

VI. Project Management

18. Overall management of the project is vested in the Sustainable Development Commission which is chaired by the Prime Minister with the Minister of the Environment as deputy chair. This Commission meets every six months and provides the necessary political direction for the project. It is supplemented by working groups in the theme areas: desertification and geomatics thus far. A meeting will be held in January with a view to initiating an NGO network; participation will be broad initially but with a view to selecting specialised NGOs to become members of RDD. (Under a separate UNDP initiative to increase NGO capacities through a small grants fund, a communications group has been established in which the SDNP project coordinator participates).

VII. Challenges and opportunities

19. The SDNP project in Tunisia is 'owned' by the government and there is legitimate sensitivity about attempts to direct it from elsewhere. This is positive from many points of view including sustainability. However it could be a disadvantage if it limits the involvement of civil society bodies and their access to information. It was not entirely clear to this consultant whether the resources available through the RDD site (as opposed to the individual sites developed under the project) would be accessible through the Internet or through a more restricted Intranet. Although the project coordinator includes expansion within the NGO community in his 1998 plans the UNDP would clearly like to see faster movement towards a more inclusive network.

20. This project - perhaps because it is firmly rooted in the Ministry - demonstrates the fact that each SDNP will be shaped by its own political reality: the overall design must be sufficiently flexible to accommodate that. There may be similarities but I would guess that they will come about by discussion among project leaders rather than by following a NY blueprint. The Lebanese experience has probably been shaped by the Tunisian approach - seeds sown during the recent meeting of North African SDNPs.

21. Views on the equipment strategy, the lack of realism in the sustainability strategy and the impossibility of achieving impact in a two year project accorded with the views of Lebanon's SDNP manager.

VIII. Lessons for the Global SDNP

22. There clearly has been value in workshops of SDNP coordinators for the transfer of experience between projects.

23. Progress towards the democratisation of information will be determined inevitably by the prevailing political climate - SDNP must accept the management mechanism selected by the government or withdraw; it is the local office's responsibility to ensure that a political debate continues.

24. Similarly it will be the local players who determine whether the initiative is led by the sustainable development specialists or the technologists. A case can be made on behalf of either - much will depend on individual skills, talents and political positioning.

25. The equipment strategy seems to be overridden when necessary. Is it useful still for some countries?

26. The sustainability strategy seems in question - perhaps SDNP should offer a menu of approaches rather than a prescription. In any event - connectivity would not seem to provide a basis for revenue generation in many countries now. It supposed a much slower pace of Internet introduction.

Contacts

Mustapha Stambouli, CTA, SDNP

Eddie Harmon, Deputy Resident Representative

Ridha Zaffal, Program Officer

COSTA RICA SDNP COUNTRY REPORT, 17 November 1997

Consultant: Michael Gucovsky

I. Project Status

1. The project is in a process of managerial transition, changing of host institution, reconfiguration of the Executive or Consultative Committee, and substantive and technical re-definition. Its current status is, therefore, substantially different from the other project sites visited in Central America and the Caribbean.

2. During the limited one day review of the project in San Jose it was not possible to consult with the key senior actors who have been involved at least since 1994 with the development, guidance and management of SDNP in Costa Rica. Only one of the senior actors involved in the recent decisions concerning the "re-casting" of SDNP was consulted, with the other five (the recently resigned Co-ordinator, the Director of the "Observatory of Development" - the new host and main partner of SDNP, the Vice-Rector for Research of the University of Costa Rica under whose auspices the Observatory of Development operates, the Co-ordinator-Designate, and the UNDP Deputy Resident Representative) either were not in the country or were unavailable. Consequently, the limited observations about this project are based primarily on consultation with the Executive Secretary of CONADES and Special Advisor to the Minister of Planning and Economic Policy (where SDNP was located until late November 1997), with the Executive Deputy Director of the Earth Council (both members of the Executive Committee of SDNP), the Information Technology Officer for SDNP since 1994 (and *de facto* interim Co-ordinator of SDNP since mid-August 1997 when the Co-ordinator resigned), and the UNDP Programme Officer.

3. In view of the above, it would be useful to determine whether the SDNP project document should not be substantively revised to reflect the new, recent reality of the recast project, its management and governance. A comprehensive revision process would also contribute to enhancing its decision-making and management practices, with a view to ensuring that they are participatory, transparent, systematic, and adequately documented.

4. It should be noted that the feasibility study carried out by ACCESO in 1994, was primarily an identification study, since it was weak on such elements as market study, financial plan, and in general, could not be considered as a business plan. The recast SDNP should, therefore, give priority to formulating a Business Plan for the SDNP, including its transformation into an autonomous, financially sustainable enterprise; the governance and management structure of such an enterprise should also be part of the Business Plan.

5. The above process could be facilitated by convening a small technical group in San Jose in February 1998 (after the elections), with the participation of one of the Co-ordinators from a Central American SDNP and a senior Central American consultant, to collaborate with the new SDNP management in Costa Rica in the revision of the project document and finalisation of technical terms of reference for the formulation of a Business Plan by independent national consultants.

6. The project should be rigorously monitored in 1998 by the SDNP partners against a revised project document, precise work plan, and eventual Business Plan, which will contribute to meeting the country's overall objectives for ICT in support of sustainable development.

II. Overall Objectives

7. The recast overall objectives of the SDNP focus on strengthening its link, with the National Council for Sustainable Development (CONADES) and the O of D (Observatory of Development), who would become the two principal partners and users. Through CONADES, the SDNP would continue to maintain a collaborative relationship with the Earth Council.

8. The revised overall objectives would need to be reflected in the work plan for 1998 and in the eventual Business Plan for SDNP.

III. Resources and Finance

9. The original allocation for the SDNP was $213,800 of which 197,200 and $16,600 are derived form the Global SDNP and from the Costa Rican IPF, respectively. In addition, the Foundation of National Parks, where the project was initially located, also contributed $21,200 in kind. Moreover, since April 1996 when SDNP was transferred to the Ministry of Planning and Economic Policy, the Ministry has contributed a total of about $8,000 in kind (offices and furniture, services, supplies, and access and connection to the Internet).

10. It is estimated that as of end September 1997, global undisbursed funds amount to about $169,000, and all of the Costa Rican IPF of $16,600 has not been used.

11. With the transfer of the SDNP to the O of D in late November 1997, the value of in-kind contributions has not yet been calculated. However, it includes *inter alia*: 35sqm. of office space, access to a conference room, access to 3 telephone lines, access to the electronic communications platform installed at the University of Costa Rica, and one fourth of the salary of the SDNP Co-ordinator.

12. Mobilisation of new and additional financial resources and generation of revenues from services marketed will have to be addressed in the Business Plan referred to above.

IV. Training

13. This subject will have to be addressed in the revision of the project document and in the Business Plan. However, there are indications that the budget for training may be reduced from

$44,400 to $13,000, and there is not yet an agreed plan for charging for training activities although an internal assessment has been made recently of the potential market.

V. Equipment

14. Equipment now available to the project includes:

Quantity	Description
1	Computer Pentium 200 Mhz- Dell 32 Mb RAM, Colour Monitor SVGA
1	Dell Computer Pentium, 200 Mhz, 64 mb
1	Printer HP Laserjet 5/5m Postscript
1	Digital Camera Kodak 40 DC
1	Laptop Toshiba Satellite Pro 420 CSD, 133 Mhz.
1	Scanner HP 4 p full colour, 2400 bps
2	UPS auxiliary batteries

15. Future equipment needs will have to be determined on the basis of the recast project document.

VI. Project Management

16. It will be necessary to assess independently the lessons to be learned from the managerial track record of the project. This should be done by an independent consultant, with a view to establishing a governance framework and a management system that is accountable, systematic, well-documented, participatory and transparent. It will have to be monitored effectively and implemented professionally and with judicious flexibility.

17. From the outset, in addition to the above issues, it will be necessary to address and to incorporate into the Business Plan/Work Programme a strategy for the transformation of the SDNP into an autonomous, financially sustainable enterprise.

VII. Challenges and Opportunities

18. The preceding sections implicitly and explicitly provide insights into challenges faced by and opportunities presented to the project. The main challenge and unique opportunity is to transform the SDNP into a viable and sustainable instrument for using ICT effectively and accessible to all in support of the country's sustainable development. It should also contribute to rationalising the multiplicity of Central American Networks into a cost effective system of data generation, management and use, and in fostering a culture of information technology in the region.

VIII. Lessons for the Global SDNP

19. A quicker response to managerial and conceptual problems must be facilitated by the core New York SDNP team in close collaboration with the Regional Bureau and the Country Office concerned. It must also include fostering incorporation of SDNP into the mainstream of UNDP

country programmes, involving senior management in this process. The Global SDNP needs to provide policy guidelines as already discussed in the report, which should include *inter alia*, overall criteria, supplemented by the local considerations, for the selection of the host institution for SDNP and ensure that they are rigorously applied.

20. The Global SDNP should pursue policy dialogue with the Earth Council on how to leverage SDNP in support of the Council's objectives, especially in enhancing the National Councils/Commissions for Sustainable Development. Priority should be given to accelerating connectivity among National Councils, and to establishing thematic electronic fora, including topics such as implementation of specific components of Agenda 21 (*e.g.*: capacity building, public-private partnerships for promoting sustainable development, follow-up to the Rio Conventions, environmental technology, and institutional issues).

Contacts

1. Andrean Rodriquez, Special Advisor to the Minister of Planning and Economic Policy, Executive Secretary of CONADES, and the Co-ordinator of INADES.

2. Francisco Mata, Executive Deputy Director, Earth Council

3. Richard Barathe, UNDP Programme Officer

4. Marvin Cabezas, Technical Advisor of SDNP

GUATEMALA SDNP COUNTRY REPORT, 1-2 December 1997

Consultant: Michael Gucovsky

I. Project Status

1. The present SDNP project in Guatemala became de facto operational on 15 March 1997, with the appointment of Lucretia Peinado de Fuentes as Co-ordinator. During the first 6-8 months of the project (March-November 1997), the administrative/management focus was on:

• Structuring and recruiting the project team (Marco Antonio Micheo, Technical Officer - 23 June 1997; Joel Arriaza, Information and Training Officer - 3 November 1997; Rocio Morales, Administrative Officer - 16 October 1997), with Micheo and Arriaza financed by the Swedish Government (SIDA).

• Signing a partnership agreement and strategic alliance with the University of the Valley of Guatemala (UVG), 27 June 1997, and the installations of SDNP on the premises of UVG, in September 1997, with the computing equipment (SDNP node) liberated from customs on 22 September.

• Signing of partnership agreement and strategic alliance with National Institute of Statistics (INE);

• Obtaining of the domain and IP numbers for the SDNP on 22 October 1997;

• Establishing first version of the Web Site on line, first week in November 1997.

• Activating the Interim Consultative Committee, convening the first Assembly of Users (November 1997), and formalising arrangements process for completing the SDNP's governance structure in February 1998.

• Completing arrangements with a national consultant to undertake, beginning January 1998, the formulation of a business plan, including a market study, for the SDNP which will be guided by a Steering committing consisting of UNDP, the Co-ordinator, Luis R. Furlan (UVG) and Mario Jacobs (INE), who are the representatives of the two major partners of the SDNP.

2. Programmatically and substantively, SDNP concentrated on product development and on promoting demand for its services and advisory functions among NGOs, civic groups and local governments, academic, private and government sectors, in an environment that is becoming increasingly competitive and sophisticated. Examples of these activities are:

• Promotion, with the NGO Forum (150 NGOs including indigenous people) of a programme to strengthen NGOs in the use of ICT, including training of more than 40 e-mail and Internet users of major NGOs and of technical officers to manage such applications, and overall requirements for a training programme have been identified;

• Training for the Urban Environmental Network in use of ICT has been initiated, including formulation of a preliminary proposal for training municipalities in electronic use of environmental urban data for preparing environmental urban development projects funded by the Spanish Government.

• Training for the members of the Youth Network for Sustainable Development in use of ICT with a view to achieving maximum outreach.

• Support to CONAMA (National Environment Commission), at request of CCAD, in defining the content of its Website, and in outreach programmes especially the regional offices in Petena and in the watersheds of lakes.

• Substantive electronic discussion fora will be developed for ASOREMA (Association of Environmental NGOs).

• For the National Forum of Women a programme similar to the one with the NGO Forum is being developed.

• In the private sector, activities are being developed with export and investment enterprises, and negotiations will be undertaken with major ISPs for preferential Internet rates of SDNP users.

• Intensive technical advisory services, including training and Website design, are being provided to INE in use of ICT for cost-effective collection, production and dissemination of statistics for sustainable development.

• With the Secretariat of Planning in the Office of the President and the Ministry of Finance and with UNDP, SDNP has provided active support for the implementation of the Donor Assistance Database (DAD), dissemination of TCDC (including Website design), and training of users and technical officers to download and to design applications of e-mail and Internet

• SDNP is providing services to the UN Peace Building Mission (MINUUA) and the National Office

of Human Rights (PHD) for the project of strengthening the provincial documentation centres of human rights through the effective application of ICT, including design and maintenance of the system and training of users and operators.

• SDNP supports and participates in the inter-agency UN Resident Co-ordinator's System thematic groups on information and information technology. It also won a contract for a workshop on this subject in competitive budding with commercial ISPs and one University, having been deemed to be the best proposal on the basis of content and price.

3. Since the initial consultations in Guatemala concerning SDNP, three UNDP Resident Representatives and their senior colleagues and Luis R. Furlan (who also did the prefeasibility study in May 19994), and supported by the New York Core Team have been the enthusiastic and committed champions of the project. The success of the project has also been greatly facilitated by the strategic alliance and partnership with the UVG and INE and the overall competence and leadership of the Co-ordinator. This is also evidenced by the rapid and effective "change of course: necessitated by the restructuring of ICAITI which made it unsuitable as the host for SDNP, cancelling the agreement with it and replacing it with an agreement with UVG. The present partnership between UVG (a private University), and INF (an important data service agency) as the two major partners in the future autonomous and sustainable SDNP enterprise, with a broad base of civic society and government users, and effectively supported by UNDP Guatemala provides a solid foundation for transforming SDNP by 1999 into a viable enterprise.

II. Overall Objectives

4. SDNP's overall objectives in the country are compatible with and supportive of the government's policy to integrate environmental dimensions into all sectors and levels of decision-making within a framework of decentralised technical and administrative systems. This framework includes 22 regional development councils, and the planned regionalisation/decentralisation of CONADES. Incorporation of marginalised sectors of society and of indigenous people into the mainstream of the economy and of participatory decision-making in fulfilment of the Peace Agreement will benefit from SDNP's outreach programme for dissemination and sharing of information. It will alleviate the chronic absence of adequate, systematised and reliable data readily accessible to decision-makers in Guatemala and to communities.

5. SDNP will promote the consolidation of a network of multi-sectoral users trained to search and manage national and international exchanges of information. During the first two years of operation SDNP will aim to incorporate a representative group of major actors who will be trained in the application of ICT for the dissemination of information they produce and in the use of data from other sources. It will promote sustainable human development through a network of institutions that participate in substantive electronic discussion fora and will consolidate an "information culture" in the country.

6. The ISP market in Guatemala is still evolving , with GUATEL (until it will be privatised in the near future) regulating the connectivity to Internet and charging USD $3,250.00 per month for a 64 kbps channel and an additional 2% of actual sales of services by each company. MAYANET, whose current director is Luis Furlan, was the first network connected to the Internet and it provides services to the major universities and research centres in Guatemala. CONCYT (The National Council of Science and Technology) is the administrator of "domains" and of e-mail addresses, with more than 30 commercial entities, 5 universities and 2 research centres now listed.

7. SDNP intends to develop and maintain a competitive edge in this rapidly evolving ISP market by focusing on service quality, lower prices, offering technical training, and specialised priority sectors (including electronic discussion fora) *e.g.*: education, environmental legislation, biodiversity, health,

energy, solid waste management.

8. The major objective is to establish an autonomous and financially sustainable enterprise within 2-3 years. This is being facilitated by charging from the outset for advisory consulting and training services, and by establishing an appropriate governance and management structure.

III. Resources and Finance

9. A total of US$ 179,600 has been allocated by the Global SDNP for two years according to the budget of the Guatemala project document. UNDP is providing $25,000 from country TRAC resources. UVG contributes office space and partial technical support (services in-kind which have not yet been valued). An additional US$ 3,000 have been allocated for implementation of services to TCDC focal points in the country, and US$ 400 for the design and facilitation of a workshop of the UN Reform project under the auspices of the Resident Co-ordinator. In general, disbursements in 1997 have been low due to the start-up phase of SDNP, but should pick up substantially in 1998, especially if response time from UNOPS is decreased and the UNDP Country Office is given decentralised delegated authority to act on personnel, consultants and even some equipment items.

10. However, as users begin paying for services at rates indicated in Attachment 1, and special project agreements are reached with government and other agencies, additional financial resources would become available to SDNP. Should it be decided to provide ICT services to the UN Resident Co-ordinator System, funding for this purpose would have to be provided. In any case, arrangements have been concluded with UVG late in October 1997 for managing revenues that are expected to be generated for services provided and special projects co-ordinated/managed by SDNP.

IV. Training

11. A total of at least 140 professionals from more than 20 institutions and agencies have been trained in 1997 in 9 workshops. Professionals from NGOs, Government agencies and ministries, and from the UN System have participated in these workshops. A comprehensive analysis and evaluation of these training activities is available with the project management and the core team in New York; it is the most comprehensive training programme of the four sites visited in Latin America and the Caribbean. The fee schedule for training is provided in the attachment referred to in paragraph 10 above. Moreover, several senior managers from NGOs and government agencies who have participated in the workshops have written letters of praise, indicating that these were the best training programmes that they have ever participated in and urged follow-up.

V. Equipment

12 The technological structure of the SDNP is outlined in Attachment 2. However, due to time constraints it was not possible to examine in detail the current status of equipment already in place.

VI. Project Management

13. Management of the project since the appointment of the Co-ordinator in March 1997 has been effective, systematic, and professional. IT has been characterised by a close collaborative relationship with the UNDP office, which has contributed to a synergetic relationship in the use of ICT to advance UNDP’s country strategy and objectives. A transparent and well documented process has been followed in the management of the SDNP Interim Committee (with a membership of 8-14), the preparation and convening of the first users meeting on 21 November 1997, selection of staff, and of the institution to host the SDNP, and in the selection of the

independent national consultant to prepare the Business Plan.

14. Assuming that the consultant will initiate his work in January 1998, the task will be completed by April 1998, with Interim reports provided periodically. It is also expected that the SDNP management team will collaborate with the consultant. The work of the consultant will be guided by Ing. Mario Jacobs Lima, Manager of INE, Luis R. Furlan, Director, Centre of Computer Sciences and Statistics of UVG and Advisor to SDNP, UNDP Resident Representative and the SDNP Co-ordinator. The principal output of this consultancy will be the Business Plan and strategy for transforming SDNP into an autonomous and sustainable enterprise. It is expected that UNDP should accompany this process through 1999, including mobilisation of financial resources substantially beyond what is now allocated.

15. With respect to Governance of SDNP, in November 1997 the first Assembly of Users was convened with an attendance of about 30. It was agreed that the Interim Committee will be replaced in February 1998 by a Permanent Consultative committee, which would have some characteristics of a management group. During the first half of 1998, as drafts of the business plan become available (including market studies for the SDNP), a definition of the legal nature of SDNP and its incorporation under Guatemalan law will be undertaken. INE will provide legal services for this purpose. The steering group referred to above, in consultation with the Consultative Committee could guide this process.

VII. Challenges and Opportunities

16. The main challenge, which also offers unique opportunities, is to position SDNP as a major instrument facilitating the creation of a culture of information technology in Guatemala. Such a culture would ensure that information technology is widely accessible to all sectors and regions of the country.

17. Rapid consolidation of SDNP to enable it to accelerate delivery of quality ICT services is of critical importance, as is its ability to become a key actor in the evolving ICT policy and in the growing commercial ISP market. SDNP will be de facto required to operate like a commercial enterprise marketing products that have a comparative advantage, and provide value-added over strictly commercial ISPs.

18. During the consolidation and transition phase in 1998 and 1999, the SNP will require additional grant funds from UNDP/TRAC, Global SDNP budgets, government and others, in order to supplement generated revenues and to be able to invest in further product and market development. In part, such funds could be justified by ICT services that SDNP would provide to the UN System, donor community and government to enhance their ability to manage effectively development co-operation in support of the Peace Agreements and of the UN Resident Co-ordinator System.

19. The partnership and strategic alliance between UVG, INE and SDNP should facilitate the above. A similar partnership should be forged with the CCAD in order to rationalise the Central American regional ICT networks and to provide quality information and a framework for exchange of information in support of sustainable development in the region. SDNP and UNDP Guatemala in close collaboration with CCAD should co-ordinate and lead these initiatives involving the SDNPs in all Central American countries.

VIII. Lessons for the Global SDNP

20. Active involvement by the UNDP office, including the Resident Representative and senior colleagues, in the development phase of a country SDNP is critical, as is its continued presence

during the transition and consolidation into an autonomous and financially viable ICT enterprise. ICT should, therefore, be an integral part of UNDP's programme.

21. Regional Bureaux, and UNDP Corporately, should be committed to ICT as a tool for achieving UNDP's overall mission and the specific programme objectives at the country, sub-regional and regional levels. UNDP Country Offices and Resident Co-ordinators should be provided with appropriate guidelines about ICT and SDNP.

22. Partnerships and strategic alliances among universities, main agencies producing information (*e.g.*: national institutes of statistics), and national councils/commissions for sustainable development could serve as the foundation for SDNP and as its host institution. They could be the champions of SDNP in the country.

23. Technical and substantive, as well as managerial institutional and sustainability issues, must be addressed from the initial actions to develop and launch a SDNP. The Global SDNP should expand its capacity to provide policy guidelines in areas such as: standards for documenting systematic and transparent decision-making, governance and institutional/organisational aspects; management and financial administration, network configuration and equipment and software options, pricing of advisory/consultant, and training services; protocols and standards for data collection, validation and management; criteria for negotiating with telecommunications agencies and companies, preferential tariffs for SDNP, training materials/modules; and criteria for selection of host institutions for SDNP. Such support from the Global SDNP should increase substantially and rapidly, combined with delegated authority to the UNDP country office to implement recruitment of national staff and consultants, equipment procurement and related matters.

24 Adequate grant funding from diverse sources is essential during the initial 2-3 years of SDNP operations.

25. Enhance and expand use of electronic bulletins and thematic fora among the SDNPs world-wide.

26. Institute a systematic induction programme for SDNP Co-ordinators and technical staff, including preparation of reference materials/guides and visits to successful SDNPs.

27. Collate "best" and some "worst" practices form SDNPs and other related programmes and disseminate them widely.

Contacts

1. UNDP

a. Mauricio Valdez, Deputy Resident Representative (in absence from Country of Resident Representative)

b. Edgar Pineda

c. Rachel Graham

d. Jorge Calvo

2. SDNP

a. Lucretia de Fuentes, Coordinator

b. Marco Antonio Micheo, Technical Officer

c. Joel Arriaza, Information and Training

d. Rocio Morales, Administrative Officer

3. National Institute of Statistics (INE)

a. Mario Jacobs Lima, Manager

b. Carlos Cifuentes, Information Technology Advisor

c. Katia Saravia, Chief of Information Technology

d. Hugo Rolando Rodriguez Barrios, Chief, Department of Dissemination and Public Information

4. Office of the President, General Secretariat of Planning

a. Juan Manuel Vega, Deputy Director for International Co-operation

b. Ramon Fernando Valey Reyna, Consultant for International Co-operation

5. Luis Ferlan, Director, Centre for Information Technology, Computer Science and Statistics, University of the Valley of Guatemala (UVG), and Technical Advisor of SDNP, and Director of MAYANET

6. Manuel Aguirre, National Consultant for Business Plan of SDNP

7. Ofelia Aguilar, Office of Human Rights

8. NGOs and Users

a. Ana Victoria Rodriguez, Executive Director, Environmental Urban Network (RAU)

b. Silvia Osorio, Technical Advisor, RAU

c. Maribel Carrera, National NGO Forum

d. Carlos Perez, Technical Advisor, Youth Network for Sustainable Development (REJUDES)

e. Jose Pablo Prado, REJUDES

9. Jorge Cabrera Hidalgo, Executive Secretary, CCAD

GUATEMALA: Attachment One

SERVICIOS ACTUALES DE LA RDS

a. Servicios de asesoria

Dado que nuestro objetivo es promover el uso de estas herramientas dentro de un marco de fortalecimiento institutional y creación de la capacidad nacional, nuestros servicios de asesoria incluyen:

1. Analisis de la capacidad instalada de la institución para la colectividad:

diagnostics y sugerencias sobre el hardware y software necesario para acceder a correo electrónico e Internet.

2. Analisis de necesidades de comunicación interna y external uso de Internet para divulgar/publicar y buscar informaci6n relevante a la organización.

3. Definición de contenidos de sitio/pagina Web y propuesta de diseho del mismo

4. Definición de opciones para poner en linea bases de datos y mecanismos de actualización

Costo por hora de asesoria: $ 25.00 veinticinco dólares -

b. Servicios adicionales

· Desarrollo del Sitio Web

· Albergue (hosting) del mismo

· Hospedaje y administración de listas autom6ticas de distribución de mensajes

· Foros electrónicos

c. Cursos de capacitación

l. Usuarios nivel 1: incluye el uso del correo electrónico y navegación en Internet.

2. Usuarios nivel 2: se enfoca en actualización y creación de paginas Web. Incluye bases de HTML y FTP. Los participantes deben tener los conocimientos del nivel

3. Curso 1 para Técnicos: Desarrollo de paginas Web (HTML), bajar y configurar aplicaciones del Internet.

4. Curso 2 para técnicos: Uso de otras aplicaciones de Internet como News groups, Chat, moderación y generación de listas de discusión, entre otras cosas.

Todos son cursos disehados para 8 horas cada uno. El costo de cada curso es de $35.00 dólares participante.

d. Paquete de servicios de Capacitación Conectividad

Paquete institutional que incluye:

1. Conexión a Internet y/o correo electrónico: $15.00 cuota única

2. Una cuenta de correo electrónico: $8.00 mensuales/total anual $96.00

3. Acceso a Internet, 30 horas al mes: $.20.00 al mes/total anual de $240.00

4. Capacitación para cuatro personas de la institución en el uso de correo electrónico y navegación en Internet.

Costo por persona $30.00 total por las cuatro personas: $120.00.

5. Asesoria para definición de contenidos de sitio Web y propuesta de diseño del mismo

EL TOTAL ANUAL DE ESTE PAQUETE DE SERVICIOS POR INSTITUCION ES DE: $456.00 (cuatrocientos cincuenta y seis d6lares anuales)

Nuestros precios estan muy por depajo de los del mercado nacional dado que no tenemos fines do lucro sino solo recuiperamos costos y estamos en disposición de ofrecer amplia asesoría directa a su institución como un valro agregado de nuestros servicios.

GUATEMALA: Attachment Two

Estructura Tecnologica de la RDS

Para poder definir la estructura de la RDS, es necesario tomar en cuenta la estructura de la Universidad del Valle, incluyendo su conexion a internet. Mayanet provee a la LTVG su conexion a internet por medio de un router(168.234.68.1). Seguido del router se encuentra un switch que divide la conexion hacia distintas computadoras y/o redes. El name server (168.234.68.2) de la universidad incluye a la RDS asi como al equipo de la TJVG.

Internet

Router

Name Mail/ Red **RDS** Red

Server Web

Server

Asi que el nodo de la RDS se conectara por medio de un hub al switch de la UVG. El hub debe ser

de 10 mbps ya que el switch de la UVG solo soporta esa velocidad. La red de la RDS tiene asignado 65 direcciones de las cuales 1 es para el servidor (168.234.68.22) y 64 para las computadoras de la RDS y sus clientes (168.234.69.128 con un netmask 255.255.255.192).

Como segunda opcion, podemos utilizar el servidor antes del hub, funcionando como un gateway entre la red de la RDS y de la UVG.

... ...

Switch Switch

Hub (RDS) Servidor

Impressora Servidor PC1 PC2 **...** Impressora PC1 PC2

El servidor tiene asignadas dos direcciones: 168.234.68.22 para conexion con la UVG y 168.234.69.130 para ser el gateway de la RDS. Ademas tendra instalado el sistema operativo Linux (distribucion Red Hat 4.2 o mejor). La impresora tendra asignada la direccion 168.234.69.129, y las PCs tendran asignadas las direcciones 168.234.69.131 en adelante.

http://www.rds.org.gt/docl.html 27.Nov.97

HONDURAS SDNP COUNTRY REPORT, 3-4 November 1997

Consultant: Michael Gucovsky

I. Project Status

1. The present SDNP project in Honduras commenced on 16 August 1994 and is located in the UNDP office, which already had a server - a remnant of a 1991-92 initial failed attempt to establish a project called RIDES. The project is the first provider of e-mail for Honduras. By mid-1995, following an intense promotional campaign and demonstrations to NGOs and other potential institutional users, about 30 users participated in the first Assembly. In general they exhibited a reluctance to participate due to absence of modems and lack of knowledge and awareness of electronic communications. During this initial period, the Co-ordinator, Francisco Salinas, had a direct relationship with UNDP Resident Representatives, who met periodically with the institutional users and promoted the SDNP in the country.

2. Notwithstanding the country office's attitudinal changes in subsequent years towards the SDNP, as of 4 December 1997 the project has 274 institutional users and partners. Moreover, since June

1997 the SDNP has been charging for the provision of services.

3. SDNP has forged a strategic alliance with the National Council for Sustainable Development (CONDES), and they are both housed in the same office complex, each paying for its office space. Through this strategic alliance, SDNP has extended its reach, from which both institutions benefit. SDNP begins to offer effective and competitive Internet services only in March 1997 when a dedicated connection and 30 telephone lines were installed. In the absence of a signed project document and of a "juridical persona" for the SDNP, it is in the process of transition and consolidation which is likely to continue through 1999. UNDP and especially the Country Office should continue to actively accompany this process until the end of 1999.

4. As the first SDNP in Central America and Panama, Honduras has been blessed by two dedicated and committed Co-ordinators: Francisco Salinas from September 1994 and Raquel Isaula since March 1996, and a technical advisor, Erlin Palma from August 1994, who provides the institutional technical memory of the project. It has also benefited greatly from the steadfast and creative support form the leadership of CONADES, and several leading NGOs, some Ministries, and ‘HONDUTEL, who granted preferential tariffs for the connection and the telephone lines, which were negotiated with the active and skilful support of the technical advisor of the Global SDNP in New York.

II. Overall Objectives

5. All six Central American SDNPs are anchored in the principles elaborated in the document "Sustainable Development Networking Programme - A Central American Strategy." The Honduran SDNP is designed to be the link to connect Universities, Research Centres, Governmental Institutions, International organisations, and especially NGOs, the private sector, communal and community-based organisations and indigenous people so that they may share knowledge and information and use it as a key contribution toward sustainable development. SDNP collaborates closely with the National Council for Sustainable Development and through it is linked to the office of the President of Honduras and with local and municipal government associations, and other similar groups.

6. The 274 users of SDNP represent a wide range of partnerships and are distributed in 158 institutions of which 20 are independent consulting firms (55 are in the private sector), 94 are NGOs, 17 are governmental, 9 religious organisations, 14 international organisations, 13 academic institutions, 2 co-operatives and 1 association of users. SDNP’s geographical outreach and content focus is enhanced substantially through the establishment of two sets of "discussion lists" ("open" and "closed") for sharing information and conferences among users of the Internet interested in certain topics. The active "lists" which are co-ordinated by a lead user of by the Co-ordinator of the SDNP includes the following --- "Open": agricultural and environment, children, human rights, women, information technologies, micro-credit and housing; "Closed" : Ecological Co-ordinators group, consisting of 8 environmental NGOs involved in organising the NGO Environmental Forum; UNICOM, which aims to provide a forum for closed communication among the Rectors and Vice Rectors of the 13 Universities and colleges; FOPRIDEH, includes 26 members of the Federation of Organisation for the Development of Honduras; ANIAE (National Association for Ecological Agricultural Development); Central American Campaign against Child Abuse; Combating Domestic Violence, which is co-ordinated by a member of the Centre for Women’s Rights.

7. SDNP has "top level domain", which is registered in UNDP’s name, obtained through an agreement with HONDUTEL. Services offered to users are summarized below, with the fee’s structure initiated in June 1997 described in Attachment 1. These Services are:

• Electronic mail

• Access to World Wide Web

• FTP (File Transfer Protocol)

• Discussion Lists

• TELNET - only for some users

• Programmes for use of Internet Services which include:

- accounts for UUCP electronic mail" Pegasus mail, and Waffle Versions of DOS;

- accounts for Internet.

• Line pages - seven are now functional and are being frequently updated systematically.

8. Overall objectives of the SDNP will be adjusted as a result of a current feasibility study/business plan conducted by national consultants and funded by CIDA at a cost of $8,000 which may increase before the completion of the entire study in 1998. With about 14 commercial ISPs in the country (most of which are of recent vintage since HONDUTEL established in 1996 a link for connectivity with Internet), SDNP is faced with a more competitive environment. It must therefore maintain its comparative advantage derived form its quality of service, specialized content focus, and cost effectiveness. In fact, fee structure established in June 1997 is lower than that of commercial ISPs. However, with the influx in 1997 of ISPs from the United States, additional changes are taking place, *e.g.:* they offer a Web page for $10 compared to $30 charged by local providers.

9. With increased awareness by the private sector of the use of ICT for trade and investment promotion, COHEP (the Honduran Council for Private Enterprises - with 46 members) has requested SDNP to enter into an agreement that would enable them to use SDNP's "top level domain." This will now be negotiated.

III. Resources and Finance

10. Of the $200,000 allocated for Honduras for 1994-97 from the Central SDNP only about $140,000 (possibly less) will have been actually implemented by the end of 1997. CIDA has allocated 8,000 Canadian Dollars for a study being implemented by Honduran consultants to prepare a development plan/business plan for the Honduran SDNP.

11. Since June 1997, SDNP services have been charged for according to the tariff [Also see attachment 1.] schedule outlined below (in Lempiras):

Type of Service	12 months	6 months	3 months	monthly
E-mail only (DOS-UUCP)	600.00	360.00	210.00	80.00
Internet (one account)	3,000.00	1,590.00	840.0	300.00
Internet	3,900.00	2,100.00	1,125.000	390.00

(2-5 accounts)				
Web Page	2,400.00	1,320.00	720.00	260.00

12. Through the end of November 1997, the total income from services provided amounts to 179,509 Lempiras, which is distributed by category of service as follows: E-mail 58%; Internet: 30%; Internet and E-mail: 10%; and Web Pages on line: 2 %.

13. Comparing the average monthly costs of operating the SDNP in Honduras, of approximately 35,952.00 Lempiras with the average monthly revenues generated from services provided (assuming that they are distributed constantly per months) of approximately 13,716.00 Lempiras, reveals that 38% of average costs is already covered by the revenues generated. It is noted that the tariffs established by the Honduran SDNP are designed to be competitive with those offered by commercial providers (see attachment 2 for tariffs of commercial providers.) Moreover, the Honduran SDNP is also marketing aggressively to large institutional users such as the Ministries of Education and the municipal associations, *e.g.*: see attachment 3 - offer of services to Ministry of Education dated 23 October 1997.

14. UNDP and SDNP management in collaboration with major partners, should launch an aggressive resource mobilization drive, including from TRAC sources and from existing and potential private sector partners.

15. It is apparent that the UNDP would have to accompany the Honduran SDNP at least through 1999 before it could be considered fully sustainable.

IV. Training

16. In general, the Honduran SDNP does not itself provide training. However, it collaborates with small companies (who are members of SDNP) that provide commercial training.

17. The SDNP also provides responses to queries through e-mail and other means, as well as the training offered to the person who would be responsible for operating the system in the Ministry of Education. Manuals on the use of e-mail have also been produced in collaboration with some partners of the SDNP. Periodic demonstration seminars for different users are being held on the premises of the project.

18. The issue of training should be addressed in detail in the business plan being prepared by the national consultants.

V. Equipment

19. The existing equipment and a diagram of the physical connection of the network have been sunmmarised by the national consultants, annexed as attachment 4.

IV. Project Management

20. 1998 will be a critical year for the consolidation of the SDNP's significant achievements and for ensuring a successful transition process for its financial and institutional sustainability. This transition period may well last through 1999.

21. Active, creative and sustained engagement by UNDP senior management in Honduras throughout 1998 and 1999 will significantly benefit UNDP's own corporate objectives in the country

and facilitate the institutional transformation of SDNP into a leading ICT force in the country. It would also benefit the Resident Coordinator system buy providing it with required ICT support.

22. A broad consensus exists with regard to the above conclusions, as well as concerning the need to strengthen the management capacity of the SDNP and to delegate to it and to the UNDP office increased administrative and financial responsibility regarding personnel and equipment issues within established overall policies and budgets. This view is fully shared by the independent national consultants formulating the business plan for the SDNP and carrying out background studies and analyses, including interviews of users and partners.

23. In this context, an executive committee consisting of the UNDP Resident Representative, the Coordinator of the SDNP, CIDA (who is funding the local consultants), and one or two representatives of the partners/users, e.g.: CONADES, should be established as soon as possible to guide the concluding phase of the work of the independent Honduran consultants. This is a matter of some urgency since the consultants are likely to conclude their work by end-February 1998.

24. Adequate and systematic documentation of decision-making, of financial management, and more generally of the rapidly evolving scope and nature of the Honduran SDNP, requires that a third professional, with a strong management profile and track record be recruited as soon as possible, as a matter of highest priority. Funding for this purpose should be made available (See also paragraph 14 above).

25. The local governance structure of the SDNP requires re-design and reactivation on a systematic and focused basis. Elements for this will be included in the report of the local consultants. Consequently, one is reluctant to prejudge the details of the ultimate governance structure for an autonomous, sustainable SDNP in Honduras. It is essential to ensure, however, that representatives of the strategic alliances and partnerships be included in an Executive Committee of 10-15 members, which may also establish a smaller management committee of about 5 members. The private sector (small/medium and large enterprises), major NGOs, the academic sector, local government authorities, the government, and UNDP should be represented in any effective governance arrangements.

26. Lastly, streamlined and timely decision-making, within a framework of transparent authority and accountability, is critical for effective management of the SDNP and its transformation into an autonomous and sustainable enterprise. Ongoing strategic alliances with key actors of Honduran society should be formalized as soon as possible by signing of memoranda of understanding and/or "Convenios."

VII. Challenges and Opportunities

27. With a new President and new municipal governments taking office during the last week of January 1998, the demand for increased ICT will expand significantly as a tool to deepen and accelerate decentralized and participatory governance in support of sustainable development. ICT will increasingly be used also to promote tourism, trade and domestic and foreign investment in the country. SDNP will also be challenged to serve as a catalyst to expand "connectivity" within the country reaching community based organizations, rural areas, and local governments. Leveraging the synergies and experience of SDNP to launch the UNDP/ITU Multi-purpose Community Telecentres for Sustainable Development (TCM-DHS) would accelerate the process of meeting these challenges in a timely and constructive manner.

28. Small and large businesses, and their trade associations, social sector ministries, and international programmes will become increasingly interested in the services that SDNP is

providing. At the same time, competition from commercial providers of ICT will also increase, in an environment where the telecommunications industry itself is being transformed through privatization.

29. The above outlined challenges and others create an environmental of almost limitless opportunities for SDNP. For these opportunities to be capitalized and leveraged, it is essential to put in place a more effective management system for the SDNP as outlined in the preceding section. Leveraging the synergies between UNDP's regular programmes and objectives and the SDNP will benefit sustainable human development in the country, and will facilitate access by all sectors of Honduran society to information and communication technology.

30. SDNP must sharpen its comparative advantage and competitive edge by focusing on substantive priority areas, outreach, capacity building, and on providing the "benchmarks" for an effective Honduran ICT service industry.

VIII. Lessons for the Global SDNP

31. The lessons for the global SDNP may be summarized as follows:

• the Core Team in New York must have an adequate technical and administrative critical mass to be able to provide more policy guidance, and *ad hoc* specialized technical advice in complex areas of technology, negotiations with providers of telecommunications services, state of the art business and management dimensions of SDNP, and criteria for selecting host institutions for SDNP;

• UNDP's corporate structure in New York and at the County Level must leverage the synergies of SDNP and the global and country development objectives through active participation and support of SDNP, including grant funding during the transition to autonomous and sustainable enterprises.

• ITU should become more aware of the comparative advantage SDNP offers for its initiatives regarding multipurpose community telecenters;

• In collaboration with the Regional Bureaux (including the outposted thematic service units) the country SDNPs, and the CCAD and similar regional sustainable development institutions, it is necessary to vigorously promote regional connectivity among the SDNPs and other relevant networks and databases.

• Expand policy collaboration with the Earth Council as a framework for enhanced partnerships and strategic alliances with National commissions/Councils for Sustainable Development.

Contacts

1. Zoraida Mesa, UNDP Resident Representative and UN Resident Coordinator

2. Jorge Quevera, UNDP Programme Officer

3. Francesca Jessup, UNDP Senior Advisor - Governance Programme

4. Marcelo Pisani, UNDP Consultant Telecentres and related programmes

5. Gunilla Bergh, UNDP Programme Officer

6. Raquel Isaula, SDNP Coordinator

7. Francisco Salinas, SDNP Former Coordinator

8. Erlin Palma, SDNP Former Technical Advisor

9. Dante Gabriel Ramirez, Minister of Integracion and Executive of CONADES, Office of the President

10. Arnulfo Cruz, CONADES

11. Alicia Paz, CONADES

12. Luis Labelle, Principal Advisor for Sustainable Development, CIDA

13. Luisa Hernandez, Executive Director, Honduran Business Council for Sustainable Development (CEHDESO)

14. Fernan Nunez Lagos, Manager Economic Policy, Honduran Council of Private Enterprise(COHEP)

15. Guillermo Matamoros, Economic Advisor, COHEP

16. Members of the users council (see attachment 5)

17. The independent consultants:

a. Adela Margarita Chavera (Coordinator and Strategic Planning)

b. Ana Andujar (Networks)

c. Lis Figueroa (Information Technology)

d. David Enrique Chavera (Economist)

HONDURAS: Attachment One

Nuestras ofertas de servicios para el acceso a Internet:

Tipo de Cuenta	12 meses	6 meses	3 meses	mensual
Solamente Correo Electrónico (DOS-UUCP)	600.00	360.00	210.00	80.00
Internet (1 Cuenta)	3,000.00	1,590.00	840.00	300.00
Internet (2-5Cuentas)	3,900.00	2,100.00	1,125.00	390.00
Pagina Web	2,400.00	1,320.00	720.00	260.00

Es de hacer notar que la aportación de su institución es en lempiras y ésta sera en caracter de membresia a la RED. El uso de las cuentas Internet es racionalmente ilimitado.

Se pagara L. 300.00 adicionales por instalalaci6n de los servicios

Las instituciones/organizaciones nuevas aportar6n ademas de lo anterior L. 1 00.00 por inscripción.

El pago es mediante cheque a nombre del PNUD y no se aceptarón aportaciones en efectivo.

Nota: La aportación es efectiva a partir de Junio de 1997

Requerimientos MINIMOS para conexi6n INTERNET:

Computadora con procesador 386, 66 **MHZ,** Memoria Ram 8MB, espacio de disco duro 30MB.

Modem de 14,40OBPS

Acceso a linea telefónica

Les recordamos que somos sus aliados en la lucha por el Desarrollo Sostenible del pais y necesitamos su apoyo y sugerencias en esta tarea conjunta.

Mayor información, estamos para servirles.

Lic. Raquel Isaula

Coordinadora Nacional

Col. Palmira, Costado Este Edificio Italia, Calzada Los Olivos No. 350 Tegucigalpa Honduras, C.A,

Tel. (504) 20-1115, 20-1116 Fax: (504) 20-1117 E-mail: rds@sdnhon.org.hn

HONDURAS: Attachment Two

Proveedores de Servicios Internet

Proveedor	Cta. Unica	Hora/mes	Costo en $ +7%	Hora adicional en $	Observaciones	Dirección	Dominio	Telef Fax
ntertel ntemation al Communic atios S. A.	Basica	20	20.00/mes	1.00		Col. Florencia Sur, Boulevard Suyapa,#3 752, Tegucigalp a Col. Jartdines del Valle Boulevard Principal I cuadra delante Iglesia	intertel.hn E- mail: jrfalck@simon.int ertel .hn http:// www.intertel.hn	35-8043 8700 56-1740 1760

						Católica, San Pedro Sula		
	Plan 55	Ilimitado	55.00 mes		Siempre que use racionalmente depues de 120 horas $2.00 por hora adicional.			
	Corporativa	120	65.00/mes	1.00	3 Ctas.			
	Corporativa	150	75.00	1.00	5 Ctas.			
	Homepage		desde 35.00 /por mes		Con dominio virtual $ 1 00.00 adicinales por mes			
Cedanet Centromatic Datum nternet	Normal	20	30.00	1.00	Cuenta de coffeo adicional $ 1 0.00	Boulevard Suyapa, Edificio Lisboa No. 142 1, Apartado portal 1502, Tegucigalpa	datum.hn e-mail: ceda@datum.hn http://www.datum.hn	32-1190 6555
	Ilimitado	720	50.00	N/A	I mes gratis si paga un ano por adelantado			
	3 Ctas.	66	9 1.00 / mes	1.00				
	5 Ctas.	110	130.00 / mes	1.00				
	10 Ctas.	220	240.00 / mes	1.00				
	Instalaciony entrenamicto		En Datum $10.00 Cliente-ciudad $20.00		Maquina Adicional $50.00 c/u por transports fuera de la ciudad Lps.			

			Cliente-fuera $30.00		2.15/Km			
roveedor	**Cta. Unica**	**Hora/mes**	**Costo en $ +7%**	**Hora adicional en $**	**Observaciones**	**Dirección**	**Dominio**	**Tele Fax**
edanet entromatic atum ternet	Home page, plan ejecutivo	1-4 mb Diseno segun cotización, cargo mensual de $35.00/rnb				Boulevard Suyapa, Edificio Lisboa No. 142 1, Apartado portal 1502, Tegucigalpa	datum.hn e-mail: ceda@datum.hn http://www.datum.hn	32-119 655
	Home page, plan premier	5 mb o mas cargo mensual de $35.00/mb			Diseno segun cotizatión			
iga ervicio de formatic a Gerentes sociados . A.	Cta. 1		10.00	1.00	$25.00 inscripción	Boulevard Morazin, Calzada Iguazu, Tegucigalpa	hondudata.hn http://www.hondudata.hn	36-947 947
	Cta. FM50		300.00/ ano		Libre de tiempo pagados por anticipado			
	Cta. FA500		500.00/ ano		Libre de fiempo pagados por anticipado, homepage gratis			
	Home page		Gratis		Consultar costo de diseno			
	Capacitación				Gratis, oferta de introducción			
bnet	Plan 15/15	15	15.00 /	1.00	Inscripción	Edif Sonisa, Col. San	gbm.hn	32-2

BM de onduras .A.			mes		$30.00	Ignacio, Tegucigalpa, Honduras	http://www.gbm.hn	32-230 191
	Plan 30/30	30	30.00 / mes	1.00	Inscripción $30.00			
	Cta. Corporativa	20	20.00 / mes	1.00	M i nimo 5 cats. ($ 1 00.00 /mes) Lps. 450.00 por instalaci6n y entrenamiento de 5 usuarios			
	Homepage		25.00 / mes		250 kb, solo texto, $35.00/hora diseno			

Proveedor	Cta. Unica	Hora/ mes	Costo en $ +7%	Hora adicional en $	Observaciones	Dirección	Dominio	Telefono/ Fax
Optimus/0ptinet	tarifa Basica	20	20.00 / mcs	1.00			optinet.hn http:Hwww.optinet.hn	36-5764/36-6761
	Tarifa Avanzada	50	38.00 / mes	1.00				
	3-5 ctas.	20 / cta.	18.00 / mes, / cta.	1.00				
	6 ctas. o mas	20 por cta.	6.00 / mes, / cta.	1.00				
	Home page 200 kb		20.00					
	home page 200-500 kb		25.00					
	home page 5OOkb-1mb		$30.00					

Globalnet	Basica	20 cta.	20.00	1.00	$20.00 por instalación capacitación incluida	Carretera Pto. Cor-tes Contiguo a EMECO, San Pedro Sula	56-1784/56-2515
	Ilimitada		30.00		Incluye cta. de correo, Cta. adicional por $ 1 0.00 mensuales		
	Corporativa		65.00		Acceso ilimitado, 3 ctas. de correo electrónico, 5 MB de espacio en disco para publicaciones, dominio virwal de su compania		
Mayanet							
Hondunet							

HONDURAS: Attachment Three

OFERTA DE SERVICIOS

Tegucigalpa 23 de Octubre, 1997

Dr. Armando Euceda

Sub Secretario Técnico Pedagógico

Secretaria de Educación

Ciudad

Estimado Dr. Euceda

De acuerdo a lo solicitado en la reunión conjunta realizada el Jueves 16 de Octubre del 997, me permito enviarle nuestra oferta de servicios de comunicación electrónica y diseno de pagina web.

A. SERVICIOS DE COMUNICACION ELECTRONICA

Estos servicios incluyen los siguientes aspectos:

1. Asignación de login y password en el servidor SDNP-HON

2. Instalación del software de comunicacio'n electronics y/o acceso a Internet

3. Capacitación técnica de la persona del Ministerio encargada del mantenimiento del equipo.

4. Conexiones tanto en Tegucigalpa como en las oficnas departamentales que cuenten con todos los requisites para realizar las conexiones

5. Soporte técnico en los servicios prestados, con atención via correo electrónico, telefono, fax o personalizada a discreción de SDNP-HON.

6. Entrega de manuales sobre el uso del correo electrónico (Pegasus Mail solamente).

7. Diseno e instalación de paginas web de acceso publico y paginas web de acceso restringido.

PLAZO

Se estipulara' un plazo para la entrega del servicio a satisfaccion del Ministerio, enfatizando que para el cumplimiento del mismo se requiere del apoyo oportuno que el Ministerio facilite a la Red, por ejemplo: Cada computadora debe tener su modem y la extension telefónica correspondiente ya instalada y funcionando adecuadamente.

SOFTWARE

Como software de acceso al Internet se utilizara'n los siguientes:

a. Netscape Navigator para navegación en Internet.

b. Pegasus Mail para correo electrónico.

Salvo aquellas personas que ya tengan instalado otro software y prefieran seguir utilizandolo se le hara' la configuración respective. Con el entendido de que la capacitación se hara solamente para el software instalado por la SDNPHON, mencionados anteriormente.

La Red brindara' el servicio de apertura de listas de correo cerradas o restringidas solamente para el personal del Ministerio. (Ej. 1. Ministro y Vice Ministro, 2. Dir. Generales y Gerencia administritativa, 3. Sub Directores y Sub Gerentes, 4. Jefes de proyectos, 5. Directores Departamentales, 6. Otros)

ATENCION

Cada usuario recibira' asistencia técnica por medio de correo electronics, telefono, fax o de manera personal de acuerdo a las necesidades que amerite el caso y adiscreción de SDNP-HON. En caso de ser necesaria, la atención personal debe solicitarse con 3 das de anticipación para llenar la programación de atención al usuario.

SERVICIO,

El nodo SDNHON no se hard responsable por interrupciones en el servicio ocasionadas o provenientes de

a. Casos fortuitos o fuerza mayor

b. Interrupciones provocadas por inestabilidad en el fluido el6ctrico

c. Interrupciones provocadas por causas naturales

d. Dañios causados a los equipos receptores (Computadoras, modems) del Ministerio de Educación que interrumpan el servicio.

e. Uso indebido del sistema por personas no capacitadas por SDNPHON.

En caso de que la interrupción sea generada por el nodo proveedor del servicio **SDNP-HON,** la administración se compromete a dar aviso al usuario por los medios que considers pertinentes, procediendo a la corrección del problema de interrupción del servicio.

El Ministerio debera comunicar al personal técnico de la Red la falta o interrupción del servicio de forma inmediata. Correra' por cuenta del usuario la responsabilidad de tomar las medidas necesarias de mantenimiento y precaución para evitar cualquier deficiencia o interrupción como parte receptors del servicio.

El Ministerio permitira el acceso del personal técnico de SDNP-HON o al que este designer en las oficinas donde estan instalados los equipos receptores por concepto de asistencia técnica o por alguna otra razon vinculada a la prestación del servicio.

REQUISITOS MINIMOS DE CONEXION

Computadora con procesador 386, 66 MHZ, Memoria Ram 8MB, espacio disponible de disco duro 30MB.

Modem de 14,40OBPS

Acceso a linea telefónica

COSTOS

Se mantendran los precios ofertados por un periodo de 15 dias.

· Lps. 300.00 por cada conexión electronics por computadora, ya sea esta uucp o intemet mas la inducción.

· Lps. 3,900.00 / año de 2 - 5 computadoras con el servicio de Internet completo.

· Lps. 600.00 / año por cada una de las conexiones de correo electronics (UUCP).

. Lps. 1 00.00 / año por la inscripción de cada una de las cuentas.

· Lps. 2,400.00 / año por el hospedaje de paginas web.

CUADRO RESUMEN

Tipo de Servicio	Valor Unidad	Cantidad	Valor Total	Observaciones

	L.		L.
Inscripción por computadora	100.00		
Conexión Correo Electrónico e Internet mas inducción por computadora	300.00		
Servicio Correo Electrónico (LTUCP) anual	600.00		
Servicio Internet 2-5 cuentas, anual	3,900.00		
Capacitación grupal maximo IO personas (precio por participante)	675.00		4 horas, Manuales, Coffee Break, Diploma
Demostración	6,600.00		
Hospedaje Pag. WEB	2,400.00		
Paginas Web en US$		32.50	
Opción A		25.00	
Opción B			
Viaticos fuera de Teg			

La organización de la Demostración y la logistica sera' responsabilidad del Ministerio, La Red se compromete a proporcionar el material de apoyo (Instructivo, data show, Retroproyector, Computadora, modems, conexión electronica, expositores).

El Ministerio asumira los viaticos correspondientes por el traslado de la persona que hara las conexiones en los departamentos.

B. DISESO Y LEVANTAMIENTO DE PAGINAS WEB

Para el diseño de las pa'ginas web se solicita que la infonnación, graficos, fotografias y detalles sobre la diagramación de las mismas se proporcione con quince dias de anticipación y para lo cual se nombre a una persona enlace responsable dentro del ministerio para el seguimiento o mantenimiento de la misma.

La diagramación de la pa'gina web involucra un trabajo de cerca con nuestros clientes en el diseño de sus paginas y no solo la incorporación de la información que nos brindan. También hacemos un estudio intensive de la Web y exploramos sus vastos recursos para localizar enlaces e información que estén directamente relacionados con las actividades e intereses de nuestros clientes.

Una vez que la pagina ha sido publicada nos aseguramos de que su "sitio" esté en continuo monitoreo y actualizado en una base regular o tan seguido como el cliente lo requiera según las condiciones contratadas. Nuestros servicios incluyen mercadeo y promoción constantes de su Web Page entre los usuarios del Internet.

Ademas las paginas se programaran de tal forma que solo con las claves correctas sean accesadas. De cualquier otra forma se negara el acceso a ellas a personas no autorizadas.

OPCION I

Precio por pagina: US$32.50 e incluye:

· Diseño y levantamiento de la pa'gina principal con las opciones de "Frames" y "No frames".

· Digitalización de hasta 4 imagenes tamaño postal, incorporación a la pagina principal y su levantamiento.

· Creación del "Mapa del Sitio", su levantamiento o actualización

· Contador de visitantes.

· Botones de navegación interna.

· Tantos enlaces como sean apropiados.

. Suscribir la pagina web a 1 0 buscadores y/o indices web reconocidos.

OPCION 2

Precio de la pagina: US$25.00 e incluye:

· En el caso de paginas solo de texto (sin fotograffas ni graficos), proporcionando el documents base en diskette nuestros clientes, diagramadas en un formato estandar previamente establecido.

· Botones de navegación interna.

. Creación del "Mapa del Sitio", su levantamiento o actualización.

OTROS SERVICIOS

· Digitalización de imagenes tamaño postal: US$10.00 c/u

· Thumbnails (fconos de fotograffas): US$5.00 c/u.

· Formularios o encuestas: US$15.00 c/u (precio base para formularies de complejidad normal).

· Dominio del tipo su_organización.base.org (cubre un año calendario Enero-Diciembre), $15.00.

Para que pueda establecer un marco de referencia en cuanto a precios y servicios, a continuación le proporcionamos los precios de la competencia:

Intuitive Net Designs

http://intuitivenetdesiqns.com/services.html

Tipo de Pagina Rango de Precio

Tasa por hora $75-$150

Home Page sin frames $200-$500

Solo texto $75-$150

Solo texto con enlaces $75-$200

Solo texto con graficos $100-$250

Frames (hasta 5 paginas) $250-$750

ETWPS

http://www.etwi)s.com/desig n3/frrbotto 1. htm#Startu 1)

Paquete de Arranque $1 00.00

Incluye:

· 1 diseho de pagina y diagrmación.

· Levantamiento de texto

· Rastreo electrónico de dos fotograffas o disefio de 1 gr6fico.

· Edici6n del grafico

· Botones y reglas.

. Un enlace a otras paginas de internet

. Un enlace a su cuenta existente de correo electrónico

Affordable Web Site Solutions

http://www.hairynet.com/prices.htm

· Pagina base Page $25 : 1 fotografla y un logo y hasta 100 palabras de text

· Pagina normal $50: 5 fotograffas y hasta 250 palabras de texto.

· Pagina Deluxe $75 : Hasta 8 fotograffas y hasta 750 palabras de texto.

· Incorporar frames: mismo precio que una pagina extra mas $25

Emerald Web Trader

http://www.ewtrader.com/quote page.htm

$80/pagina

· Texto de hasta 150 palabras.

· Un grafico o logo.

. 2 fotograflas.

· 3 enlaces a otras paginas.

GBM

http://www.cibm.hn

0 25OKB solo de texto, $35.00/hora de diseño

Intertel

http://www.intertel.hn

0 Entre $200.00 y $300.00/pagina según la complejidad de la pagina.

Para proceder con la cancelación de estos servicios se emitira'n los cheques a nombre del PNUD. 50% del pago por adelantado y el otro 50% restante contra entrega o al alcanzar la fecha estipulada de finalización, esto u'ltimo en caso de atrasos atribuibles a la Secretaria de Educación.

Sera un placer para nuestro equipo poder darle un servicio de mucha eficiencia y confiabilidad. Para cualquier observación y / o consulta pude escribimos a: raquel@,sdnhon.org.hn, o llamamos a los telefonos: 20 - *1115* 20 - 1116, Fax 20 - 1117.

Esperando poder servirle,

Raquel Isaula

Coordinadora Nacional

PRDS - Honduras / PNUD

Col. Paimira, Costado Este Edificio Italia, Calzada Los Olivos No. 350 Tegucigalpa Honduras, C.A,

Tel. (504) 20-1115, 20-1116 Fax: (504) 20-1117 E-mail: rds@sdnhon.org.hn

HONDURAS: Attachment Four

EQUIPMENT

· Una computadora Micron Millenia Pro 2 con altos recursos de memoria y procesamiento (Millenia Owner's Manual) utilizada como Servidor de Correo y Servidor WEB, su DNS (Domain Name System) es **sdnhon.org.hn.**

· Una computadora Micron Millenia Pro 2 Plus, con altos recursos de memoria y procesamiento (Millenia Owner's Manual) a la cual se le esta haciendo una actualización del sistema operative.

· Un Router Cisco 2500, (enrutador) disposivo especializado para monitorear y enrutar los datos hacia su destino buscando vias mas rapidas de llegada.

· Un Modem RAD ASM 20 con capacidad para 1.44 Kbps usado para el enlace con Hondutel, con linea dedicada a una velocidad de 64 Kbps.

· Dieciocho modems USRobotics de 33.6 Kbps, siete modems USRobotics de 14.4 Kbps y dos modems Zyxel de 14.4 Kbps; actualmente estan conectados dieciséis USRobotics de 33.6 Kbps para cuentas intemet, dos modems Zyxel para cuentas uucp y uno USRobotics de 14.4 Kbps para Fax.

· Un Hub (multipuertos) de dieciocho puertos, utilizado para interconectar los diferentes componentes de la red (servidores, router, port master), para intercambio de datos entre todas las partes conectadas.

· Un Port Master de veinticuatro puertos que sirve para incrementar el numero de modems para servicio a usuarios.

· Una Computadora Micron Millenia Plus (Millenia Owner's Manual), usada para funciones administrativas y demostraciones de los servicios de Internet en seminaries.

· Una Computadora Epson EQUITY 386SX/16 PLUS, que no esta siendo usada.

· Computadora Laptop Toshiba en mal estado.

· Scanner HP 4C, usado para captura de imagenes y texto a ser utilizados en el diseño de paginas web.

· Dos impresoras: Impresora Laser BP 5M e Impresora matricial Epson Action Printer ESC/P2.

· Cuatro UPS con capacidad de 800 y 600 Kwatts que con la cantidad de equipo conectado sólo pueden dar soporte sin energia treinta minutos.

· Se cuenta con un bloque de sesenta y cuatro direcciones IP asignadas, lo que pen-nite incrementar los recursos y equipo actuates para los servicios.

· Con el equipo actual se da servicio a doscientos setenta y cinco usuarios entre cuentas intemet y uucp y por esta razón no es conveniente tener una computadora como linico servidor (Web, DNS, Correo, etc.) porque constitute un punto medular sumamente débil si esta falla; no hay otra que se este usando como servidor-respaldo.

· El equipo de cómputo asignado para funciones administrativas y demostraciones es insuficiente.

· La Red de Desarrollo Sostenible no posee soporte técnico local para su equipo ya que actualmente no hay en Honduras distribuidores autorizados para la marca Millenia, unicamente el distribuidor en los Estados Unidos, por lo que no se cuenta con un servicio de reparación imnediato ya que el equipo tendria que enviarse fuera del pais para su reparación, o esperar que el proveedor envie la parte dafiada, causando atrasos en el trabajo.

· No se cuenta con un contrato de mantenimiento para equipo.

· No se cuenta con un plan de seguros para equipo, aunque se estdn haciendo las gestiones para adquirir uno.

· Las instalaciones del equipo no son seguras, cableado a la vista, poco organizado, no hay suflcientes LTPS, ni conectores el6ctricos de pared.

4.1.3.2 Programas

***** Sistema Operativo del servidor:

Red Hat Linux versi6n 4.2

Algunas caracteristicas (Running Linux):

· Sistema operative de la familia UNIX

· Especializado para multitareas y multiprocesamiento

· Linux ha sido desarrollado para ser instalado en muchas clases de equipo y operar en microcomputadoras, desde procesadores 80386SX Intel hasta Pentium Intel, o con procesadores Cyrix y AMD en clones, y con 2MB de memoria RAM como minimo.

· Requiere poco espacio en disco duro de 10 a 20 MB aproximadamente

· Alta capacidad en el manejo de aplicaciones

· Puede ser obtenido gratuitamente en intemet

. Esta siendo actualizado y mejorado constantemente.

* Los Servidores que se encuentran activos con los programas actuates son: servidor WEB, Servidor de Correo, Servidor de Nombres y Servidor Radius.

* Se cuenta con mecanismos de control de acceso para los usuarios a través del. Servidor Radius (Radius Administrator’s Guide), que controla el Port Master, realizando funciones de autenticación, autorización y estadisticas de conexión.

* No hay servidores para FTP, grupos de noticias y conversaciones.

Existe una copia de respaldo de los programas que contiene:

· Procesos de inicialización

· Configuración del servidor de nombres (DNS)

· Configuración de HTTPD (servidor WEB)

. Configuración de Radius

· Procesos para controlar modems

· Configuración de cuentas de los usuarios

· Configuración del servidor de correo

. Configuración de listas de discusión

· Configuración de estadisticas de conexión de usuarios llevadas por Radius

· Bitdcoras del sistema

· Pdginas Web que estan en linea

· Mensajes de usuarios internet y uucp que no han sido recogidos

· Otros archivos.

Esta copia se realiza en la unidad iomega jaz con 1GB de capacidad, dos veces por semana. Existe una segunda copia de respaldo mas pequeña del servidor que contiene la información mds sensible de la anterior:

· Procesos de inicialización

* Configuración del servidor de nombres (DNS)

· Configuración de HTTPD (servidor WEB)

· Configuración de Radius

· Procesos para controlar modems

· Configuración de cuentas de los usuarios

· Configuración del servidor de correo

· Configuración de listas de discusión

. Paginas Web que estan en linea

Esta copia se realiza en la unidad iomega zip con I OOMB, una vez por semana.

· Existe una copia en disquetes de la infonnación que se guarda en la computadora usada para funciones administrativas y demostraciones, la que se hace una vez por mes.

· No hay una adecuada sistematización del proceso de las copias de respaldo donde se incluya:

· Guardar las copias de respaldo en lugar seguro.

· Un manual de procedimientos para hacer/restaurar copias de respaldo.

· Una segunda copia de respaldo exacta de la unidad iomega jaz.

· Calendarización escrita de las copias de respaldo (fecha, hora).

· Se cuenta con disquetes arrancables para Red Hat Linux 4.2, Disco Compacto con la versión Red Hat Linux 4.2, Discos Compactos con otras versiones de Linux.

· Se cuenta con manuales para instalación de Red Hat Linux 4.2 (User's Guide)

· Se cuenta con literature extra de apoyo para Linux (Running Linux)

· Se cuenta con licencias de Windows 95, MSOffice 97, Front Page y otros.

· La Red de Desarrollo Sostenible no posee soporte local, porque en nuestro medio no existen servicios especializados para Linux. Todas las especificaciones y ayudas en las configuraciones sobre programas y problemas relacionados con estos, vienen de Nueva York.

· No hay sistema contrafuegos (firewalls) que sirve para proteger la red de intrusiones no autorizadas; pero se realizan regulan-nente monitoreos de los usuarios que accesan el sistema y sus acciones.

4.1.3.3 Enlace del Nodo

***** El ancho de banda del enlace es "la cantidad de información que se puede enviar a través de una conexión. Se mide norrnalmente en bits por segundo (bps)". Este enlace para Honduras via Hondutel es de 512 Kbps, (Encargado Inforrndtica Hondutel), no cumple con la velocidad requerida por lineas Tl que es de 1.544 Mbps como minimo, y este tipo de linea aun no es lo suficientemente rapida para soportar video con movimientos a pantalla completa en tiempo real. Esto ocurre porque Hondutel todavia no cuenta con la infraestructura necesaria para mejorar el enlace.

* El ancho de banda del enlace entre Hondutel y el nodo Red de Desarrollo Sostenible es 64Kbps (Asesora Tecnica PRDS-HON), ya que Hondutel ofrece únicamente enlaces de 64 y 128 kbps, esta es una limitante al momento incrementar la conectividad, porque este tipo de enlace se congestiona rapidamente en la medida en que aumenta la cantidad de usuarios conectados por consiguiente el trafico de información y el tiempo de respuesta se vuelve lento.

* Las velocidades promedio de conexión de los usuarios oscilan entre 2,400 y 56,400 bps, factor que depende de:

· La velocidad a la que estdn configurados los modems en el servidor, para dar el servicio Internet que es de 115,200 bps y para uucp 14400 bps.

· Hora en que se realice la conexión (horas pico la respuesta es lenta)

· Tipo de modem del usuario y de PRDS (velocidad, marca)

· Calidad de la linea telefónica usuario y PRDS

· Capacidad de los recursos de equipo del usuario (Memoria RAM, Microprocesador).

En la figura No. 2 se muestra el diagrama de la conexión fisica del nodo de la Red.

HONDURAS: Attachment Four

EQUIPMENT

· Una computadora Micron Millenia Pro 2 con altos recursos de memoria y procesamiento (Millenia Owner's Manual) utilizada como Servidor de Correo y Servidor WEB, su DNS (Domain Name System) es **sdnhon.org.hn.**

· Una computadora Micron Millenia Pro 2 Plus, con altos recursos de memoria y procesamiento (Millenia Owner's Manual) a la cual se le esta haciendo una actualización del sistema operative.

· Un Router Cisco 2500, (enrutador) disposivo especializado para monitorear y enrutar los datos hacia su destino buscando vias mas rapidas de llegada.

· Un Modem RAD ASM 20 con capacidad para 1.44 Kbps usado para el enlace con Hondutel, con linea dedicada a una velocidad de 64 Kbps.

· Dieciocho modems USRobotics de 33.6 Kbps, siete modems USRobotics de 14.4 Kbps y dos modems Zyxel de 14.4 Kbps; actualmente estan conectados dieciséis USRobotics de 33.6 Kbps para cuentas intemet, dos modems Zyxel para cuentas uucp y uno USRobotics de 14.4 Kbps para Fax.

· Un Hub (multipuertos) de dieciocho puertos, utilizado para interconectar los diferentes componentes de la red (servidores, router, port master), para intercambio de datos entre todas las partes conectadas.

· Un Port Master de veinticuatro puertos que sirve para incrementar el numero de modems para servicio a usuarios.

· Una Computadora Micron Millenia Plus (Millenia Owner's Manual), usada para funciones administrativas y demostraciones de los servicios de Internet en seminaries.

· Una Computadora Epson EQUITY 386SX/16 PLUS, que no esta siendo usada.

· Computadora Laptop Toshiba en mal estado.

· Scanner HP 4C, usado para captura de imagenes y texto a ser utilizados en el diseño de paginas web.

· Dos impresoras: Impresora Laser BP 5M e Impresora matricial Epson Action Printer ESC/P2.

· Cuatro UPS con capacidad de 800 y 600 Kwatts que con la cantidad de equipo conectado sólo pueden dar soporte sin energia treinta minutos.

· Se cuenta con un bloque de sesenta y cuatro direcciones IP asignadas, lo que pen-nite incrementar los recursos y equipo actuates para los servicios.

· Con el equipo actual se da servicio a doscientos setenta y cinco usuarios entre cuentas intemet y uucp y por esta razón no es conveniente tener una computadora como linico servidor (Web, DNS, Correo, etc.) porque constitute un punto medular sumamente débil si esta falla; no hay otra que se este usando como servidor-respaldo.

· El equipo de cómputo asignado para funciones administrativas y demostraciones es insuficiente.

· La Red de Desarrollo Sostenible no posee soporte técnico local para su equipo ya que actualmente no hay en Honduras distribuidores autorizados para la marca Millenia, unicamente el

distribuidor en los Estados Unidos, por lo que no se cuenta con un servicio de reparación imnediato ya que el equipo tendria que enviarse fuera del pais para su reparación, o esperar que el proveedor envie la parte dafiada, causando atrasos en el trabajo.

· No se cuenta con un contrato de mantenimiento para equipo.

· No se cuenta con un plan de seguros para equipo, aunque se estdn haciendo las gestiones para adquirir uno.

· Las instalaciones del equipo no son seguras, cableado a la vista, poco organizado, no hay suflcientes LTPS, ni conectores el6ctricos de pared.

4.1.3.2 Programas

***** Sistema Operativo del servidor:

Red Hat Linux versi6n 4.2

Algunas caracteristicas (Running Linux):

· Sistema operative de la familia UNIX

· Especializado para multitareas y multiprocesamiento

· Linux ha sido desarrollado para ser instalado en muchas clases de equipo y operar en microcomputadoras, desde procesadores 80386SX Intel hasta Pentium Intel, o con procesadores Cyrix y AMD en clones, y con 2MB de memoria RAM como minimo.

· Requiere poco espacio en disco duro de 10 a 20 MB aproximadamente

· Alta capacidad en el manejo de aplicaciones

· Puede ser obtenido gratuitamente en intemet

. Esta siendo actualizado y mejorado constantemente.

* Los Servidores que se encuentran activos con los programas actuates son: servidor WEB, Servidor de Correo, Servidor de Nombres y Servidor Radius.

* Se cuenta con mecanismos de control de acceso para los usuarios a través del. Servidor Radius (Radius Administrator’s Guide), que controla el Port Master, realizando funciones de autenticación, autorización y estadisticas de conexión.

* No hay servidores para FTP, grupos de noticias y conversaciones.

Existe una copia de respaldo de los programas que contiene:

· Procesos de inicialización

· Configuración del servidor de nombres (DNS)

· Configuración de HTTPD (servidor WEB)

. Configuración de Radius

· Procesos para controlar modems

· Configuración de cuentas de los usuarios

· Configuración del servidor de correo

. Configuración de listas de discusión

· Configuración de estadisticas de conexión de usuarios llevadas por Radius

· Bitdcoras del sistema

· Pdginas Web que estan en linea

· Mensajes de usuarios internet y uucp que no han sido recogidos

· Otros archivos.

Esta copia se realiza en la unidad iomega jaz con 1GB de capacidad, dos veces por semana. Existe una segunda copia de respaldo mas pequeña del servidor que contiene la información mds sensible de la anterior:

· Procesos de inicialización

* Configuración del servidor de nombres (DNS)

· Configuración de HTTPD (servidor WEB)

· Configuración de Radius

· Procesos para controlar modems

· Configuración de cuentas de los usuarios

· Configuración del servidor de correo

· Configuración de listas de discusión

. Paginas Web que estan en linea

Esta copia se realiza en la unidad iomega zip con I OOMB, una vez por semana.

· Existe una copia en disquetes de la infonnación que se guarda en la computadora usada para funciones administrativas y demostraciones, la que se hace una vez por mes.

· No hay una adecuada sistematización del proceso de las copias de respaldo donde se incluya:

· Guardar las copias de respaldo en lugar seguro.

· Un manual de procedimientos para hacer/restaurar copias de respaldo.

· Una segunda copia de respaldo exacta de la unidad iomega jaz.

· Calendarización escrita de las copias de respaldo (fecha, hora).

· Se cuenta con disquetes arrancables para Red Hat Linux 4.2, Disco Compacto con la versión Red Hat Linux 4.2, Discos Compactos con otras versiones de Linux.

· Se cuenta con manuales para instalación de Red Hat Linux 4.2 (User's Guide)

· Se cuenta con literature extra de apoyo para Linux (Running Linux)

· Se cuenta con licencias de Windows 95, MSOffice 97, Front Page y otros.

· La Red de Desarrollo Sostenible no posee soporte local, porque en nuestro medio no existen servicios especializados para Linux. Todas las especificaciones y ayudas en las configuraciones sobre programas y problemas relacionados con estos, vienen de Nueva York.

· No hay sistema contrafuegos (firewalls) que sirve para proteger la red de intrusiones no autorizadas; pero se realizan regulan-nente monitoreos de los usuarios que accesan el sistema y sus acciones.

4.1.3.3 Enlace del Nodo

***** El ancho de banda del enlace es "la cantidad de información que se puede enviar a través de una conexión. Se mide norrnalmente en bits por segundo (bps)". Este enlace para Honduras via Hondutel es de 512 Kbps, (Encargado Inforrndtica Hondutel), no cumple con la velocidad requerida por lineas Tl que es de 1.544 Mbps como minimo, y este tipo de linea aun no es lo suficientemente rapida para soportar video con movimientos a pantalla completa en tiempo real. Esto ocurre porque Hondutel todavia no cuenta con la infraestructura necesaria para mejorar el enlace.

* El ancho de banda del enlace entre Hondutel y el nodo Red de Desarrollo Sostenible es 64Kbps (Asesora Tecnica PRDS-HON), ya que Hondutel ofrece únicamente enlaces de 64 y 128 kbps, esta es una limitante al momento incrementar la conectividad, porque este tipo de enlace se congestiona rapidamente en la medida en que aumenta la cantidad de usuarios conectados por consiguiente el trafico de información y el tiempo de respuesta se vuelve lento.

* Las velocidades promedio de conexión de los usuarios oscilan entre 2,400 y 56,400 bps, factor que depende de:

· La velocidad a la que estdn configurados los modems en el servidor, para dar el servicio Internet que es de 115,200 bps y para uucp 14400 bps.

· Hora en que se realice la conexión (horas pico la respuesta es lenta)

· Tipo de modem del usuario y de PRDS (velocidad, marca)

· Calidad de la linea telefónica usuario y PRDS

· Capacidad de los recursos de equipo del usuario (Memoria RAM, Microprocesador).

En la figura No. 2 se muestra el diagrama de la conexión fisica del nodo de la Red.

HONDURAS: Attachment Five

JUNTA DE USUARIOS

1.) Hector Sandoval, PNUD/LAN

Tel: 31-0216

E-mail: hsando@lan

2.) Diego Turcios Lanza , Gobierno de Honduras - Ministerio de Economia

Tel: 38-2024

3.) Andres Thomas, Comisión Cristiana de Desarrollo, Chairperson

Tel: 31-0266

E-mail: andres@ccd or andres@acceso

4.) Luis Alvarado, Comisión de los Derechos Humanos en Honduras

Tel: 37-7825

E-mail: luis@codeh

5.) Jorge Oliva, Proyecto compartir

Tel: 39-2215/39-3683

E-mail: jaoc@compartir

6.) Patricia Cervantes, Save the Children Britdnica

Tel: 32-6815

E-mail: scf@scfhon

7.) Elias Sanchez, Loma Linda/Acorde

Tel: 39-0640/388537

8.) Pedro Jimenez, Centro Internacional de Agricultura Tropical

Tel: 32-1862

E-mail: hbarreto@ciat

9.) Pedro Mejia, Jefe Depto. Telematica, Hondutel

Tel: 31-4882/32-7483/30-3131 ext. 2109

E-mail: pedro@hondutel

JAMAICA SDNP COUNTRY REPORT: 5-6 December 1997

Consultant: Michael Gucovsky

I. Project Status

1. The project document was signed on 19 November 1997 by the Government of Jamaica (Director, Technical Cooperation and Resource Planning, Planning Institute of Jamaica, Professor Elizabeth Thomas-Hope, Chair of the Steering Committee and Head of Environmental Studies at UWI), and Joachim van Braunmuhl, UNDP Resident Representative.

2. It will become operational on 15 December 1997 when the Project Coordinator, Ms. Valerie Gordon, assumes her functions. The SDNP Information Specialist, Paulette A. Meikle-taw, has also been designated and is expected to sign her contract before the end of December. The third core post, Administrative Assistant, only part-time, will come on board in January/February 1998.

3. The SDN concept was initially presented by the UNDP Resident Representative in February 1996 to the government ministers, members of the academic community, NGOs and CBOs, the private sector and other interested parties. Within six months of initial discussions, the draft feasibility study prepared by NYCOM Computer Products Limited was submitted on 22 December 1996. A Steering Committee (SC), consisting of about 12 persons representing the above-mentioned sectors, chaired by Professor Thomas-Hope, has actively accompanied the project's development through 2 December 1997 when it was dissolved. Many supported the project throughout its development stage; however, its most untiring champions have been Professor Thomas-Hope, the UNDP Resident Representative and its Programme and EDS Officers. As the project becomes operational. the SC will be replaced by a Management Board (*see below under Management*).

II. Overall Objectives

4. The long-term and immediate objectives of the project fall within the Manifesto of the PNP/Government Party to transform Jamaica into an "Information Society" - "Information Technology for All" - as a lynch-pin for decentralized, participatory, transparent and informed governance and effective participation in the Global Economy. The project will contribute to sustainable development and will benefit all sectors of Jamaican society, especially the poverty eradication programme, CBOs in small urban and rural areas, farmers, women's groups, small business and entrepreneurs. It aims to create a positive and dynamic cooperation environment of communication and information exchange system between Government, the Donor Community, the private sector, NGOs, CBOs, especially in isolated rural and urban communities.

5. SDNP will make use primarily of electronic tools. However, it will also use conventional communication means such as radio and television in order to reach a greater number of stakeholders who do not yet have access to computers and Internet. It will also establish electronic community connectivity in six parishes in partnership with other information providers.

6. Internet connectivity started only in late 1994 through UWI as part of the OAS project Red Hu

CyT, and subsequently established JamNEt, which is primarily an academic network connected to the Internet via a 64 kbps link between Kingston and the National Science Foundation (NSF) in Washington, DC. UWI's Distance Education Centre links Barbados, Jamaica and Trinidad and Tobago and most English-speaking Caribbean islands, including Belize. It has only voice at present, but from January 1998 it will be upgraded to 64 kbps for digital/voice and data (including e-mail) and two connections to Internet with its own server in Trinidad and Tobago.

7. CEPNet designed by UNEP's Caribbean Environmental Programme focuses on information systems for the management of marine and coastal resources, and is financed by a US$ 1 million grant from the IDB and $361,000 form UNDP. It has Intranet and Internet components, a query engine, a metadata platform, Web links and databases, a Web-based CIS module, and an administrative component to serve UNEP offices in 6 regional centres initially.

8. SIDSNet is another initiative launched by the Core SDNP and partially funded by the TCDC Unit in response to he 1994 Conference on Small Island States held in Barbados. As a follow-up to the December 1`996 Hemispheric Summit in Santa Cruz, Bolivia, UNDP/RBLAC and SDN will undertake a project that focuses on the content dimension of sustainable development in the region.

9. The Jamaica SDNP project will build on the above-mentioned initiatives to provide information and communications, technologies and training and their application in support of sustainable development through sustainable networking.

III. Resources and Finance

10 US $135,000 has been approved for the first year of operations expected to start on 15 December 1997. US $100,00 of total comes from UNDP funds earmarked for the Resident Coordinator, and $35,000 is a contribution form the SDNP Global Allocation. However, there are additional "in-kind" contributions which have not been valued yet; these include: the office space and related services to house the SDNP at the UWI, the partial staff time of two UWI senior professionals., and of two UNDP office professionals.

11. Additionally, at the suggestion of the SC the Government (PIOJ) will look into the possibility of allocating TRAC funds for SDNP in 1998. SDNP global is also likely to provide a consultant in January 1998 to collaborate with the Jamaica team in resolving technology, "domain", "server" and related equipment issues.

IV. Training

12. the training component will be addressed in the work programme/business plan for 1998 when the project becomes operational on 15 December 1997.

V. Equipment

13. Same as 12 above, and also see last sentence of 11 above.

VI. Project Management

14. Management of the development phase of the project by UNDP and the Chair of the SC has been exemplary and professional. A transparent and well-documented process has been followed in the commissioning of the feasibility study, management of the SC, selection of the two project staff and the institution to host the SDNP. This performance record stands out when compared with

conditions in some of the other sites visited. The clear and complete documentation reveals the professionalism and transparency that have characterized the criteria and decision-making processes to date.

15. The SC is in the process of being reconstituted as Management Board, which will convene in January 1998. This Board will maintain the members of the original SC, and will be augmented by 3-5 new members to reflect the broader range of partners in the SDNP, including for example small business, sectoral ministries, national council on sustainable development. The Board is likely to establish a small working or executive group that will meet more frequently than the Board itself.

16. The overview of the settling in of the SDNP team in the UWI site, decisions concerning equipment, "domain" and "server" issues, selection of the six parishes where SDNP nodes will be established, mobilization of additional financial resources, and of the preparation of the business plan that will guide the SDNP in its transition to an autonomous and sustainable enterprise are expected to be the focus of attention of the Board in 1998.

VII. Challenges and Opportunities

17. The main challenge, which also offers unique opportunities, is to position the SDNP as a major instrument facilitating the transformation of Jamaica into an information society providing information technology for all, which is the stated goal of the new government. Consequently, the SDNP will come under severe pressure to accelerate its delivery and overall performance, and become a key actor in the evolving ICT government policy and in the growing commercial IPS market.

18. Whatever its local character and the corporate structure of the SDNP autonomous, sustainable and non-profit enterprise will be , it will *de facto* be required to operate like a commercial enterprise marketing products that have a comparative advantage, and provide value-added, over strictly commercial ICT enterprises. It will in fact have to operate in a most cost-effective fashion, with the excess of revenues over operating costs reinvested and/or used to fund initially services that may not be able to recover full cost.

19. During the consolidation and transition phase in 1998 and possibly, 1999, the SDNP will have to count on more grant funds from UNDP/TRAC, the Global SDNP budget, government, and others. Such funds could in part be justified by ICT services that SDNP would provide to such programmes, and to the UN System and government to enhance their ability to manage effectively development cooperation, especially its external funding components, in an integrated manner.

20. The partnership and strategic alliance between the UWI and SDNP, and some other key partners, should facilitate the above. Likewise, the timely preparation of the Business Plan, which should include the normal market, financial and institutional/ management components, will also be a key tool in meeting the challenges and opportunities SDNP faces in Jamaica. A specialized Jamaican consultant might be used in the preparation of the Business Plan.

21 As the SDNP takes off, Jamaica could meet another challenge and unique opportunity in providing leadership in rationalizing and promoting regional ICT initiatives, including the SIDSNet.

VII. Lessons for the Global SDNP

22. the importance of active involvement by the UNDP office, including the Resident Representative and senior colleagues, in the development phase of the country SDNP is critical.

23. Consequently, the Regional Bureau must be fully committed to ICT as a tool for achieving

UNDP's overall mission and the specific programme objectives at the country, sub-regional and regional levels. The Regional Bureaux should, therefore, provide appropriate guidelines to the Country Offices. This could be reinforced by providing similar guidelines to the Resident Coordinators.

24. ICT should be an integral part of UNDP's programme.

25. From the initial development stages of an SDNP in a country, technical and substantive, as well as managerial, institutional and sustainability issues must be addressed. The global SDNP could provide policy guidelines, which should include *inter-alia* emphasis on standards for documenting systematic and transparent decision-making, and options for organizational and management arrangements.

26. Adequate grant funding must be assured for both the development and consolidation phases.

27. Short-term specialized consultants regarding SDNP technology, "domain" and related issues are required during the development phase. Likewise, such consultancies are required for the preparation of the Business Plan.

Contacts

1. UNDP

a. Joachim von Braunmuhl, Resident Representative

b. Norma Messam, Programme Officer

c. Arlene Bailey, Information Technology Officer

2. University of West Indies (UWI)

a. Sir Alister McIntyre, Vice-Chancellor

b. Kenneth O. Hall, Pro Vice-Chancellor and Principal, Mona Campus

c. Professor Elisabeth Thomas-Hope, Chair, Environmental Studies and Chair, SDNP Steering Committee

d. Keith Manison, Director, Information Systems Unit

3. Members Steering Committee

a. Rollin Alveranga, Office of the Prime Minister (OPM)

b. Jaslin U. Salmon, OPM

c. Marcia Hextall, LIFE Programme

d. Mark Rammeleare, Manager, Natural Resources Conservation Authority

e. Terry Williams, Chairman, Bluefield People's Organization

f. Keith Meller, Local Government Reform Unit (LGRU)

CAMEROON SDNP COUNTRY REPORT, December 7 1997

Consultant: Mike Jensen

I. Project Status

1. The project (CMR/96/001/01/09;INT/95/G81) was finalised in early 1996, although the first staff started work in mid-April 96. The project is fully operational but is currently only a 2 year project due to end in April 1998.

2. The SDNP in Cameroon was an outgrowth of the National Environmental Management Plan (NEMP) formulated in 1994 by the Ministry of Economy and Finance and the official project partner from the Government of the Republic of Cameroon (GOC) is the Ministry of Economy and Finance (international co-operation department).

3. Although the Ministry of Environment was initially planned to be the executing agency, problems with their capacity to manage the project resulted in UNOPS being selected as the project executor, responsible for financial control. The implementing agency and host for the SDNP Cameroon office is the Automation and Control Laboratory (ACL), located in the Department of Electrical Engineering at the National Higher School of Engineering which is part of the Ecole Nationale Superieure Polytechnique in downtown Yaounde.

II. Overall Objectives

4. When the SDNP project in Cameroon was conceived, there were no ISPs in the country and none in sight. There was a store-and-forward email service offered by the same institution (ACL), which was part of the motivation for initial collaboration. Since then, the situation has changed substantially, the PTO has opened a full ISP with plans to extend it nationally, and there are a number of private ISPs.

5. The project clearly understands the need to maintain a dynamic strategy which responds to the changing environment in the country - in particular, the need to become owned by the local development community, to build information resources and to move away from a focus on the provision of access and connectivity - a role which is being rapidly assumed by the PTO and the private sector. Government and Academic ISPs have also been recently established.

6. Notwithstanding this, SDNP CAMEROON is likely to continue to play an important role in providing access to some of the NGO sector and others who cannot afford the current cost of access. How long this continues will paradoxically, in part depend on the effectiveness of SDNP CAMEROON's other activities in pushing for policy changes in Government and encouraging support from other agencies. For example, policy changes within the Ministry of Posts and Telecommunications regarding ACTEL (its commercial service) implementing a nationwide local call tariff for dialup Internet access would have a major impact on SDNP CAMEROON's strategy for supporting low cost access outside of the capital, as would the establishment of a major integrated ICT support strategy from the international development assistance community.

7. Nevertheless, in general it can be said that SDNP CAMEROON will most likely evolve away from a single focus on ICTs, and become a wider forum for the sustainable development community to exchange ideas and experience, improve their outreach to the public and sponsors and to promote sustainable development policy changes in government. Using ICTs will clearly play an important role in helping to achieve these goals, but other activities will also likely take place, such as public debates or 'edutainment' events, seminars & training workshops, printed newsletters and media campaigns etc.

8. These objectives are encompassed in proposal developed by the project for a 'SDNP Cameroon Sustainability Watch Network' (SWAN) which is seen as a natural extension of SDNP Cameroon's overall goal to promote the exchange of information on sustainable development.

9. As a recent indication of the moves in this direction, the project has just signed a memorandum of understanding with Mount Cameroun Project - Limbe to establish a home page for the Bio-diversity Conservation Center in Limbe. SDNP Cameroon is also acting as the communications hub for the World Bank's Central African REIMP project and extensive training of the REIMP users has been carried out.

III. Resources, Finances and Sustainability

10. SDNP CAMEROON is the most advanced of all the SDNP projects in Sub-Saharan Africa and appears to be on track for developing a sound institutional footing and long term self-sufficiency if further short-term support can be found.

11. The total budget for the 2 year project is US$250 000 - ($140,500 in year one and $ 109,500 in year two). The UNDP contribution is $187 000, with the remaining $63 000 from GOC. UNDP is expected to disburse $123,000 in the first year, with about $66 000 going toward office and PC equipment and supplies.

12. Aside from the supply of equipment (see below), ongoing disbursements have been slow due to the UNDP/UNOPS system of project management. Although the two main staff were recruited in April 96 and started work then, their contracts were not signed until September and there seems to be no instrument at UNOPS disposal to disburse funds for the 4 months that were worked without contract. Likewise, there is no SDNP Cameroon bank account, so the revenue generated from sale of services (over 5 million CFA so far) has to go back to UNOPS and there is no simple way of disbursing it again. Funds have been needed in particular to pay for transport to provide on-site support, but no petty cash or transport item was envisaged in the original budget.

13. The SDNP Cameroon members (users) have taken over responsibility for organizing member's meetings and if the proposed Foundation can be quickly established, SDNP Cameroon will be on track for becoming self-sustaining by assuming the role described above.

14. In order to be able to quickly move on from the constraints of the current financial administrative system, and to provide the resources needed to lay the ground-work for the establishment of the Foundation, SDNP Cameroon needs the commitment of UNDP funds for an additional year which should be allocated in a manner which allows for a simpler process for expenditures, including the petty cash necessary for transport.

15. With the expectation that SDNP CAMEROON will become an independent foundation, the procedures and the handover from the Ministry of Finance and the Management Committee will need to be worked out.

16. In addition, the relationship with ACL/ESNP and UniNet needs to be concretised. Until this is

done, operating costs cannot be fully assessed and revenue generation requirements will remain indeterminate.

17. The SDNP CAMEROON is institutionally well connected and physically well situated at the Polytechnic on the University of Younde campus. The building provides ready access to the largest pool of expertise in the country (including low cost technical support from student micro-entrepreneurs), as well as broadband Internet access across the campus.

IV. Training

18. So far little training outside the core team has taken place. The network information specialist has trained the SDNP Cameroon co-ordinator and the administrative assistant to use the Internet and office software applications (Netscape, Mail, PPP dialer, MS-Word etc). He also provided Internet navigation training using the dialup accounts obtained from Intelcam.

19. Training is planned next year for the co-ordinator and administrative assistant in basic system administrative functions such as adding accounts and examining log files to determine user problems.

20. Subscribers to the email service are trained in the use of email when the account is set up. Because of the lack of transport, these users have had to bring in their equipment to the SDNP office to receive training.

21. Web page production and making use of advance email functions such as decoding manual file attachments has been requested by the users.

V. Equipment

22. Equipment was purchased in the US through the normal SDNP HQ procurement process. 2 Pentium desktop PCs were supplied, one laptop, a lazer printer and 6 modems. Obtaining equipment from the US was not seen as a particular problem. The University has some computer maintenance skills.

VI. Project Management

23. The Management Committee comprising UNDP, Ministry of the Environment and Forests, Ministry of Economy and Finance, Ministry of Telecommunications, CENADI, KORUP, National Assembly, ACL, Countryside Foundation for Sustainable Development (current chair), Inades Formation, Saild, Cameroon Development Corporation and Intelcam are responsible for the project.

24. The precise relationship between the SDNP Cameroon members (users) group and the Management Committee has not been defined, and this will need to be established as the project moves into being an independent foundation.

VII. Problems and Opportunities

25. A Tripartite review is scheduled shortly for the project, this should resolve many of the outstanding issues described above and finalise the trajectory of the project for the next year.

26. There is sound vision, strategic thinking, and management expertise within the SDNP CAMEROON co-ordinating unit (CU) which should be able to overcome any existing or emerging

obstacles. The SWAN proposal goes a long way to identifying the specific activities necessary to become a self-sustaining foundation focussing on facilitating the flow of development information.

27. As yet however revenue mix from ongoing services to the community vs funding from special projects is still unclear. The dynamism and leadership shown by Dr Ngenge indicates that the process of defining this will be successful, but it is worrying that the driving force behind the project is a single individual.

28. There are a large number of both national and international actors on the ICT stage in Cameroon and SDNP CAMEROON will both need to be cognizant of their plans and can play an important role in ensuring collaboration between the stakeholders.

29. In particular it will be important to develop a close relationship with CENADI's new 'government ISP' and with the Centre Syfed (AUPELF/UREF/REFER) to encourage their support for development community - for example, collaboration on local content development, training workshops and providing access to the development community.

30. As yet there has not been much focus within the project on pushing for policy changes within government. This could be improved (see below).

VII. Lessons Learned

31. In a very under-developed country such as Cameroon, the sustainable development programme is a potentially powerful force for self-help and for uniting diverse stakeholders in a single forum for helping accelerate national development.

32. With the awareness of the importance of ICTs in this process and given the cross-sectoral nature of SDNP's management committee and user group, sustainable development would appear to be an ideal banner within which to advocate policy changes which improve access to ICTs. This suggest that SDNP members should be encouraged to become familiar with documents such as the AISI framework and to be able to use the national government commitments to the Information Society objectives to push for appropriate policy changes. In relation to this, it may be worth considering the possibility of helping to begin the process of developing an integrated AISI approach to national information and communication infrastructure planning which brings together all of the national and international stakeholders. If a proposal for this was developed, international assistance could likely be found.

33. The high penetration of telephone shops in Cameroon and many other African countries suggest that SDNP Cameroon could be an important testing ground for developing a sensitization programme for the public and 'teleboutique' owners - the communication and information access possibilities that could be made available through email/web at teleboutiques. This would also require investigating the possibilities of providing a low cost offline email and online public access web browser for teleboutiques which would include the necessary real-time billing and administrative tools.

34. The accessibility to students on campus suggest that this project and perhaps others located near Universities should consider developing a student internship programme that will provide a low cost source of on-site content building and digitization.

35. To take the place of time consuming meetings, establishing local mailing lists and the culture of their use by the committees and interest groups will be necessary in Cameroon and perhaps at other sites.

36. Now that the Cameroon SDNP server is available on the Internet and can be supported remotely, it may be necessary to develop a policy and process for use of technical skills (both locally and from New York) on an ad-hoc basis when needed, rather than employing full time network technicians - this would substantially improve the funds available for content developement and other activities necessary to develop the foundation.

Contacts:

a. Mr. Aurelien Agbenonci, DRR/UNDP Tel 22 50 35

b. Mr. Timothy Besingi, SDA/UNDP Tel 22 50 35

c. Mr Oumarou, CAMNET/INTELCAM Tel 23 40 65

d. Dr Efoua Fouda, Centre National de la Development des

Technologies

(CNDT), Tel 23 60 44

e. Mr Ebot, Administrator UNINET Tel 23 03 96

f. Mr Kane Kane J. P., Director Centre National de Developpement de l'Informatique (CENADI) Tel 22 07 66

g. Mr Chretien Talelo, DG DITOF, ctalelo@mail.ditof.cm + Mr Evina Abessolo, Director DITOF, evinaac@mail.ditof.cm (www.ditof.cm www.inforcosa.fr) Tel 20 48 93

h. Mr. Boulaise, Sub-Director DCET/MINEFI Tel 22 64 13

i. Dr Tonye Emmanuel, LETS, Polytechnic Yaounde Tel 22 86 20

j. Mr. Jean Claude Nwaha, ARR (P)/UNDP Tel 22 50 35

k. Mrs Urmiah Lynch, ARR(O)/ UNDP

l. Mrs. Isabel Turmaine, Director AUPELF/Centre Syfed REFER Tel 23 97 45 m. Mr Wawa Ngenge, SDNP Cameroon Co-ordinator n. Mr Derek Asoh, SDNP Cameroon Network and Information Technician

---

MAURITANIA SDNP COUNTRY REPORT, December 9 1997

Consultant: Mike Jensen

I. Project Status

1. The project (MAU/97/010/A/01/31 MAU/97/009/A/01/99) has been approved in principle by both UNDP and the Government of the Islamic Republic of Mauritania (GRIM), but official signing for the

three-year initiative has yet to take place. The President of Mauritania is highly Internet aware and top levels of government are likely to support the project.

2. The Mauritania project is a new direction for SDNP, being the first joint project between the UNDP Africa Bureau's Internet Initiative for Africa (IIA) and SDNP. SDNP provided the lead consultant for the development of the project proposal, partly because of the extensive preparation efforts SDNP had already made before the inception of the IIA.

3. A project identification mission took place in July 1997, followed by an awareness raising and promotion mission specifically intended for the President, the Prime Minister and their cabinet of ministers. During this mission the go-ahead was given for a formulation mission which took place in October 1997.

4. During the mission a team of four international consultants and 1 local consultant put in a total of 12 person weeks. One of the consultants was the SDNP co-ordinator for Morocco and another had experience with SDNP nodes in other parts of Africa.

5. The project, officially titled "Initiative Internet pour l'Afrique (IIA) / RThetaseau DThetaveloppement Durable (RDD)", is planned to be jointly executed by UNOPS and GRIM's Ministry of Planning.

II. <u>Overall Objectives</u>

6. The project is situated within the "Cadre de CoopThetaration de Pays (CCP) Mauritanie-PNUD 1997-2001" which already has as its general goal, support for Sustainable Human Development and the elimination of poverty. In this context, and with such a small and relatively homogenous country, the IIA/RDD project has a ground-breaking role in working at the highest levels with the government, ICT providers (PTO and ISPs) and content producers in developing policy and assisting with the development the country's national information and communications infrastructure. The approach takes into account the UNECA's African Information Society Initiative (AISI) framework.

7. While there is no specifically identifiable SDNP component within the overall project, the proposal is the result of much of the accumulated SDNP experience and brings this to a new level in focusing on national ICT policy development and skills transfer. More specifically, the project plans to assist the PTO (OPT) to expand the existing Internet host in the capital into a national network, to support the private sector ISPs in developing their services, in reinforcing the national capacity to use the Internet through training, and developing web content on Mauritania, especially in the areas of SHD through the establishment of two web servers - one at the Ministry of Planning's Observatoire du DThetaveloppement Humain Durable (ODHD) and one at CGEM - the Confederation Generale des Employeurs de la Mauritanie.

8. The main other SDNP contribution to the project was the insistence in establishing a Co-ordination Unit and hiring a local manager or coordinator to oversee project implementation. This is not the case in the strictly IIA countries.

9. Also, SDNP has made a unique contribution by insisting on a national focus in enhancing capacity to use the Internet. IIA strictly looks at building capacity to connect internationally, as does the Leland Initiative on which it is modeled. The IIA/RDD propject looks at both components and attempts to enhance national networking as a result: the development of a national Internet infrastructure dependent on the dynamics of the local market. Encouraging the development of a local market for Internet related goods and services is a novelty for the SDNP. With the added resources made available as a result of the IIA, SDNP can now also consider developing doing this

and encouraging policies that try to link the provision of Internet services to the demand for these services.

10. In Mauritania, the project will shortly be sending a team to develop a business plan for the PTO. It is hoped that on the basis of this exercise, the project can link development of the international connection(s) to national demand through such planning activities.

III. Resources, Finances and Sustainability

11. GRIM is providing resources in kind of $64 000, OPT is using its $200 000 investment plan for Internet as its contribution. UNDP is expected to provide the remainder of the estimated $500 000, although some funds may become available through outreach to other national initiatives such as WorLD, ACCT, etc.

12. As this is not a traditional SDNP project, the sustainability of an independent institution is not really an issue. However the continued support for SDNP goals will rest on the ability of the structures that are established within the Ministry of Planning to convince the decision makers of their ongoing necessity.

13. Since the Ministry already has a unit focusing directly on this area (ODHD) which will be likely be the project co-host, sustainability may simply mean an increased awareness within the unit of the importance of ICTs. However training, consultancies, and web hosting/page production may also become revenue generators to support staff.

IV. Training

14. Training and skills transfer is fundamental to the IIA/RDD project and it is expected that one of the first tasks of the co-ordinator will be to establish detailed sensitisation and training plans for PTO and ISP operators, content developers and users in various ministries, companies and NGOs. This will likely result in some jointly funded workshops and some partnerships with private sector trainers to provide ongoing training

and support. The IIA/RDD co-ordinating unit may also choose to develop training expertise as a revenue generator.

V. Equipment

15. Two PC based servers and ancillary equipment and software to connect them to the Internet as Web hosts will be required for the project. Additional PC workstations may be required, and once the precise location of the servers is established, the co-ordinator will define the exact equipment requirements. For example if a LAN at the host institution is connected to the Internet, it may not be necessary to purchase routers and leased line equipment.

VI. Project Management

16. Although the suggested responsibilities in the proposal have not been put to the test, it is envisaged that the project's 'Cellule de Coordination' will be co-hosted with the Ministry of Planning at the 'Observatoire du Developpement Humain Durable' (ODHD) and at the CGEM facility. The assumption is that this will be agreeable to all parties. Both institutions say they are open and willing involve NGOs, the press, etc. However, this is still to be worked out in detail.

17. The Cellule de Coordination will be answerable to a steering committee and a Consultative

Group consisting of the co-ordinator of the UN resident missions and representatives from the other international co-operation agencies.

18. The project will be looking for an entrepreneurial type of individual to manage the Cellule. The main Mauritanian consultant on this project is one possible candidate.

VII. Problems and Opportunities

19 Mauritania is a small, and up until recently, very isolated country. Its skills base and experience in the use of ICTs is very low. As a result the project has the potential of having a major impact on the country. There is also the opportunity to build in SDNP objectives into the underlying national ICT policy and to capitalise on the possibilities created by having a sustainable development agency (ODHD) run a national ICT and connectivity development programme endorsed by the highest levels of government. There is a strong effort in government to open up the country and ICTs can clearly play a vital role in this process.

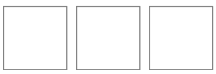
20. At the same time however, Mauritanian society is conservative and has not been exposed to the international media and other manifestations of the emerging global information society. It remains to be seen how the public in general will respond to the new technologies.

21. Also, with no real independence from Government, the project may have difficulty in maintaining its strategy to be inclusive of all social elements once the decision makers more fully understand the implications of the free-flow of information.

22. Finally, the telephone infrastructure is at a very poor level of development and will limit the speed of uptake of ICT based services unless new policies are instituted to allow greater access to the market.

VIII. Lessons

23. No real lessons can be obtained at this early stage of the project, however the process of negotiation with the government and the UNDP Resident Mission in the development of the project proposal was a valuable experience in understanding protocol process and unlocking the interest in a non-traditional project. Experiences with the mix of consultants used on the project were also valuable - the mix of languages, expertise and backgrounds. The use of a supplier as a consultant was a little problematic.



CHINA SDNP COUNTRY REPORT, November 27 to December 2 1997

Consultant: V. Rajaraman

I. Project Status

1. SDNP China was initiated as a follow-up of China's Agenda 21, the white paper on China's population, environment and development, which was approved by the State Council in March. A pre-feasibility was conducted in late 1993 and early 1994 by two consultant who were assisting in the formulation of China's Agenda 21. The pre-feasibility report pointed out that Internet

connectivity was available between three major academic institutions, namely Peking University, Chinese Academy of Sciences and Tsinguha University, which are all located in one neighborhood of Beijing and there was very little penetration beyond this.

2. Many important data bases were created in China during the past 10 years on natural resources, environmental protection and natural disasters, but there was a lack of organized mechanisms to share the information. SDNP/China was identified to work under Chinese National Agenda 21 office (Science and Technology Commission) and connected to the existing Chinese computer networks (Computer Network Information Centre CNIC of Chinese Academy of Science), China Eco Systems Research Network, Chinese Education and Research Network (CERN), and through Public Switched Telephone Network to remote locations. Such a connection along with SDNPs task of creating directories and special data bases relevant to sustainable development was considered an important advance for China's development.

3. Currently, SDNP/China has been formed, has recruited a coordinator and three technical personnel and is operating since January 1997.

II. Overall Objectives

4. The objectives of China SDNP are:

(i.) To establish the national administrative node of SDNP and strengthen capabilities to manage the network.

(ii.) Develop and enhance capabilities of a metadata system to facilitate access to numerous data bases on sustainable development available with various Government agencies.

iii.) Provide information services about sustainable development in China to domestic and international users.

(iv.) Upgrade information exchange capability and services of CSDNP in order to implement China's Agenda 21 priority programs.

III. Resources and Finances

5. UNDP has allocated $348,000 to the China SDNP. Besides this, the Chinese Government has agreed to allocate RMB 3,000,000 Yuan (in kind) to the program and RMB 128,000 Yuan ($100,000) Chinese Government cost sharing.

IV. Training

6. The coordinator has attended coordinators workshop in Mexico. The technical staff have been trained locally and also abroad by Chinese Government initiative.

7. The Centre has developed training material in Chinese to train local users to use the network. Four training programmes are planned to train 100 persons during 1997-98.

The Centre perceives need for training in:

(i.) Writing home pages which will enable efficient Web Search with low bandwidth modems.

(ii.) Developing Metadata for describing data bases

(iii.) Use of Chinese characters in e-mail.

8. The training courses, they believe, can be organized locally by Tsinghua University and Chinese Academy of Sciences.

V. Equipment

9. The Centre has PCs connected in a LAN, 2 HP servers, scanner, laser printers, color inkjet printer and a color plotter. The communication equipment consists of a CISCO 2511 router connected to a pool of 16 modems which are connected to dial up lines. The router also connects to a 64 Kbps dedicated leased digital line which is for Internet use.

VI. Project Management

10. The project is managed by the Chinese Government through the State Commission on Science and Technology National Agenda 21 office.

11. There is a steering committee headed by the Director General of Administrative Centre for China's Agenda 21 (ACCA 21) which has 7 members. The Centre coordinator reports to the steering committee. The coordinator has freedom in day-to-day operations.

VII. Particular issues relevant to China

12. China SDNP is concentrating mainly on integrating contents spread over several sites. As it has just been formed, the first few months have been spent in building a core group and negotiating with the China Telecom to provide necessary phone lines and direct digital lines. A 64Kbps line is now installed for Internet connectivity. Allocation of 16 phone lines is imminent. Four core staff are in position and are technically competent, some with several years of experience.

13. Work has been completed in setting up a LAN in the SDNP office and laboratory, which are quite spacious. Directories to data bases are being developed. As the idea is to provide information to a large clientele, Chinese language is essential. The Centre is creating Web pages in Chinese. Information available on the Internet is not much use unless translated to Chinese. This is a major local problem.

14. SDNP, China is also looking at long range sustainability. It is presently trying to tie up with local ISP to earn revenue. It will, however, take longer to progress in this area.

15. China SDNPs major problem is the high maintenance cost of HP equipment when the warranty expires. Local HP office has indicated that they have to enter into maintenance contract after 3 months. They have not budgeted this amount.

16. SDNP, China perceives a need for better software training and training in network administration. They have requested for a low cost consultant from the UN Volunteer Program. Such a consultant can stay for a longer period (6 months to a year) in their Centre and give on-the-job training to the project staff.

17. Even though the overall UNDP budget is known, China SDNP wants to have clarity on yearly releases to enable them to plan their programme of activity.

VIII. Challenges and opportunities

18. China has clearly understood the need for data bases and their wide accessibility as the primary objective of SDNP. Connectivity is necessary, but not sufficient for the success of SDNP. The inter-connection of many existing diverse networks and their cooperation is a challenging task. With assured very high level support, it will be interesting to watch China's progress in making available a variety of data to persons in remote areas who need it.

Contacts

1. Wang Qiming (National Coordinator) - SDNP

2. Chen Xiaolin - Executive Manager, SDNP

3. Jia Jiong - Network Administrator - SDNP

4. Li Mei - Programmer - SDNP

5. Xing Li - Professor, China Education and Research Network Centre, Tsinghua University

6. Zhang Jianzhong - Professor - Computer Network , Information Centre, Chinese Academy of Sciences

7. Duan Liping - Deputy Director, Administration, Administrative Center for China's Agenda 21

8. Zhang Jiayuan - Standing Deputy Director, Administratrative Centre for China's Agenda 21

9. Hua Onyang - Professor - Commission for Integrated Survey of National Resources, Chinese Academy of Sciences

10. Chen Yuxiang - Professor & Deputy Director General, Administration Centre for China Agenda 21

INDIA SDNP COUNTRY REPORT, 4-5 December 1997

Consultant: V. .Rajaraman

I. Project Status

1. SDNP, India contract was signed in February 1997. The executing agency of the project is the Ministry of Environment and Forests which would provide the contents and the National Centre for Software Technology, Bombay which would provide the technical support for the network. Operation of Centre has not yet started. A location has been identified, the National Project Director has been identified and there is clarity on what is to be done.

II. Overall Objectives

2. The primary objective of SDNP-India is to establish a distributed clearing house to answer and channel queries related to sustainable development. Most of the necessary data is now available in printed form in the Environmental Information System (ENVIS). The aim is to have them machine

readable and network accessible.

3. The second objective is to organize an SDNP Association with members who will be information users, carriers or providers from among government, academic, business and non-government organizations. It is envisaged that the association will have 250 members.

4. In the project document it is mentioned that manual information dissemination by mail will be used concurrently with electronic on line access in order to service remote locations without good communication infrastructure.

III. Resources and Finances

5. The total funding is US $ 616,910 with the following contributions:

UNDP/IPF $ 205,638

IDRC $ 205,636

SDNP $ 205,636

_____

Total $ 616,910

_____

As of now no money has been released.

IV. Training

6. As yet no coordinator has been appointed. A panel has been identified and a coordinator is expected to assume charge in January 1997. Thus no training has been given. NCST, however, has well trained staff in networking and can easily provide the required infrastructure and leadership in establishing a network.

V. Equipment

7. No equipment has been ordered.

VI. Project Management

8. The project will be managed by the officials of the Ministry of Environment and Forests. The organizational chart of SDNP-India is given below:

Steering Committee

(Policy)

Content

Information

requests

VII. Particular issues relevant to India

9. SDNP, India is to be closely linked to the ENVIS information centres which have a large repository of environmental and sustainable development related information mostly in printed form - reports, bibliographic, abstracts, statistical data etc. Several ENVIS centres have been established in Government, academic institutions, industry and NGOs. Currently ENVIS network acts as a clearing house for queries and forwards queries to appropriate network member for reply. The members of the ENVIS network currently are:

• Central Pollution Control Board, Delhi

• Industrial Toxicological Research Centre, Lucknow

• Development Alternatives. A New Delhi based NGO (Environmentally Sound and appropriate technologies data base) . Has a web page of the Society of Development Alternatives

• Anna University, Chennai
Biodegradation of wastes and Environmental impact assessment (Has a computerised data base of 5000 articles)

• Tata Energy Research Institute, New Delhi (Energy and Environment)

• Indian Institute of Science, Bangalore
(Biodiversity and information on Western Ghats)

• World Wide Fund for Nature-India, New Delhi.
(Index of questions and answers on environment answered in Parliament. Collection of NGO information on environment).

• Environmental Planning and Coordination Organization, Bhopal, (NGO)
(Environment information on the state of Madhya Pradesh, India)

• National Institute of occupational Health, Ahmedabad

• Central Arid Zone Research Institute, Jodhpur
(Information on desertification)

• Centre for Advanced Study in Marine Biology, Annamalai University
Mangroves, Estuaries, Lagoons and coral reefs information

• Centre for Environmental Education, Ahmedabad

• Zoological Survey of India, Calcutta

• Indian School of Mines, Dhanbad
(Environmental Problems in Mining)

• National Environmental Engineering Research Institute, Nagpur(Solid and Hazardous wastes)

• GB Pant Institute of Himalaya on Environment and Development, Almora (Himalayan Ecology)

• School of Planning and Architecture, New Delhi
(Human Settlements - particularly in big cities)

• Jawaharlal Nehru University, New Delhi
(Biogeochemistry and environmental law)

• Botanical Survey of India, Calcutta

• Environmental Protection Training and Research Institute, Hyderabad(GIS and remote sensing data on Eastern Ghats)

• Bombay Natural History Society, Mumbai(Avian Ecology and Inland Wetlands)

• Forest Research Institute, Dehradun: Forestry data

10. As can be seen, a large number of Centres are already part of ENVIS. SDNP will primarily network them electronically and provide distributed on-line information on diverse topics. With networking, information can be easily retrieved from any centre.

11. The work is challenging and will be pioneering as it connects diverse organizations.

VIII. Challenges and Opportunities

12. SDNP India starts with two major advantages. It will link to well established computer network, ERNET, managed by NCST Bombay - a partner in this project. NCST has vast experience and expertise in running a good computer network connected to internet. The other main advantage is the availability of content from a variety of sources linked to ENVIS. ENVIS is unique as it encompasses a wide variety of organizations each with good data resource. The path is clear - to make also this information machine readable and accessible on-line. The challenge is to have a flexible organizational structure and a National Coordinator who can make all this happen working a Government office

IX. Lessons for the bigger UNDP picture

12. UNDP should commit funding only after it is convinced that the requisite human resource is available and proper administrative arrangements are in place.

Contacts

1. Kehsav Desiraju, Asst.Resident Representative, UNDP, New Delhi

2. Sunil Arora, Programme Officer, UNDP, New Delhi

3. B.Bandopadhyay, Addl.Director, Ministry of Environment and Forests, New Delhi

4. Usha Subramanyam, Dy.Director, Ministry of Environment and Forests, New Delhi

5. S. Ramani, Director, NCST, Bombay

PHILLIPINES SDNP COUNTRY REPORT, 24-25 November 1997

Consultant: V. Rajaraman

I. Project Status

1. The Phillipines Centre started as an aftermath of "Earth Summit" with a feasibility report in 1991 costing $13000 followed by preparatory activity in 1992 ($ 13000) and full activity in 1993. Between 1993 and 1997, $ 177,000 of UNDP grants were spent. Funds were tapered down in 1996 and effectively ended in 1997. Besides the UNDP input, a grant of $ 123000 was obtained from the Foundation for Phillipines Environment over a 3 year period. This amount was specifically earmarked for a project called Biodiversity Conservation Information Project which required electronic and non-electronic networking to the other parts of the country. The total UNDP and non UNDP input was thus $ 326,000.

2. Currently the Centre has been incorporated as a non-profit Foundation called Phillipines Sustainable Development Network. The planned yearly budget is $ 51000 which is earned by the Centre by providing services primarily to organizations involved in activities in sustainable development.

II. Objectives of the Centre

3. The original broad objective was to facilitate access to information. Based on 4 years of experience and the present structure in Phillipines the current objectives are:

i. To provide easier, more affordable and rapid access of information to users in Government, research and educational, non-governmental and entrepreneurial organizations.

ii. To develop simple, cost-effective and reliable information technology/systems that would enhance the capacity for information networking of individuals and organizations in sustainable development.

4. At the time the project started there were no ISPs in the country. Currently there are several . Phillipines SDNP has created a niche for itself by providing better service for several NGOs and consultants involved in sustainable development by providing access to information and specialised training in internet use and web page creation. The Centre also hosts web pages for many small organizations at a charge.

III. Finances

5. As pointed out in the introduction the Centre received a total grant of $ 326,000 during 1991 to 1996. Currently as a non profit foundation it has a budget of $ 51000 per year. It is earning this from income generated by training courses, fees collected for providing connectivity and creating and hosting Web Pages. In the long run it plans to obtain 50% of its total expenses from special projects/grants from UNDP and other organizations and 50% from providing ISP type services.

6. The Centre has applied for grant of $ 50,000 from Regional Resource Facility for Environment (PRIME project). When I visited UNDP program officer she informed that PSDN's proposal has been accepted. Other proposals in the pipeline are GAINEX (a technology transfer information system) ($ 8000) and information System for Marine Environment ($ 10,000). There is a good understanding with UNDP country office and the country office is very supportive. It is thus expected that many UNDP projects related to information on environment will be channelled to PSDN.

IV. Training

7. The national staff was trained in the following programmes

i. SDNP Training Workshops/Coordinator's meetings (1994, 1996)

ii. INET Workshops (1995, 1996)

iii. System Adminstrator's training course (in Phillipines - 1994)

iv. Hewlett Packard Equipment Software Training Course (1996)

Two were trained - the coordinator in (i) and (ii); and the System Administrator in (iii) and (iv). Both are still with PSDN.

8. Besides this the PSDN has given training programs in

i. Internet use training - 10 programmes, 200 trainees

ii. HTML training - 3 programmes, 50 trained

iii. Information Packaging - 2 programmes, 27 trainees

iv. Training for dial up users - 5 progammes, 58 trainees

v. Training in System Administration - 1 programme, 8 trainees

As can be seen PSDN has been very strong in training local users.

9. PSDN is changing its emphasis from being a connectivity provider to content provider. It perceives the need for training in a good Data Base Management System such as Oracle and use of JAVA language for advanced applications. Currently it is short of staff and the training will become more relevant when the staff is strengthened.

V. Equipment

10. The current equipment consists of two IBM PC compatible computers: 486DX, 16MB RAM, 1GB disk and Pentium (133MHz, 16MB RAM, 2 GB disk)

HP Server: Vectra, 128MB RAM, 4GB disk with UPS. HP-UX operating system

16 Port Hub

CISCO router

64KB leased line for internet connectivity

10 Telephone lines for dialup connection

The systems run 24 homes a day, 7 days a week.

The hardware is maintained by local companies. The software is maintained in-house by the

system administrators.

No major equipment addition is planned.

VI. Project Management

11. The Phillipines Centre is organized as anon-profit Foundation. The organizational chart is given below:

12. The Board of trustees are elected by the membership for a 2 year term and has currently 11 members. It meets once a quarter. The Executive Committee meets once a month. This has 5 members and advises the Centre coordinator on day to day activities. The members of the Foundation have voting rights whereas subscribers or users (around 200) do not have such rights.

Policy Information

Advise on Operations

Day to Day running

PSDN Staff

VII. Challenges and Opportunities

13. PSDN is a good model for other SDNPs when they want to graduate to a self-sustaining situation. The major problem in continued operation is the competition from ISPs if only connectivity is to be provided. It has to be a good training facility and a content provider for long range sustainence. PSDN has succeeded in creating good links with a large number of NGOs and consultants involved in Environmental issues. Many of the NGOs have grass roots connectivity and can spread information fast. The "empowerment" of rural population by providing access to information is already on.

14. Another major information resource hosted by PSDN is the Phillipines Environmental and Natural Resources Directory which was developed by the Integrated Environmental Management for Sustainable Development IEMSD), a three year programme initiated by the Government of Phillipines. A Sun Workstation holds this and other useful web pages developed by IEMSD. It is physically located at PSDN and accessible to all users of PSDN.

15. At present PSDN is down to a 2 member staff due to financial difficulties. It needs projects from local UNDP office to increase the staff and have financial stability. This has been forthcoming. In the long run PSDN being a non-profit foundation ought to look for Endowments from Organizations such as Magsaysay. Foundation to create a corpus fund, interest form which can be used to run the core Centre. Other members of PSDN may be hired for specific projects for which PSDN should aggressively bid.

16. PSDN is moving from being a connectivity provider to a content provider. In order to do this effectively they require a good Data Base Management System (DBMS) such as ORACLE. Such a DBMS is expensive. Revenues from users of the data bases should be commensurate with the cost of the DBMS and its maintenance.

17. PSDN received HP Workstation as gift. The warranty is for a 3 month period. Provision for post warranty maintenance of both hardware and software is to be made. This will be considerable

amount for PSDN whose current budget is quite small.

18. The current staff structure is 1 coordinator and 1 technical person. There is no second line of support. The number has been reduced as the budget is small. This situation is not desirable. There should be at least two more persons on the permanent staff for providing minimal back up.

VIII. Lessons learned in Phillipines

19. The independent Foundation model for SDNP as in Phillipines and their management structure is a good model for other Centres to emulate to become self-sustaining.

20. Good cooperation with local UNDP office for funding environment information related projects to the PSDN will sustain the Centre. Other SDNPs should create good linkages with local UNDP, to get funding from UNDP's ICT related programmes.

IX. Conclusions

21. Phillipines SDNP has succeeded in getting a large number of NGOs involved in environment issues connected electronically. It also has a good coordination with Government managed Integrated Environmental Management for Sustainable Development Programme. Besides this it has established itself to be an information Centre on Environment and Development issues. The local UNDP office has promised to use PSDN as the agency for many of the environment related UNDP projects.

22. Currently it is self-sustaining - although on a shoe string budget. It needs aggressive marketing of its services to be self-sustaining in the long run. It should also attempt to create a corpus fund from endowments from Environment related charitable foundations.

23. Overall PSDN has come up to the expectations as a good SDNP node and has provided excellent service when it was needed most.

Contacts

1. Ms.Amy M.Lecciones - Coordinator PSDN

2. Mr.Victor G.Reyes - Information Network Specialist

3. Ms.Dulce Cacha - PSDN Executive Committee - President

4. Ms.Claire Ungson - Environment Consultan

5. Ms.Marissa Fernandez - NGO dealing in Environment (PHILDHRRA)

6. Ms.Beta Balagot - Chairperson - PSDN Foundation

7. Ms.Clarissa Arida - UNDP Programme Officer

8. Ms.Sunday Lingad - National Mapping and Resource Information Authority