UNDP SDNP
Cameroon Project Document

Title:

SUSTAINABLE DEVELOPMENT NETWORKING PROGRAMME (SDNP)

UNDP Financing and Others in USD

```
ACC/UNDP Sector + Sub Sector          IPF  :  63,000
                                      SDNP : 187,000
                                      TOTAL USD 250,000
```

Number: INT/91/716

Duration: 2 Years

Primary Function: Information Networking

Government Executing Agency: Min. of Environment + Forests

Implementing Agency: The ACL/Polytehnic Yaounde

Estimated Starting Date: January 1996

Government Input: US $

Project Brief Description:

Government of Cameroon has demonstrated a development policy shift in favour of Sustainable Development by setting up a National Commission on Sustainable Development (NCSD) and implementing a National Environment Management Plan (NEMP) through a participatory process. A major success indicator of this will be the ability of people to quickly access, generate and share relevant information for sustainable development. In this context, the SDNP aims to enhance the capacity to integrate sustainability and inter-sectoral environment-development concerns in decision-making at all levels in the country through the application of computer mediated communications; and ultimately, the use of the Internet and other global networks. A management structure and a central information server are basic requirements for the project. Training in specific skills for technical personnel and users and marketing of the SDNP will also be necessary. Cost recovery is an important consideration in drawing up of a business plan so as to sustain the initiative right from the first year of execution. Expected project out-put will be, enhanced national capacity and capabilities for promoting Sustainable Development through increased awareness, access, possession, assimilation and use of information on various subjects according to

individual and collective needs.

Signed :

On Behalf of Government

On Behalf of Executing Agency

On Behalf of Implementing Agency

On Behalf of UNDP

TABLE OF CONTENTS

A. DEVELOPMENT CONTEXT

INTRODUCTION

1. GENERAL COUNTRY SITUATION

Located in the Central African Region, Cameroon stretches between latitudes 2 and 13 degrees North, and longitutes 8 and 16 degrees east of the Greenwich Meridian. Its neigbouring countries are Nigeria to the west, Chad to the north east, Central African Republic (CAR) to the east, and Congo, Gabon and Equatorial Guinea to the south. The country opens into the Atlantic Ocean in the south west at the Gulf of Guinea.

Often referred to as "Africa in miniature", Cameroon is a country with great diversity and variety (geographic, climatic, ecological, geological, ethnic, cultural, religious and linguistical). In the South is the dense equatorial forest and in the Extreme North the sahelian vegetation. In between one finds a variety of ecosystems. This diversity is also reflected in the topography as one goes from the lowland coastal plains and extensive range of highland and mountain range from Mount Cameroon (4,094 m) in the Atlantic coast, through the Kupe and Adamawa mountain ranges in the middle, to the Mandara mountains in the North.

Cameroon is a medium income country with a low Human Development Index (HDI) although life expectancy, literacy and per capita income are above average for Africa South of the Sahara. Measured in constant F CFA, the level of per capita GDP in 1990/91 was almost the same as that of 12 years earlier, in 1979/80. In the HDI country ratings Cameroon has 0.447 (1994) placing her at 124 near Kenya, Zimbabwe and the Congo.

The population which was about 12 million people (1992) and a growth rate of 2.7 % in 1990/91 is unevenly distributed, like in many other developing countries, averages around 27 persons per square kilometre with an estimated 40 % staying in urban centres. For examlpe, in parts of the West Province it is as high as 100 persons per sq. km while in some parts of the East Province as low as 6 persons per km.

Following independence (1960) and up to 1985, an appropriate mix of policies allowed for a steady real economic growth averaging 6.5 percent/year. Up until 1970, agriculture was the main stay of the economy but after that, oil production became the main source of economic growth, with commodity crops making an important contribution.

Since 1986, the country has been experiencing a large-scale economic crises due to sharp decline in export prices of its key primary commodities: petroleum, cocoa and coffee. This caused Cameroon's export earnings to fall by more than 50 %. Real Gross Domestic Product (GDP) fell by 3.4 % yearly from 1985/86 to 1988/89 while per capita income dropped by almost 40%. In 1988/89, the government launched an economic reform programme under the Structural Adjustment Plan (SAP), and supported by a Standby Agreement with the International Monetary Fund (IMF) and an Adjustment Loan from the International Bank for Reconstruction and Development (IBRD). Today, the government faces considerable public finance deficit, tight cash flow, high foreign and domestic debt and rising unemployment.

In January 1994, Cameroon devalued the franc CFA (F CFA) by 50% from 50 CFA/FF to 100CFA/FF. This has not attenuated the economic hardship the country faces.

a. Natural resources

On the overall, Cameroon natural resources and oil reserves are diminishing. The country however

possesses the second largest tropical rainforest in Africa with reportedly a tremendous potential as a carbon sink and also a principal repository of biodiversity (fifth world highest number of species of mammals and vascular plants) besides being a major source of revenue for the logging industry. Other riches include minerals, fisheries, fertile agricultural land and a relatively favourable climate. A wide variety of food and cash crops are grown and most people depend on agriculture for a living.

b. Environmental situation

The immense diversity and variety of natural resources exposes Cameroon to related environmental problems. The key ones are: desertification in the Sudano-Sahelian zone (affecting 25% of the total population); deforestation in the coastal, central, east and south regions; soil erosion and degradation in the high plateau region of the west and north west provinces; water supply, urban waste management and industrial pollution in the urban centres as well as marine pollution in the coastal areas. Population growth and environmental degradation are closely linked in both rural and urban settings as it impacts on the natural resources according to density and activities.

c. Social and economic situation

As stated earlier, from independence (1960) and upto 1985, an appropriate mix of policies allowed a steady economic growth, with a real economic growth averaging a yearly 6.5 percent. Agriculture remained up to 1978, the main source of growth and foreign exchange earnings. As from 1989, oil production, started and became the main source of economic growth.

Political liberalisation, which began in 1990 is underway but the process still suffers from major hiccups and governance questions still pose a threat to the revival of economic activities. To these problems can also be added some key institutional constraints which comprise: inadequate community participation, absence of appropriate policy framework, and lack of institutional capacity. Infact, the preparation of the Rio Summit was instrumental in not only converging attention on these issues, but most of all in accelerating processes that did lead to measures abating some of the institutional constraints, like the creation of the Ministry of Environment and Forests in 1992, which is now elaborating the National Environmental Management Plan (NEMP) for the country.

The UNDP initiative of setting a SDNP in Cameroon is very timely and highly commended. The network envisaged is in agreement with the recommendations of Agenda 21. Since Sustainable Development is not limited to the environment alone, it is hoped that this initiative would act as a catalyst to revive socio-economic activities in all sectors of the nation's life, as we enter the 21st century.

d. Telecommunications infrastructure

The telecommunication system is generally adequate although its reliability could be improved.

i) CAMPAC

The Cameroon Packet Switching Network (CAMPAC) does provide an appropriate backbone for electronic networking within the country. CAMPAC has regional centres in the capital cities of four of the ten provinces of the country: Yaounde, Douala, Bafoussam and Garoua.

ii) ACTEL/INTELCAM

ACTEL is the government agency responsible for national telecommunications while INTELCAM is charged with the international communications. The main constraints with these state institutions include the long wait for new telephone services, very high costs of international telecommunications, placing international telephone calls, using international packet switching networks via CAMPAC, and the cost of international leased lines. For example, a 64 Kbps leased line to the USA, INTELCAM quoted a figure of about USD 32,000 per month. For CAMPAC, as with many other Public Data Networks, there are subscription costs, per unit time charges and volume charges based on the number of kilobytes of data transferred per second. Under the circumstances, individuals and small groups which lack sunstantive financial resources cannot in any way instal this kind of electronic facilities on their own. This is why the SDNP initiative is a welcome step as elaborated below for its justification.

e. Existing Telematics Networks

There are more than a dozen isolated networks in Cameroon. Only four (HealthNet, CamFido, RIO and REFER) of these networks are operational and public. The others are either not operating or are private. There is a total lack of in-country communication among the networks (public and/or proprietary), except between HealthNet and CamFido where limited exchange of local mail is possible because the servers are integrated on the same CPU and are run by common staff.

Interactive Internet access is possible through the Public Data Network CAMPAC. The ` Association des Universités Partiellement ou Entièrement de Langue Française' (AUPELF) operates a computer reference centre connected to the Internet using CAMPAC ie REFER. There is no interactive Internet access in the country apart from this.

f. National information / informatics policies

The government has put in place a National Center for the Development of Computer Systems (CENADI). This is the executing agency for "The National Computer Technology Policy plan", adopted by the government in 1990 which has as its main purpose, to establish a Central Control Policy for Information Systems acquisition in the areas of material and human resources development.

Unfortunately, CENADI's structure has been a major setback, in all efforts to carry out the above activities. That CENADI is ill-structured, and hence cannot perform its duties is demonstrated by the fact that since its creation in 1966, CENADI has been `married' six times to various ministries. Four of these marriages have taken place within the last 11 years.

2. HOST COUNTRY STRATEGY

Background

Following independence, Cameroon's development strategy was structured on five-year development plans based on a policy of territorial as well as socio-economic development geared towards export crop promotion. Economic growth was the primary concern. Sustainable natural ressource management as a development concern received little attention.

However, since participating in the Stockholm Conference in 1972, interest in natural ressource management and environmental issues has steadily increased. It is now generally recognised that any growth that occurs at the cost of environmental degradation is not sustainable in the long-term. Unfortunately, this growing interest was translated into action only through weak institutional measures: the creation of Man and Biosphere (MAB) Committee in 1977, and in 1984 a sub-Department of Environment in the Ministry of Plan and Territorial Development. Perhaps most

significant, has been the absence of a comprehensive and coherent framework to guide the multitude of timid interventions by government and donors relating to rational natural resource management, promotiong sustainable development. Environmental concerns were only implicit in sectorial strategies such as the forestry sector and the Forestry Code under the Ministry of Agriculture.

Participation in the Rio Summit by government, marked its commitment to rational natural resource management and protection, creating a Ministry of Environment and Forests. One of the key tasks of the new Ministry was the formulation of appropriate environment policy and strategies. The creation of the Ministry with a clear mandate provided fertile ground for dialogue on initiating new processes and approaches to sustainable development.

Thus, in 1992, a UNDP-led multidisciplinary mission prepared an operational report that enabled the Ministry of Environment and Forests to put together a programme of action and the government to adopt its first consolidated environment priority programme. The programme provides a comprehensive framework to guide government action and donor assistance for effective and rational management of the environment and natural resources. This process will also enable capacity building to be focused at three levels :

     a) - government institutions in order to facilitate a switch from vertical functioning attitudes to integrating horizontal multi-sectoral management approaches and increased awareness,

     b) - orientation courses for personnel of various departments, institutions and NGOs and sensitization of the population,

     c) - enabling environment (policy, strategy and legal framework).

3. PRIOR AND ON-GOING ASSISTANCE

a. National environment management plan

Following the Rio conference, the Government of Cameroon decided that a national strategy for Environment be designed to cover short, medium and long term needs. The situation in the country was analyzed and the National Environment Management plan was formalized approved. By May 1993, a priority Action programme was approved leading to a national forum on the environment followed by provincial seminars. A special unit to follow-up decisions at various levels was created. This unit ensures that local populations, NGOs, ministries, and other agencies participate in environmental management.

The Ministry of Environment and Forest (MINEF) is responsible for co-ordinating the implementation of the NEMP. To do this effectively, MINEF created a co-ordination Unit (CU) for the Plan, which includes the setting up of an information system. In the first phase of the Unit's work, studies are being carried out to generate more reliable information for the elaboration of a sustainable environmental development plan. The analysis of the progress of implementation of the NEMP was carried out by this Unit.

The Technical Regional Committee (TRC) was responsible for organizing and co-ordinating all sectoral activities. Large participation of people at grassroots levels permitted the committee to identify in a more precise and scientific manner the wishes of the people as concerns policy, strategies and concrete actions for a sectoral and multi-disciplinary planning. The TRC is a provincial unit working closely with CU/NEMP of the MINEF. These help the provinces develop their own provincial conservation strategies.

One of the most critical issues that the Co-ordination Unit of Environmental Management has proposed to handle is the creation of an Information System. This was retained as a priority action in the National Environmental Management Plan.

In the preparatory phase, it is expected that a needs assessment will be made at the level of policy makers and users of information. One expected outcome is the design of a system of information exchange for better management of the environment. During the second phase the information system will be progressively put into place with the technical and logistical assistance from outside the Unit.

Studies are currently being done that will permit the CU to define the type, and source of information, in order to build a dynamic system of collection, treatment, storage and dissemination of information to users in more appropriate forms. This information system on environment will work in close collaboration with the SDNP.

b. Donor support

Apart from the UNDP support, the government of Cameroon has benefited from a wide variety of major international support, within the past ten years from the World Bank (WB), the Food and Agricultural Organisation (FAO), the United States Agency for International Development (USAID), the Global Environmental Facility (GEF), the German Technical Co-operation (GTZ), the World Wide Fund (WWF), the British Council, the Africa 2000 Network, the United Nations Environment Programmme (UNEP) and the Governments of Canada, Israel and that of the Netherlands.

However, this assistance, has been varied and dispersed due to the absence of a coordination framework. Some interventions are very specific and thematic, limited to defined geographical areas. Others are more regional, while others are mostly studies.

i) Studies include:

```
- Conservation of Forest Ecosystems in Cameroon - IUCN, 1989
- Development Plan for the Sudano-Sahelian Region (EDF)
- Tropical Forestry Action Plan (FAO, UNDP and al, 1988)
- Initial Identification Study for the Elaboration of an
    Environmental Action Plan (UNSO,  1991)
- Elements for an Environment Policy and Strategy (FAO,
    1992)
- Structural Adjustment and Sustainable Development : the
    case of Cameroon,
  (WWF, 1993).
```

ii) Forest Reserves Projects include:

```
- Korup, Mount Cameroon, Mount Oku, Mount Kilum, Mount
    Koupe, Campo and Dja.
```

iii) Main bilateral and multilateral technical assistance involved in these reserves projects are:

```
- USAID, ODA, GTZ, IUCN/WWF, FED/ECOFAC, Netherlands.
```

iv) Specific programmes include:

```
- Elaboration of Plan to Combat Desertification in the
    Sudano-Sahelian region (PALCD, UNSO);
```

```
            - Rehabilitation of the Forestry Sector (World Bank, CIDA);
            - Assistance to the Forestry Planning Unit in the Department
                 of Forestry  (UNDP/FAO);
            - Africa 2000 Network;
            - GEF/NGO-SGP.
            - Forestry Planning Project/ Forestry Capacity funding -
                 CMR/94/001.
```

The key focus now is on assisting government strengthen national capacity and capability through the process of formulating its National Environment Management Programme. This process is already attracting lots of donor interest under UNDP leadership and it is hoped that the SDNP will contribute valuably to the it.

4. INSTITUTIONAL FRAMEWORK FOR SUB-SECTOR

Concern is for information and its proper and timely integration in the formulation of policy and decision-making processes with regard to natural resource management, assessment, analysis and monitoring of the environment as a key indicator of sustainable development. Key institutional actors in environment and sustainable development include the following;

```
        - the Ministry of Environment and Forests (MINEF);
        - the Ministry of Agriculture (MINAGRI);
        - the Ministry of Economy and Finance (MINEFI);
        - the Ministry of  Scientific and Technical Research
          (MINREST);
        - the  Ministry of  Industrial and Commercial Development
          (MINDIC);
        - the Ministry of Posts and Telecommunications
        - the Ministry of National Education (MINEDUC);
        - the Ministry of Livestock and Animal Industry (MINEPIA);
        - the Municipal Councils;
        - etc.
```

Prior to the creation of a Ministry of Environment and Forests in 1992, natural resources and environment concerns were taken care of by the Man and Biosphere (MAB) Committee (1977-84), and by a Sub Department of Environment in the then Ministry of Plan and Regional Development (1984 - 1992).

The Ministry of Environment and Forests (MINEF), the lead ministry for sustainable development, has three main technical departments: Department of Environment, Department of Wildlife and Department of Forestry. The Ministry has the overall responsibility for policy and strategy formulation as well as coordinating activities of other technical ministries in this realm.

For the purpose of formulating the NEMP, a Coordination Unit was established at the level of the Minister's cabinet and headed by a Coordinator who works with a team of a small number of staff and a team of national experts from other technical ministries, mainly from Agriculture, Economy and Finance, Commerce and Industry, and Mines, Energy and Water.

The Unit which is based in MINEF premises is responsible for the implementation of the National Environmental Management Plan and for vetting all projects for their environmental impact. It enjoys financial autonomy and has a small efficient functional bureau.

The Director of the Department of Environment within the Ministry whose director supervises the work of sub-directors and chiefs of services responsible for the design, plan and monitoring of the environmental policy.

An inter-ministerial committee has been set up at the level of the Prime Minister's Office to ensure, co-ordination of activities, participation of different technical ministries and to provide necessary policy guidelines for the formulation of the NEMP.

A National Commission on Sustainable Development (NCSD) has equally been established at the level of the Prime Minister's Office which brings together members of different ministeries, private stakeholders (NGO, CBO and business community representatives).

The Ministry of Environment and Forests also has in every province a provincial delegation responsible for the supervision and implementation of environmental policy.

Each province has a Technical Regional Committee (TRC) whose membership is drawn from the administrators of MINEF and other related ministerial representation, NGOs and grassroots organizations.

The provincial delegation provides leadership to the divisional services that work at the grassroots level with the local people. Since MINEF's policy is to encourage and enhance grassroots support and participation, these divisional services, give substance to the policy through concrete realizable micro-projects and sensitization and environmental education and sustainable development. This lay out is a solid foundation for implementing and expanding sustainable development networking as outlined below.

B. PROJECT JUSTIFICATION

1. Problem to be addressed

a. Relationship with NEMP

The United Nations Conference on Environment and Development (UNCED) brought into existence a comprehensive plan for sustainable development at the national and global scale. This plan, known as Agenda 21, is designed to help developing countries acquire the capacity to implement the recommendations of the Conference. Agenda 21 recognizes the powerful role of information sharing and dissemination on issues and actions related to sustainable development.

Agenda 21 repeatedly notes the need to deal with fundamental problems caused by inadequate availability, analysis, and use of information in the field of development and its relation to the environment. It highlights the lack of effective mechanisms for exchanging information between the South and the North, the lack of human resources and institutional capacity building in developing countries to make use of available information, and the lack of information infrastructure to support research and development effort.

The United Nations Development Programme (UNDP) was given the mandate at UNCED for capacity building, through its Capacity 21 programme, to help developing countries formulate economic, social and environmental goals, plans, programmes and policies that lead to sustainable development. The Sustainable Development Network Programme (SDNP), with its capacity to provide quick access to data, speedy analysis and the timely dissemination of information, is a critical part of this effort.

The global plan for SDNP, is to set up national SDNPs which will combine electronic communication, face-to-face meetings, and other means of communication and link sources and users of information on sustainable development.

SDNPs should facilitate access to the global communications network and knowledge databases which can provide information on different aspects of sustainable development (electronic mail (e-mail), computerized resources such as commercially available databases and information services, the largest international network, the Internet).

However, each SDNP has to chart its course, and to assess how it can meet some, or all, of these objectives through a phased programme approach.

b. Present situation

Currently, Sustainable Development information sharing is hindered by a number of problems, the main ones being:

- Absence of a national information sharing programme.

- Absence of sensitization of the SD actors to communicate with others.

- Absence of sufficient local expertise to set up communication systems.

- Relative inadequacy and unreliability of the telecommunication system.

- High costs associated with the telecommunication system.

- Isolation of existing networks. HealthNet and CamFido have limited inter-connectivity between themselves. Networks put emphasis on external connectivity. Consequently, a message from one network must pass through two gateways located abroad to be received on the second network.

- The only national network CAMPAC does not as yet provide Internet connectivity.

- Accessibility to scientific and technical information is difficult.

- Funding for libraries and other sources of information is rare and scarce.

- Few universities and Research and Development (R&D) institutions have access to technological tools.

- CD-ROM databases are rare in most institutions.

- Electronic networking, nationally and globally is in its rudimentary stages, and major advances are unlikely under the present economic recession and hardship.

- Research and Development (R&D) efforts remain very low with little co-operation and co-ordination between R&D institutions and educational institutions. The R&D institutions make very little effort to cater for the demands of business, industry and curriculae for educational institutions.

- A few microcomputers are owned by some organizations but international networking is limited by; the high tariff rates and the monopolistic attitude of the Cameroon Post and Telecommunication which might be more favourable when it will be privatized as is anticipated.

- Information about products and processes is got through informal contacts overseas, visits to trade fairs, and by trade and industry information services which is often supply driven and poorly harnessed.

- There is no organization which can carry out comprehensive investigation of user's needs.

- Although NGOs are active and show signs of making a significant contribution to social change and access information from a large range of sources, NGOs remain donor driven and lack internal financial sustainability. Most local NGOs lack e-mail links and other electronic communication devices and cannot access to international networks although a few urban NGOs now have computers and are active users. Joining the SDNP will provide tremendous advantage.

c. Opportunities

The SDNP has many opportunities in Cameroon.

Cameroon is an important commodity trading nation which is under-going a restucturing process of its economy with greater concern for environmental management and planning for sustainable development (privatisation of parastatals ...).

SDNP as a tool for information exchange and dialogue, will give greater competitive advantage and strengtheng environmental monitoring and foster national and sub-regional information sharing, following Cameroon's position in the Africa region. See introduction for details.

Since Sustainable Development requires an appropriate functional information system, high priority has been given to the implementation of an information system in the NEMP. The SDNP can have an important role to play in supporting this endeavour.

The NEMP outlines various levels of sensitization and communication processes such as: public relations, mass awareness and behavioral change. It points out the need to concentrate on methodologies to bring about behavioral change as the key focus for any communication intervention. The Cameroon National Environment Management Plan (NEMP) focuses on 11 core sectors of national priorities which are very relevant for the SDNP:

   i) Sensitization and Environmental education;

   ii) Conservation, management and use of biodiversity and forestry resources;

   iii) Geological and mineral resources exploration with environmental concerns;

   iv) Industrialization and pollution;

   v) Managing urban wastes;

   vi) Management of coastal and marine ecosystems;

   vii) Maritime and inland fishing;

   viii) Environmental conflicts and legal and institutional framework of sustainable solutions;

   ix) Sectoral policies with the view of harmonizing and taking into account environmental

considerations;

x) Developing a national management scheme with the view of harmonizing and taking into account environmental considerations;

xi) Inventory and evaluation of research with concern for the environment.

In all these, the principal objective is the integration of communities into environment programmes and to consolidate their active participation in the process.

These 11 sectors are supported by programmes in population, education, communication, research and technology, women in development, training, and information management. The success of all these programmes and the NEMP will no doubt depend on quick access to relevant information as well as the facility to exchange ideas and information across these related, but different areas of endeavour. And this is where the SDNP comes in to fill the gap.

d. Linking SDNP / NEMP-IEC

The communication and education programmes of the NEMP lay great importance on the "process" aspect of development and emphasize social mobilization, community participation and behavioral change while discouraging the ad hoc, quick-fix solutions where media is seen as the only communicator.

The SDNP can have a role to play here by helping stakeholders access relevant information in a user friendly format. SDNP could enhance participation in the NEMP by permitting planners, policy makers and other key decision-makers working on the NEMP to eventually interact with groups directly concerned with the policies and actions proposed. The SDNP can help bridge gaps between stakeholders for sustainable development across the country and across sectors of the economy and of civil society in general. In this way, the SDNP and NEMP/IEC will be re- inforcing and complementary in the sustainable development process.

e. Local Expertise

There is sufficient expertise for the maintenance and repair of computer hardware found in the following institutions:

- CamFido and HealthNet
- RIO/ORSTOM
- REFER/AUPEF
- INTELCAM
- Ministry of P&T
- Higher School of P&T
- ACL/Polytechnic Yaounde
- CENADI
- Campus

However, there is need for further training in Unix and other advanced networking skills, as the local available expertise is moderate.

f. Awareness and Computer Literacy

The concept of information sharing through electronic networking is still very new to many

Cameroonians. There has been little publicity, and the degree of awareness is not high despite the fact that the technology has existed in the country for close to three years now. The level of computer literacy is low, and training is required for users.

2. EXPECTED END OF PROJECT SITUATION

a. Collaboration SDNP and Other Networks

The management and operators of the CamFido and HealthNet networks are keen to collaborate with the SDNP. Discussions should be pursued with the RIO/ORSTOM and REFER/AUPEF network. RIO/ORSTOM provides access to a variety of users, and does not only include the research and academic communities, although these are the main target groups. Collaboration under the aegis of the UNDP Resident Representative, and among the operators and managers of these four networks is sure to lead to greater collaboration and rationalization of resources.

b. Management Committee/Coordination Unit

The SDNP Management Committee and the SDNP Coordination Unit will have been well established and functional.

c. SDNP Host Connected

The SDNP Cameroon Host should be connected, operating and offering training to users and trainers.

d. Users Trained and Connected

Several users and representatives of stakeholder groups, including members of the Mnagement Committee will be trained in the use of computer mediated communications and connected to the SDNP Host.

e. SDNP Host Fully Installed

The SDNP Host will be fully installed and operational at - The Automation and Control Laboratory (ACL), Ecole Nationale Superieure Polytechnique in Yaounde.

f. Provincial Nodes

All Provincial Nodes in Yaounde, Douala, Bafoussam and Garoua will be linked to the SDNP server at the ACL/Polytechnic in Yaounde.

g. SDNP Self-sustaining

A self-sustaining mechanism will be set-up with commitments for ongoing support in place to support the continued operation of the SDNP.

h. SDNP Publicity

The media and opinion leaders will be better informed about the SDNP and sustainable human development in Cameroon.

Over the longer term, the project will lead to greater awareness, greater access to information for

sustainable development, and better decision making for sustainable development.

i. Relationship: SDNP with NEMP and Capacity 21

As support to the NEMP and the Capacity 21 initiative, SDNP will also have helped to achieve the following outputs:

- SDNP will have contributed to supporting both the NEMP and the Capacity 21 programme in Cameroon (see above for specifics);

- SDNP will have helped strengthen environmental management capacity among key stakeholders in the main cities of Yaounde and Douala initially through the relevant organs of civil society and the state;

- SDNP will have helped improve donor coordination;

- SDNP will have contributed to the recognition and the facilitation of the participation of local communities in natural resource management, giving particular attention to the role of women.

- SDNP will have helped users share data for improved environmental management and sustainable development planning and action;

- SDNP will have helped develop public awareness on environmental issues;

- SDNP will enable the teaching of environmental and sustainable development values through the educational system in Cameroon.

The SDNP will help in the formulation and use of Government policies, rules and regulations. Bibliographic references, technologies for commercial and rural users, directories of organisations, directories of experts, directories of financial sources, calendar of events, news and opinions will be established to facilitate the process of information collection, storage and dissemination.

Identify users of the 10 listed possible services that can be offered by the SDNP and make service available to Partners.

- Communication with colleagues
- Access to databases
- Access to software
- Forum for debates and discussions
- Learning of new skills (distance learning)
- Classified adverts
- Expert or specialised services
- Early warning system
- News and opinions
- Lodging of complaints.
- etc.

3. TARGET BENEFICIARIES

Various stakeholders engaged in sustainable development will benefit from this project, in particular the following:

a. Government

In government, the ministries responsible for the following areas are the main beneficiaries: environmental affairs and natural resources, agriculture, fisheries, forestry, wildlife and national parks and protected areas, women's and children's affairs, education, health, disaster planning and relief, tourism, information, posts and telecommunications, planning and finance etc.

b. NGOs/CBOs

Among the community of Non-Governmental Organizations (NGOs), the following have been identified on a preliminary basis because of their wide range and relevant activities and knowledge: Service d'Appui aux Initiatives Locales de Développement (SAILD), Féderation des Organisations Non-Governmentale d'Environement du Cameroun (FONGEC), Conseil des Fédérations Paysans du Cameroun (CFP-C), Centre International pour la Promotion de la Création (CIPCRE), Action pour un Développement Equitable Intégré et Durable (ADEID), Fédération des Associations des Femmes du Cameroun (FAFCAM), Fondation Camerounaise pour une Action Rationalisée des Femmes sur l'Environnement (FOCARFE), Association des Clubs des Amies de la Nature (ACAN), Africa Femmes Et le Progrès (AFEP) etc. dealing with coordination and information sharing among the NGO community around the country.

c. The private sector

Several organizations of business professionals have been identified and a good number showed interest during meetings with the feasibility study team. They include the following: the Cameroon Chambers of Commerce and Industry and of Agriculture, the AGRO-PME for small and medium sized enterprises in the agricultural sector, GICAM, Brasseries du Cameroun, Paris Mutuelle Urbain du Cameroun (PMUC), Cameron News Agency (CAMNEWS), SITABAC, Societé Nationale d'Invetissement (SNI), Societé de Développement du Cacaoyer (SODECAO), Societé de Développement du Coton (SODECOTON), Regie Nationale de Chemin de Fer du Cameroun (RNCFC), Cameroon Development Coorperation (CDC), SONARA, Cocoa Union of the West Province (UCCAO), North West Beekeepers Association (NOWEBA), etc dependent on the sustainable exploitation of natural resources.

d. The Academia and R&D Institutions

Institutions in this group include the following:

The National Higher School of Engineering, Advanced Teachers' Training College, Posts and Telecommunications, the Medical School, the Universities of Buea, Yaounde I, Yaounde II, Ngaoundéré and Douala and the Inades-Formation, National Institute for Medicinal Plants, Zooligical and Agronomic Research.

e. Linkages

As a result of the feasibility study, it is clear that the SDNP- Cameroon should be an inter-disciplinary facility, disseminating information at several levels:

- *Decision-making level:*

    Demand at this level is mainly found in governmental institutions including: the Ministry of Environment and Forests, the Ministry of Agriculture, Ministry of Economy and Finance, Ministry of Mines, Water and Energy, and other government ministries. Information needs at

this level can be specific and could include a need for information on management practices, policies and regulations relevant to sustainable development. Information on natural resource management and experiences from elsewhere, for example from Zimbabwe on the management of national parks for example, could be very important to Cameroon.

Information on overseas markets, non-tariff barriers, pollution standards, pollution abatement methods and clean production technologies could also interest the private sector. The relationship between the greening of consumers and international trade and sustainable development would also be directly relevant. For Cameroon, information on overseas commodity market, buying and selling prices, currency exchange information is crucial and must be made more readily available to small scale producers and small and medium sized enterprises in general.

Information on the state of the environment continues to be needed. There is a need to enhance basic telecommunications infrastructure to permit headquarters, regional and district level officers in the Government of Cameroon, and among NGOs and others to communicate.

- *Research level:*

  Demand at this level is mainly found in some government departments, research and academic institutions and some NGO's. Information needs at this level are wider and include all issues related to sustainable development.

- *Awareness level:*

  Demand here comes mainly from the Ministry of Environment and NGO's, including NGOs working in environment, development and health; local and community groups; grassroots organizations and religious groups. Information on news, views, opinions, calenders of events and directories could be very important at this level.

  The feasibility study identified several areas where specific information needs are to be addressed. These include: directories of financial sources; of information sources on specific or general information on sustainable development; technologies for commercial and rural users; government policies; laws, rules and regulations; data base on organizations, etc.

4. STRATEGY AND INSTITUTIONAL ARRANGEMENTS

a. Strategy

The sub-sector concerned is information, and its proper integration in planning, policy and decision-making with regard to environmental management and assessment, analysis, and monitoring of the environment as a key indicator of Sustainable Development. The capacity to acquire this information, know-how and technology to implement appropriate solutions for Sustainable Development, as well as to share this with stakeholders through out the country is anticipated through the existence of the SDNP.

The strategy adopted in this project is to create an open structure for managing the SDNP that will foster consensus decision-making processes and develop the SDNP Host in Cameroon.

An ad hoc Steering Committee (that could eventually be part of the SDNP Management Committee) coordinated the work of the feasibility study all through and has secured valuable

feedback and a high degree of participation from stakeholders. The committee continues to meet and provides much needed direction and support. It has greatly helped to identify the most feasible options for the SDNP in Cameroon. The group is made up of key representatives from different sectors of the economy, of civil society and Government. See Appendix II for details.

The eventual SDNP, helped by the Management Committee, will encourage support from government and other actors in sustainable development as well as ensure close coordination with on-going programmes. The SDNP Coordination Unit and the Management Committee will work together to help the project raise awareness among decision makers of the need for sustainable development. The SDNP will focus on national networking and access to the Internet and the creation of a national information server on sustainable development. It will encourage greater use of existing networks.

The intent of this endeavour is to increase connectivity and communications between key stakeholders and to encourage and help develop appropriate participatory processes in support of sustainable development. These objectives should lead to better informed decision-making based on greater awareness and use of options, resources and/or experiences in developing appropriate solutions for sustainable development. Benefits from informed decision-making include the following:

- Better ability to learn from existing experiences, especially at the local and community level;
- Less duplication of effort;
- Better use of existing and sometimes limited resources;
- More timely interventions;
- More consensus.

These in turn, lead to better identification of needs, resources and their prioritization. Accordingly, better development plans and programmes are drawn up and are more effectively and efficiently executed with greater stakeholder support.

In order to ensure its sustainability, a resource mobilization mechanism is incorporated into the project design, so as to catalyse funding of the processes that are developed. This is an essential and basic principle of operation and a key strategy for the SDNP. SDNP must start thinking of becoming self sustaining from the onset of the project.

A priority for the SDNP operation will be to market the SDNP idea. For this, and for the reasons given above, the SDNP will develop a business plan.

The SDNP will not participate directly in the creation of large databases, a role that others can better deal with. Instead, the SDNP will seek to enhance connectivity between database developers and users.

The SDNP Coordination unit will seek to work closely with the national Infoterra focal point for Cameroon. The SDNP will maintain close links with the Ministry of Environment and Forests and will seek active involvement in the NEMP. SDNP will also support the Capacity 21 programme and also with umbrella organisations to ensure direct involvement of civil society concerns.

These will include representatives of the business community, including especially the Economic and Interprofessional Consultative associations and groups and other private sector natural resource managers and companies in Cameroon.

b. Institutional arrangements

Organs

- *The General Assembly*

  The General Assembly will be made up of Stake-holders and will be the decision-making body of the SDNP.

- *Management Committee*

  Representatives of key sectors have been identified during the feasibility study.

  The role of the SDNP Management Committee is to provide advice, direction and support to the SDNP Coordinator and the Coordination Unit staff, and to review plans, activities and achievements with the SDNP Coordinator. This will be done on an on-going basis.

  The Management Committee represents stakeholder groups and networks with these stakeholders on issues related to sustainable development in Cameroon. An interim ad hoc Steering Committee has been operational since the early stages of the project, during the feasibility study, to help launch the SDNP.

  The Management Committee will play a major role in guiding and orienting the SDNP and ensuring proper function of the activities undertaken by it. In addition, it will also have a role to play in long term planning and the achievement of cost recovery.

  The Management Committee does not have direct responsibility for financial management, although it should have knowledge of the financial status of the project. It is the vehicle for reflecting stakeholder and user participation in the management and operation of the SDNP.

- *SDNP Coordination Unit*

  The SDNP Coordinator is accountable to the Management Committee, the Implementing and Executing Agencies, the UNDP/CO, and reports to all on an ongoing basis. The SDNP Coordination Unit see point j) for its composition, should have expertise in the following areas:

  - an understanding of the national priorities for sustainable development;
  - an understanding of sound management practices, and especially marketing and communications;
  - expertise in information technology; and
  - especially computer mediated communications.

- *Executing and Implementing Agencies*

  For the purposes of this project, the Government is the Executing Agency and The Automation and Control Laboratory/Ecole Nationale Sup-rieure Polytechnique - The ACL/Polytechnic in Yaounde will be the Implementing Agency. The ACL/Polytechnic will provide premises for the offices of the SDNP Coordination unit.

5. IMPLEMENTATION ARRANGEMENTS

a. Phasing

This is a two year project. Most of the activities will be on- going. Phasing will be done as follows: the ad hoc steering committee that has already been meeting during the feasibility study, continues to provide input until the SDNP-Cameroon is established.

Once the project has been approved, the implementing agency - The ACL/Polytechnic takes the initiative to convene the ad hoc steering committee to a meeting where the SDNP Management Committee would be formally constituted. The project would be nationally executed by MINEF and implemented by ACL/Polytechnic.

The Coordinator, the Technical Specialist and the Administrative Assistant would be recruited following the procedures of UNDP/UNOPS.

With the help of the national implementing agency, stakeholders, the SDNP Coordinator, the Coordination Unit will develop a programme of work that considers options for cost recovery.

b) Programme of work

Once the programme of work is in place and has been approved by the Management Committee, the SDNP Coordinator implements the plan. S/He will become very much acquainted with the needs of the community of potential users of SDNP services. S/He will communicate with them on an ongoing basis. S/He will demonstrate, with the support of the SDNP Unit, what the SDNP has to offer. Work on the marketing and communications plan that will make up the business plan begins from then, including a plan for cost recovery. Once this information has been assembled, the cost recovery plan will be proposed to the Mangement Committee.

c) Hardware and equipment purchases

These are to be acquired free of duty with the advice of UNDP. The budget reflects USD street prices in New York City, for computer hardware and software. This will ensure conformity with UNDP/New York and other SDNP sites worldwide. It will also ensure more focused international training and support.

The Coordination Unit in collaboration with MINEFI and The ACL/Polytechnic through the UNDP will acquire all the equipment for the SDNP.

The ACL/Polytechnic will assist in acquiring sufficient telephone lines to permit access to the SDNP server.

d) Training plans and activities

A training plan will be developed to meet the needs of node operators and users. From the feasibility study, it is clear that there is a need to reach many users and that these users have specific demands for information.

e) Travel

This element of the budget is for travel within Cameroon. Travel will be required to demonstrate how the SDNP operates and how to benefit from the system aiming at encouraging greater use of the network. Road travel will be preferred and will take place using local transport, and other means where appropriate and where administrative mechanisms permit this to happen. Administrative issues could include obtaining an official vehicle from the Ministry of Environment and Forests or renting a vehicle, as well as using taxis for local transport.

f) The SDNP server

The SDNP staff and collaborators in organizations supporting the SDNP node search for and obtain information that will interest their users and that can be loaded as digital (ASCII) files on the server, and eventually a BBS and/or a World Wide Web (WWW) site can be developed. This will expand the E-Mail network and could be a way of promoting the sharing and the use of electronic conferencing. The host organization, along with the SDNP, will market these resources and the potential that computer mediated communications represents.

g) SDNP Coordination unit

The Coordination unit will need another computer for operations and this will be used by the administrative assistant and by the SDNP Coordinator.

h) Modems

To encourage greater use of the SDNP server, modems will be distributed from and by the coordination unit either on a loan basis or sold outright to users. Loans of modems will be provided as part of the project to encourage users to connect. Modem loans should be for a period not exceeding six months after which the user would be expected to either buy the loaned modem or purchase a different one from elsewhere. Availability of modems will be linked to participation in SDNP training.

i) Business plan

The business plan will be developed from the beginning of the project. To achieve sustainability or self sufficiency, the SDNP will first first of all need to understand user needs. How to secure support is a consideration that the SDNP Coordinator and the Unit staff will have to be aware of from the start. On-going consultations with the donor community to seek their support and feedback will also be essential. This must be undertaken at the same time as efforts to enlarge the user base.

j) Implementation

The functional structure of the SDNP relies on two (2) levels : a central level and a provincial level.

Central Level

The central level is composed of :

- *The Management Committee and the Coordination Unit;*

  It determines global strategy in relation with the SDNP/ New York and provides the necessary support to the Co-ordination Unit for lobbying activities and funding. Its composition had been explained earlier.

- *The Coordination Unit.*

  The respective responsibilities are stated as follows :

  The Coordination Unit comprises :

- the Administrative Assistant;
- the Technical Specialist;
- the Co-ordinator (head of the unit) executes the strategic orientations of the Management Committee, assures the daily running of the SDNP and is in direct contact with the UNDP/Yaounde and SDNP/NY.

Provincial Level

At provincial level, nodes will be set up according to stake- holder needs and ability to pay. These nodes will comprise :

- *A Node Manager*

  It is recommended that, the pilot organisation hosting the node should provide the Node Manager, who could be one of its regular staff. Any needed, assistant may also be designated.

  Starting with Douala, pilot nodes should be set-up with the following geographical coverage :

  - DOUALA : for the Littoral and South-West provinces;
  - BAFOUSSAM/ DSCHANG : for the West and North-West provinces;
  - GAROUA / NGAOUNDERE : for the Adamawa, North and Far-North provinces;
  - YAOUNDE : for the Centre, South and East provinces.

  Each Node should be located within the office of one of the pilot users or key-partners in each town.

6. RATIONALE FOR UNDP ASSISTANCE

Government is fully committed towards adopting strategies that would ensure sustainable development. This commitment can be noted through Government's effective participation in the RIO Summit, the ratification and signing of Conventions (biodiversity and desertification) and the implementation of the NEMP as its main block and priority area within the context of Agenda 21, a key instrument for promoting sustainable development.

Agenda 21 recognizes the powerful role of information sharing and dissemination on issues and actions related to SD and notes the need to deal with fundamental problems caused by inadequate availability, analysis and use of information in the field of development and its relation to the environment.

UNDP mandate for capacity-building through Capacity 21 programme helps developing countries formulate economic, social and environmental goals, plans, programmes and policies that lead to SD. The SDNP, with its capacity to provide quick access to data, speedy analyis and timely dissemination of information, is a critical part of this effort.

The SDNP has many opportunities in Cameroon since it is becoming an important commodity trading nation, the restructuring process of the economy and its great concern for environmental management become evident. In this process, the government needs tools for information exchange and dialogue and the SDNP will be such a tool for strengthening environmental monitoring and fostering national and sub-regional information sharing.

By supporting the process in this way, the SDNP will help to create and up-grade necessary

capacities and capabilities and ensure popular participation in the decision-making processes leading to SD. SDNP will facilitate linkages between all the players working for SD within and outside the country.

The United Nations Conference on Environment and Development (UNCED) resulted in Agenda 21, a comprehensive plan of action for sustainable development which Cameroon adheres to in principle, having participated in its deliberations.

UNCED identified UNDP as the lead agency in the United Nations system to help developing countries acquire the capacity to implement the recommendations. UNDP responded with the Capacity 21 Programme and with the Sustainable Development Network Programme (SDNP) to help developing countries implement Agenda 21 by facilitating access to information that support decision making and also encourage stakeholder participation from all levels in the steps leading to sustainable development.

Making information available for decision making is key to this process, and to securing stakeholder participation. Providing access to Internet services and applications is a response to a strongly felt-need identified during the feasibility study.

7. COORDINATION ARRANGEMENTS

The Ministry of Economy and Finance will coordinate the project in its capacity as Government representative and the Ministry of Environment and Forests (MINEF) is responsible for the execution. It is hoped that the experience gathered from the Capacity 21 programme, could be transfered to the SDNP to facilitate its implementation. As a nationally executed Project, the Implementing Agency (ACL/Polytechnic, Yaounde) will work very closely with MINEF, the Executing Agency of the Government of Cameroon and coordinate permanently with other stakeholders through the General Assembly, Management Committee and liaise constantly with UNDP/CO and SDNP/NY. NGO/CBO involvement and active participation is crucial at all times.

UNDP will coordinate those activities that are required of its procedures.

The following structures will ensure overall programme coordination.

a. Central Level

SDNP Management Committee

- the general assembly
- management committee
- Coordination Unit

  - national coordinator
  - technical specialist
  - administrative assistant

b. Provincial Level

Pilot Users Groups

- users
- node managers

c. human resource capacity building

According to the functional structure, human resources are necessary at the central and provincial levels. The specificity of Cameroon does require that an elaborate staff be put in place for the SDNP to be successful. An opposing factor, however, is the need for sustainability of the network. It is obvious that the more staff that is involved, the less likely it is, that the SDNP can be sustained after the initial funding period is over.

With the above consideration, three staff are envisaged at the national level, and one staff at the provincial level (the provincial staff is not going to be paid from initial SDNP budget). Depending on the rate of growth and the success of the SDNP, additional human resources may need to be considered before or after the two years elapse.

8. COUNTERPART SUPPORT CAPACITY

The ACL/Polytechnic will provide counterpart support to the project. This includes premises for office space for the SDNP Coordinator Technical Specialist and Administrative Assistant and to facilite the installation of the SDNP host computer and in the acquisition of at least two telephone lines (a direct line for the Unit itself and one line for the fax) for the normal operation of the Coordination Unit.

It will be up to user organizations to ensure connections to the main node in Yaounde or to other nodes. For the purposes of the project at this time, at least one other dial-in line will be needed for a dial up Internet connection. In this way, users in Cameroon can obtain dial up access to the Internet. The SDNP server will be linked on a store and forward basis via UNDP New York using uucp initially. Use of the CAMPAC Public Data Network to connect to the Internet in real time will also be examined. An eventual VSAT connection would need to be discussed with IntelCam, the government owned Cameroon international telecommunications service provider.

Government ministries and other structures may second staff on a full time basis to the SDNP to acquire the capacity to operate and maintain SDNP nodes at their level. Such persons would be trained under the terms of this project and with the help of the The ACL/Polytechnic.

The ACL/Polytechnic has the capacity to implement the project by providing operational and technical assistance, training and facilities support.

C. DEVELOPMENT OBJECTIVE

The SDNP seeks to contribute to the achievement of sustainable development by enhancing capacity for informed and participatory decision-making by stakeholders for sustainable development.

The SDNP development objective is the promotion of Sustainable Development to enhance development activities of SDNP partners.

This will be done by creating a sustainable mechanism for facilitating access to information and for encouraging increased collaboration, participation and communications and networking between stakeholders locally, nationally, regionally and otherwise.

The project will enhance capacity for using computer mediated communications especially the Internet, as a tool for sharing information, experiences and thus knowledge, and thereby enhancing

collaboration in the process.

D. IMMEDIATE OBJECTIVES

1. Immediate objective No 1

Establish an organizational mechanism for networking stakeholders for sustainable development in Cameroon.

1.1 Output 1.1 An active/operational SDNP Management Committee

Activities

```
1.1.0.1 Establish Management Committee;

1.1.0.2 Agree on Terms of Reference and Chairmanship;

1.1.0.3 Formalize Functioning of the Management Committee;

1.1.0.4 Regular meetings of the Management Committee and
        establish a modus-operandi.
```

1.2 Output 1.2

An active/operational SDNP Coordination Unit

Activities

```
1.2.0.1 Hire the SDNP Coordinator, SDNP Technical Specialist and
        Administrative Assistant;

1.2.0.2 Order equipment for the SDNP/Cameroon;

1.2.0.3 Negotiate with The ACL/Polytecnhic on Hosting Modalities
        of the SDNP;

1.2.0.4 Set up the SDNP Coordination Unit: acquire the office
        space, establish the legal status as necessary;

1.2.0.5 Develop a detailed work programme.
```

2. Immediate objective No 2

To develop and/or enhance communications and connectivity between the users and providers of information related to sustainable development in Cameroon

2.1 Output 2.1

A SDNP Cameroon Internet compatible computer network with full international Internet connectivity and linking at least 50 stakeholder groups in different sectors throughout the country.

Activities

```
2.1.0.1 A focused campaign to raise awareness and to demonstrate
        the advantages of computer mediated communications;
```

```
2.1.0.2 Support and enhance existing computer networks,
        especially the Cameroon Fido Network, HealthNet, RIO,
        REFER located at the University of Yaounde ;

2.1.0.3 Develop a high bandwidth (64 kilobytes per
        second) dedicated telecommunications connection to the
        Internet through Intelcam facilities or using very
        small aperture terminals (VSAT) satellite technology;

2.1.0.4 Work in close association with the United
        Nations system in Cameroon, especially UNDP/Yaounde,
        and with others, including WB, WHO, UNIC, UNESCO, FAO,
        UNICEF, GTZ, CFD, ACDI, WWF, GEF, British Council,
        French Cultural Center, American Cultural Center
        etc, and other end users, to increase connectivity;

2.1.0.5 Identify and establish SDNP linked hosts          in
        sites throughout the country, starting with Yaounde
        and then including Douala, Bafoussam, Maroua, Bamenda,
        Ngaoundere, Limbe, Bertoua, Ebolowa, Garoua and
        connect them to the SDNP host in Yaounde to
        develop a Cameroon Wide Internet Compatible
        Network;

2.1.0.6 Establish and Test Dial-In, Serial Line
        Internet Protocol (SLIP) or Point-to-Point Protocol
        (PPP) and Leased Line Connections to the SDNP
        Cameroon Internet server;

2.1.0.7 Develop the capacity to use Internet
        applications on the SDNP server, including
        email, electronic conferencing
        (newsgroups),Listserv (electronic
        mailing lists), logging in to remote CPUs
        (telnet), file transfer (FTP), Gopher, various
        information retrieval applications (Veronica,
        Archie, and others), and the World Wide Web
        (WWW);

2.1.0.8 Train operators and users;

2.1.0.9 Expand the SDNP by increasing the number of users and by
        developing the SDNP server;

2.1.0.10  Link users and providers of information and knowledge
          resources on sustainable development in Cameroon through
          the SDNP network;

2.1.0.11  Provide or loan modems to help users establish a
          connection;

2.1.0.12  Develop and support local user groups;

2.1.0.13  Establish operational rules and procedures.
```

2.2 Output 2.2

An SDNP information server on sustainable development in Cameroon.

Activities

```
2.2.0.1 Encourage the creation and/or acquisition and/or
```

```
        linking of Cameroon information resources,
        especially electronic sources of information
        relevant to sustainable development;

2.2.0.2 Encourage users and subscribers to load information
        on the SDNP computer server and to use Internet
        applications to share this information as
        appropriate;

2.2.0.3 Acquire the resources to permit access to this
        server throughout Cameroon by negotiating better
        terms and conditions of access and by encouraging
        participants to make best use of their own
        resources to connect to the SDNP server.
```

3. Immediate objective 3

Capacity established to use and apply technologies for computer mediated communications for informed decision making

3.1 Output 3.1

A training programme for SDNP hosts and users that will provide introductory and ongoing support;

Activities

```
3.1.0.1 Identify potential trainees and their needs;

3.1.0.2 Identify existing training activities and  organizations
        with which to collaborate in providing training;

3.1.0.3 Develop training modules;

3.1.0.4 Encourage Cameroon institutions of higher learning to
        develop educational and/or training programmes on
        computer mediated communications and computer networking;

3.1.0.5 Seek more support for training.
```

3.2 Output 3.2

Operators of SDNP nodes trained and end users trained in computer mediated communications, including Internet compatible applications.

Activities

```
3.2.0.1 Run workshops for users and node operators;

3.2.0.2 Provide on-the-job training in collaboration with
        others (Universities of Cameroon, UN Agencies
        including the WB, etc.
```

4. Immediate objective 4

To get user and other forms of support, financial and otherwise, to sustain the SDNP.

4.1 Output 4.1

A business plan, including a marketing and communications plan, laying out a strategy for making the SDNP operation self sustainable.

Activities

```
4.1.0.1 Characterize the market for information and
        knowledge resources for sustainable development in
        Cameroon. This is an ongoing activity;

4.1.0.2 Characterize the market for greater connectivity to
        the Internet and other wide are computer networks in
        Cameroon;

4.1.0.3 Characterize and capitalize on the interest of other
        groups to use and access the Internet, and seek
        collaboration with them;

4.1.0.4 Identify key users and providers of information on
        sustainable development in Cameroon;

4.1.0.5 Identify and characterize key information and
        knowledge resources in Cameroon;

4.1.0.6 Develop an understanding of the information needs
        and circumstances affecting key stakeholders for
        sustainable development in Cameroon;

4.1.0.7 Prepare a plan and strategy to meet these needs in a
        self sufficient manner, building cost recovery into
        the operation.
```

4.2 Output 4.2

A self sufficient SDNP operation in Cameroon

Activities

```
4.2.0.1 Implement the business plan.
```

5. Immediate objective 5

Develop information products and services, including a full Internet link and SDNP server, that meet the needs and circumstances of stakeholders for sustainable development in Cameroon.

5.1 Output 5.1

A `Sourcebook' of information and other resources, including people and their expertise, on sustainable development in Cameroon prepared and disseminated.

Activities

```
5.1.0.1 Develop and/or provide SDNP network access to a directory
        describing key information and knowledge resources that
        could interest SDNP users;

5.1.0.2 Include information about the key stakeholder groups,
        their nature, objectives, activities, contacts and other
        relevant information;
```

```
5.1.0.3 Create and provide access to an electronic Sourcebook on
        Sustainable Development in Cameroon by the end of year one.

5.1.0.4 Update the electronic Sourcebook on Sustainable
        Development on an ongoing basis.
```

5.2 Output 5.2

Products and services to meet the needs of key stakeholders for sustainable development

Activities

```
5.2.0.1 Identify and develop products and services to meet
        the needs of users and of key stakeholders for
        sustainable development using computer mediated
        communications: Electronic conferences, Listserv
        facilities, information services such as Veronica,
        WAIS, WWW, etc.;

5.2.0.2 Adapt Internet applications to the Cameroonian
        situation;

5.2.0.3 Encourage users of the SDNP network to make
        available key information in ASCII or machine
        readable form for access through the SDNP network;

5.2.0.4 Provide consultancy services on a cost recovery
        basis;

5.2.0.5 Make available and/or market the products and
        services agreed to.
```

D. Inputs

a. Government

Government will provide the necessary administrative and political support for a national executed project. It is expected that in the future, Government could provide independent premises and manpower to the project. With the advent of liberalisation and in the spirit of strengthening private sector activities, the SDNP may gain from Government response to this sector through exonorations and other attendant benefits.

b. ACL/Polytechnic

Premises for the National Coordinator, Technical Specialist and the Administrative Assistant, will be provided by the ACL/Polytechnic who will also facilitate the installation of the SDNP initial equipment including access to two telephones lines. One for the Coordinator and the other for the SDNP server. It is also envisaged that a meeting room will be made available when need arises. As a consequence of the above, (providing premises), electricity, water, cleaning and security will be covered in partnership with the SDNP in definite terms to be worked out. See the work plan and counterpart support described earlier in point 8 above.

c. UNDP/SDNP

UNDP/SDNP will provide US$ 187,000 to launch the project and to help it run for two years in

addition to the US$ 11,000 that was provided for the feasibility studies. These funds will be used to renumerate the three full time personnel; the SDNP Coordinator, the Technical Specialist and the Administrative Assistant, train users and purchase equipment for the project. It is hoped that the project should be self-sustaining as from the first two/three years. See the budget for details.

E. RISKS

The successful implementation of SDNP in Cameroon requires installation of a full Internet connection with public access in the long run. Its implementation requires more funding than the SDNP alone provides. Additional funding can come from the following sources:

- SDNP (UNDP New York: SPR funds)
- UNDP indicative planning figures (IPF) funding
- Capacity 21
- Expected cost recovery from network usage
- Counterpart (Government of Cameroon)
- Other donors

Other sources of funding not listed above need to be identified.

More support, for example for technical assistance, business planning and other inputs, may be required, particularly in the early stages of implementation. Cost recovery is essential for the success of the SDNP. Help may be needed for the marketing study and the cost recovery plan. The output of such a study may be invaluable to the development of a successful business plan.

Government control of information especially official records could be a risk to the success of the SDNP but it is hoped that with many changes, the Constitutional Amendments, the Municipal Elections to name but these among the current wind of change and the deliberate efforts to relax press freedom, there is an envisaged enabling environment for the SDNP to work effectively.

F. PROJECT REVIEW, REPORTING, AND EVALUATION

The regular UNDP evaluation, control, follow-up and reporting procedures would apply to the project for UNDP/SDNP funds provided for the first two years of the project. The implementing and executing agencies will meet the requirements accordingly.

1. Benchmarks/Success Criteria

The following could constitute indicators for measuring the sucessful project implementation.

- effective coordination of unit activities;
- level of participation of different stakeholders;
- number of partner user members in the Network;

2. Monitoring

Project technical follow-up shall be ensured through:

- field visits by SDNP consultants;

- periodic visits by UNDP representation;
- backstopping missions from SDNP/NY;
- project work plan;
- periodic meetings and reports by implementing agency;
- coordination meetings with other related organizations.

3. Evaluation

The following mechanisms shall be used for programme evaluation:

- annual reviews based on internal evaluation reports prepared by the National Coordinator and Technical Specialist;
- terminal evaluation at the end of the project to be effected under the leadership of The ACL/Polytechnic as implementing agency.

4. Audit

SDNP contribution shall be audited in accordance with procedures relating to nationally executed projects.

G. LEGAL CONTEXT

This project document shall be the instrument referred to as such in article 1 of the Standard Basic Assistance Agreement between Government of Cameroon and Unite Nations Development Programme, signed by the parties on 25th October 1991.

The following types of revisions may be made to this project document with the signature of the UNDP Resident Representative only, provided s/he is assured that the other signatory (ies) of the project document has no objection to the proposed changes:

a) Revision in or addition of any annexes of the project document;

b) Revisions which do not involve significant changes in the immediate objectives, output or activities of the programme, but are caused by the rearrangement of inputs already agreed on or deflation; and

c) Mandatory annual revisions which rephase the delivery of agreed programme inputs or increased/decreased expert or other costs.

The Government of Cameroon/The ACL Polytechnic Yaounde shall be financially liable in case of mismanagement of funds/equipment allocated to it buy UNDP for the programme execution.

H. BUDGET IN USD

Project personnel	Year 1	Year 2
	USD	USD
- Full time Coordinator	18.0	18.0

```
- Network Specialist                    16.8          16.8
- Administrative Asst.                    7.8           7.8
                                        -------------------
                           [85.2]       42.6          42.6


Official travel in Cameroon  [14.0]      8.0           6.0

Training and Marketing

- User training ( 5 workshops/yr,
  20/w'shop, 150 users/yr)              12.0           8.0
- SDNP staff training   (INet96, unix,
  TCP/IP, etc.)                         10.0           8.0
                                        -----          ----
                           [38.0]       22.0          16.0


Equipment

Hardware and software

- P5-133 Mhz Pentium, 1.6 Gb, 32 Mb RAM,
   2 Mg PCI graphics, 4xCD-ROM (main server);
- P5-120 Mhz Pentium, 1 Gb, 16 Mb RAM (back-up),
   2 Mg PCI graphics, 4x CD-ROM;
- Colour ink jet printer
- Modems: 2 x (28.8Kbps) for 'uucp' with New York;
   2 x 14.4Kbps for dial up.
- Tape drive unit (external)
- UPS: 1.500 Watts
- Scanner (colour)
- Software (Billing software,
  Efax + Qfax (email to fax),
  Listprocessor and X-Windows,
  WinFax Pro).
- Miscellaneous (anti-glare screens, etc.)
- Livingstone port master (10 ports minimum)
                                        27.0          15.0
- DX486 Portable, 730 Mb,
  8 Mb RAM, CD-ROM, LAN adapter          4.0            -

- TCP/IP LAN                              -            2.0

- Communications equipment              2.0            -
                                        ____          ____
                           [50.0]       33.0          17.0



Modems for members with local phone access to hosts:
  (14,400 baud, V.32 bis, V.42 bis modems)
  @ USD 125/unit X 50      [6.5]         4.0           2.5


Office Equipment

- Office furniture
  (desks, chairs, filing cabinet).      2.5            -
- Photocopier/accessories
  (or access to copier)                 3.0           2.0
- Office Supplies: laser printer
  cartridges, paper, diskettes,
  cabling, etc.                         2.0           2.0
                                        ----          ----
```

```
                              [11.5]        7.5           4.0

Operations / Maintenance/ Miscellaneous

- Premises security deposit              1.0           -
- Premises maintenance and guard services 3.5          3.5
- Utilities                      2.5     2.5
                                         ----          ----
                              [13.0]        7.0           6.0


Telecommunications
- Acquisition of phone lines             1.0           -
- International polling                   4.0           3.0
- X.25 / PPP                             9.0          10.0
- Secretariat telephone and fax          2.4           2.4
                                      _____      _____

                              [31,8]       16,4          15,4

GRAND TOTAL   USD        [250,000]      140.5         109,5
```

ANNEX I: ACRONYMS & ABBREVIATIONS

```
ACL/Polytechnic          Automation and Control Laboratory/Ecole
                         Nationale Sup-rieure Polytechnique

AIF      Africa Internet Forum

APC      Association for Progressive Communications

BBS      Bulletin Board Systems

CABECA   Capacity Building for Electronic Communications
         for Africa
CD-ROM   Compact Disk- Read Only Memory

CGIAR    Consultative Group for International Agricultural
         Research

DOS      Disk Operating System

EIS      Environment Information Systems

EPA      Environmental Protection Agency  (USA)

FAO      Food and Agriculture Organisation

FTP      File Transfer Protocol

Gb       One Gigabyte (one billion bytes)

GEMS     Global Environment Monitoring System

GDP      Gross Domestic Product

GEMS     Global Environment Monitoring System

GRID     Global Resources Information Database

IARC     International Agricultural Research Centres
```

IDRC	International Development Research Centre
IPF	Indicative Planning Figures
ISOC	Internet Society
ISP	Internet Service Provider
IUCN	IUCN - The World Conservation Union
Kb	Kilobyte (one thousand bytes)
Kbps	Kilobytes per second
LAN	Local Area Network
MOU	Memorandum of Understanding
NGO	Non-governmental organization
NEMP	National Environmental Management Plan
PADIS	Pan-African Development Information System
PPP	Point-to-Point Protocol
RAM	Random Access Memory
SDNP	Sustainable Development Network Programme
SLIP	Serial Line Internet Protocol
SOER	State of the Environment Reporting
TCP/IP	Transmission Control Protocol/Internet Protocol
UNCED	United Nations Conference on Environment and Development
UNDP	United Nations Development Programme
UNDP/CO	United Nations Development Programme Country Office
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational and Scientific Organisation
UNFPA	United Nations Fund for Population Activities
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
USD	United States dollars
UPS	Universal Power Supply
VSAT	Very Small Aperture Terminals
WAN	Wide Area Networks
WCMC	World Conservation Monitoring Centre
WMO	World Meteorological Organization

```
WTO      World Tourism Organization

WWW      World Wide Web
```

SUSTAINABLE DEVELOPMENT (SD)

Sustainable Development (SD) is economic and social growth that does not exhaust the resources of the target country; that respects and safeguards the economic,cultural, and natural environment; that creates many incomes and chains of enterprises; that is nurtured by public policy, and that builds indigenous institutions that involve and empower citizens. It permanently enhances the capacity of a society to improve its quality of life especially by investing in human capital-in education, health, food security and well-being of the population. Sustainable Development projects must involve and strengthen elements of a self-sustaining civic society. (VITA DevelopNet News, Vol. 4 N0: 5 May, 1994)

SUSTAINABLE DEVELOPMENT NETWORK PROGRAMME (SDNP)

SDNP aims at creating country-wide networks to provide information support to development activities in a sustainable fashion. Underlying successful sustainable development network are: knowledge of the kinds of information people require for development decision-making; the capacity to obtain, assimilate and make available that information; and the establishment of connections among users and providers of information andpeople skilled in facilitating its use.

ANNEX II : SDNP AD HOC STEERING COMMITTEE MEMBERS

Name	Title	Organisation
Salomon Bakoto - President	Retired Ambassador	MINEF
Tchana Mesack	Inspector General	MINREX
Yunkap Kwankam	University Lecturer/President for Healthnet Technology	Polytechnic/YDE
Jean-Pierre Kane Kane	Former Director of Cenadi	MINEFI
Thomas Ndive Mukake	Techical Advisor	MINAGRI
Daniel Awum	Director Territorial Development	MINAT
		ILO
Jules Ketcha	Director of Project Management	SAILD

ANNEX III: JOB DESCRIPTIONS

1. SDNP Coordinator

Under the direction of the Management Committee, the SDNP Coordinator will be responsible for all aspects of establishing and managing the SDNP project.

The SDNP Coordinator will be expected to have a very good understanding of the issues related to and main players involved in promoting sustainable development in Cameroon and otherwise, a demonstrated understanding of the use of information technology for computer mediated communications, demonstrated and strong managerial skills, have good writing skills, and have good interpersonal and communication skills along with initiative and drive.

The SDNP Coordinator will be responsible for helping to develop, adapt and implement the programme of work and a detailed budget based on the approved project document. He or she will be responsible for managing the small SDNP secretariat, for undertaking and/or supervising the ongoing tasks of research and analysis, for making recommendations regarding priorities and the expenditure of funds, and for doing this in consultation with members of the SDNP Management Committee.

The Coordinator will also be responsible for developing a marketing and business plan and/or other plans for the ongoing operation of the SDNP.

The SDNP Coordinator will be an entrepreneur for the SDNP.

The SDNP Coordinator will work closely with the SDNP Management Committee, the Executing Agency, the Director of the UNDP/SDNP in New York and with UNDP focal point in Yaounde. Ongoing communications will be maintained.

The Coordinator will be responsible for submitting timely reports to the executing agency and others as required, including the Management Committee and the Director of the UNDP/SDNP in New York and the Resident Representative UNDP Yaounde.

In consultation with other SDNP staff, the SDNP Management Committee and others as appropriate, the SDNP Coordinator will help develop the main programme areas for the SDNP to focus on. This will include identifying local and other sources of information and expertise on issues related to sustainable development in Cameroon, and developing a variety of information products and services to disseminate and communicate this information.

A key component of this will be marketing information products and services. The SDNP Coordinator, with the help of the Management Committee will develop and implement a marketing plan and eventually, the business plan for the SDNP.

The SDNP Coordinator, in consultation with the Technical Specialist, the Management Committee and with users and beneficiaries, will help identify and develop training activities to support the national SDNP. S/He will work closely with The ACL/Polytechnic, the MINEF, UNDP Yaounde focal point and others to prepare and deliver national workshops for SDNP members throughout Cameroon.

Opportunities for regional networking will also be considered as and when appropriate and in consultation with the Management Committee and SDNP/New York.

2. Technical Specialist

Under the supervision of the SDNP Coordinator and/or his or her designated representative, the Technical Specialist will be responsible for developing and managing the information technology aspects of an operational SDNP node and this will be based on the use of computer mediated communications. S/He will establish the necessary hook ups, acquire and install the hardware and software. S/He will help train SDNP staff and SDNP users or members as required.

S/He will be responsible for establishing the SDNP information server. This will be done by searching for and acquiring relevant information, by encouraging SDNP network users and stakeholders to contribute information in ASCII format for example, by establishing electronic conferences through which this information can be shared, and by loading and maintaining this information on the SDNP server. S/He will use various software applications for this purpose, including, where and when appropriate, Internet applications.

The Technical Specialist will also be responsible for responding to the needs of SDNP users for information and will search sources in country or elsewhere. When appropriate, searches will be conducted using the Internet.

S/He will have a good understanding of and demonstrated experience using computer mediated communications, especially computer networking. The ideal candidate will also have a good understanding of sustainable development and of the information needs of the user community. S/He will have Unix skills, and be familiar with the TCP/IP networking protocols.

S/He will have the usual communication skills and the ability to express himself or herself in writing and orally in English and French. Good presentation skills will be very useful. Flexibility and willingness to undertake other tasks as necessary will also be required.

3. Administrative Assistant

S/He will assist the SDNP Co-ordinator and the Technical Specialist in the Administrative running of the SDNP's secretariat.

S/He will be in charge of all secretarial duties; in addition to the following : documentation management and filing; storekeeping of office and working materials, supplies and consumables.

S/He will sometimes be delegated for duties related to demonstration or presentations of the SDNP services and monitoring of the needs of users.

S/He should have computer skills on word processing, spreadsheet, databases and computer graphics. Knowledge of accounting and office practice will be an added advantage.

Usual communication skills and the ability to express self in writing and orally are useful. Good presentation skills are also needed.

4. Node Manager

Node managers will be responsible for the routine operation of the SDNP nodes as will be installed depending on users needs and their ability to pay as explained earlier.

They will be assigned by the node hosting organisation in collaboration with the SDNP Co-ordinator.