



G-77/HLCST/2002/4



**Status of Cooperation among Developing Countries in Information
and Communication Technologies (ICTs)**

Report prepared by the International Telecommunication Union

Report by the International Telecommunication Union on the Status of Cooperation Among Developing Countries in Information and Communication Technologies (ICTs)

Introduction

The International Telecommunication Union (ITU) has been following the invaluable work of the Group of 77 and upholds the Group's various declarations including the Havana Programme of Action of April 2000, promoting cooperation among developing countries especially in the area of Information Technology. Information and Communication Technologies and associated services and applications have ushered in an "information revolution" that, like the agricultural and industrial revolutions before it have tremendous impact on society. It is this view that the United Nations Secretary General, Kofi Annan expressed in his remarks to the first meeting of the United Nations Working Group on Informatics when he argued that: *Recent developments in the fields of communications and information technology are indeed revolutionary in nature. Information and knowledge are expanding in quantity and accessibility. In many fields future decision-makers will be presented with unprecedented new tools for development. In such fields as agriculture, health, education, human resources and environmental management, or transport and business development, the consequences really could be revolutionary. Communications and information technology have enormous potential, especially for developing countries, and in furthering sustainable development (Annan, 1997:1).*

Our work in this regard has proven that Information and Communication Technology is an effective instrument for fostering equality in the field of economic growth and development and for narrowing the gap between the developed and developing countries. Cognizant of the important role played by South-South co-operation especially in this current global economic environment, ITU has adopted a two-pronged approach in helping developing countries work together towards a common goal of sustainable development. While creating various fora that bring developing countries together to map out strategies that promote South-South cooperation, ITU has increasingly turned to a sub regional, regional and interregional strategy. Where possible ITU has worked with or through regional economic groupings or helped in the establishment of regional institutions whose role it is to push through digital divide initiatives and promote economic growth through information and communication technologies.

Cooperation Among Developing Countries in ICTs Within the Purview of the ITU

1.Capacity Building Through Human Resources Development and Management

A host of activities have been organized and implemented aimed at facilitating the strengthening of national and regional centers to cope with new technologies; partnerships were established with training institutions; new training materials, case studies, guidelines were developed for use at sub regional and regional workshops that served as a forum for the developing countries to exchange ideas, learn from each other and share experiences. An electronic platform was also launched to allow participants focused on common issues to discuss and recommend strategies to each other.

Five Centers of Excellence (CoE) were established to serve as fora for South-South Cooperation in the area of knowledge sharing. There are two CoEs in Africa, one in the Arab Region, one in the Americas Region and one in the Asia Pacific Region. The Centers of Excellence use a Case Study based approach whose aim it is to enable developing countries learn from each other's experiences. A Global Telecommunication University/Global Telecommunication Training Institute (GTU/GTTI) has also been put in place and is offering a number of distance learning courses leading to a Masters of Communications Management qualification. An expert in one developing country moderates the course for participants in that particular region.

There is also an Internet Training Centers Initiative for developing countries (ITCI-DC). This is meant to strengthen Internet skills within the staff of the national telecom operators. In this respect each Internet Training Center will develop partnership arrangements with Telecom Operators. Such partnership arrangements include the provision of low-cost connectivity in return for cost-based training for a number of staff. Each Internet Training Center will involve the partnership of the relevant Government Agencies, the training/education institution and the ITCI. When a center is established in one developing country, other developing countries can benefit from the programme by having their telecommunication staff or students to take part. The training centers run on a not-for-profit basis so as to ensure that the programme benefits as great a number of students as possible.

ITU Internet Case Studies

A total of 15 Case Studies have been published since January 2000. This approach is meant to help developing countries share information on the status of ICTs in their countries. Success stories in developing countries can be used for benchmarking by other developing countries. Thanks to these Case Studies, strategies used by one country are shared with other developing countries so as to prevent them from adopting unviable strategies that were already tested and failed. The Cases use a Mosaic Methodology that is based on the following factors:

- Pervasiveness: Looks at the proportion of Internet users.
- Dispersion: Looks at the concentration of the Internet within a nation. Focuses on the level of concentration within individual cities to nationwide availability with point-of-presence or toll free access in all first-tier political subdivisions and common rural access.
- Sectoral Absorption: Concerns itself with the degree of Internet utilization in the education, commercial, healthcare, and public sectors.
- Connectivity infrastructure: Based on international and national backbone bandwidth, exchange points, and last-mile access methods.
- Organizational infrastructure: State of the Internet Service Provider industry and market conditions.
- Sophistication of use: Measures usage ranging from conventional to the highly sophisticated.

The Mosaic approach used in preparing the Case Studies has helped highlight where a country's strengths and weaknesses are. It is also a sanity check for unreliable Internet user data, and is a very good overall measure of ICT potential rather than just Internet user penetration as it includes sector absorption.

The studies also come up with an Internet Development Index that looks at four factors:

- Human: Looks at literacy (secondary and tertiary enrolment, language), newspaper circulation.
- Affordability: Looks at the price of Internet access.
- Infrastructure: Looks at fixed telephone lines and number of personal computers per capita as well as international bandwidth.
- Connectivity: Looks at schools, businesses, and households.

The main strength of the Case Studies is that they include recommendations that are very useful to the rest of the developing countries. We post these Case Studies on the web for ease access by users.

3. E-Strategies

The goal of this programme is to foster the deployment of secure, cost-effective and sustainable Internet Protocol-based infrastructure and value-added services in developing and least developed countries worldwide. In the true spirit of strengthening South-South cooperation, this programme uses a sub regional approach. In South America assistance was provided to member countries of the Asociacion de Empresas de Telecomunicaciones de la Comunidad Andina (ASETA) in harmonizing the electronic commerce legal texts for the Andean Community Member States (Bolivia, Colombia, Ecuador, Peru and Venezuela). Recommendations aimed at boosting electronic commerce were also given to the Organization of Eastern Caribbean States (OECS). Electronic Commerce can help increase trade between developing countries and speed up these countries' integration into the world economy.

In Africa, assistance was given to the Central African Economic Monetary Union (CEMAC) towards the establishment of regional policies on information and communication technologies. In the same vein, assistance was extended to the Tunisian Internet Agency resulting in the launch of an electronic dinar (electronic currency). Tunisia is now helping other developing countries in the Magreb region to replicate the model.

4. Pilot Projects for Rural Telecommunications

Through our rural development and universal access programme we have sought to promote and accelerate the development of rural telecommunications through the implementation of pilot projects in a number of developing countries. Through pilot projects, “best practice” models for providing access to modern telecommunication facilities and information services in rural and remote areas are shared by countries in the South. Pilot projects for rural telecommunication play an important role as they form the basis for evaluating the social, economic and cultural impact of access to such facilities and services, and thus raise awareness among policy-makers as regards requirements and the effectiveness of these tools for social, economic and cultural development.

One of the critical elements of this programme is that it provides quality training of staff and end users and the expertise attained and experience developed in one country is used as a valued asset by other developing countries. Experts in developing countries where these pilot projects are implemented have been assisting other developing countries in replicating these schemes.

There is also another dimension through which community access to ICTs is made possible under this programme. This uses post offices as a medium. The projects are carried out in collaboration with the Universal Postal Union, the national partners and other developing countries. Such participation extends to provision of expertise, equipment, access to the partner’s satellite system and provision of software. The first project was with Bhutan cooperating with the Department of Communications of the Government of India. Similarly, two projects are on the cards for Africa and will see some advanced African countries in terms of ICTs partnering with less ICTs-advanced countries.

5. In the Broadcasting Sphere

In the area of broadcasting, the Asia-Pacific Broadcasting Union (ABU) is in the forefront of promoting South-South cooperation in ICTs. The ABU is an association of the television and radio networks in the Asia-Pacific region. The basic objective of the Technical Advisory Service of the ABU is to provide assistance to its members especially the smaller ones. For example, if a member feels it needs assistance in the preparation of expansion plans for its network/augmentation of facilities or for on-location workshops for its staff, and the requisite expertise is not available with them, through ABU other members provide assistance.

The assistance is extended through services of an expert who provides the required inputs in the form of technical advice or holding of workshops supported by relevant documentation. Expert advice related to preparation of master plans, coverage extension, upgrading of studio/transmitter facilities, solution of complex technical problems, introduction of new equipment/technologies, transition from analog to digital production, on-location workshops and test and measurement procedures are some of the areas that seem to be appropriate for extending assistance. The assistance is not charged to the beneficiary country. For example, in 2000, three such activities were implemented. Maldives requested assistance in the use of digital audio recording for programme production, archival storage in digital media and test and measurement procedures. Assistance was provided by AIR, India. Likewise, BBS Bhutan requested assistance in setting up a Television Centre and assistance was also provided by India. In 2001 five activities were carried out under this arrangement. For example, LNTV, Laos received assistance from CCTV-RTPRC, P.R. China in the maintenance and servicing of several categories of TV production equipment. In the same year, FBC of Fiji requested and received assistance from MBC, Korea in the area of radio studio production. These are just a few of the many activities in which a developing country sought and received assistance from another developing country in the area of broadcasting.

6. Policy and Regulation

In the area of regulation a number of measures were taken to promote and strengthen South-South cooperation. One such measure was through ITU's Global Regulators' Exchange (G-REX). This is a hot line through which developing countries share best practices and learn from each other. G-REX comprises nine discussion groups on key regulatory issues. Most recently, when a regulator from a least developed country requested sample mobile license agreements for its use, responses were immediately received from India, Jordan, Nigeria, Philippines, Uruguay and a few more other developing countries.

Another initiative that paved way for developing countries to cooperate came with the launch by the ITU's Telecommunication Development Bureau of a Global Symposium for Regulators (GSR). The GSR provides a global venue designed to foster a dialogue among regulators. Regulators share experiences and map up strategies on effective regulation by addressing training needs, need for benchmarks and models and bolstering regional and sub-regional initiatives.

Case studies were also published to facilitate the sharing of experience by developing countries. As more and more developing countries sought information and models in regard to the independence and operation of regulatory agencies, ITU's Telecommunication Development Bureau reacted by conducting five case studies in this area. Each report looked at how each

selected country established its regulatory body and evaluated its overall effectiveness by examining its organizational structure, financing, functions and powers and level of transparency. These Case Studies remain a very important intellectual resource through which countries in the South learn from each other.

Then, there is the sub regional and regional institutional approach that among other things seeks to harmonize regulatory policies. A number of developing countries have been creating regional associations of regulators to coordinate and share information on policy-making and regulatory activities. ITU has been working with these regulatory organizations to ensure their success for the benefit of developing countries. The importance of these regional regulatory organizations is that they act as a conduit through which developing countries help each other. Through these sub regional and regional bodies, experts are identified within the region and recommended for a needy case in the region in the true South-South spirit. Examples of successful regional bodies that have made South-South cooperation a reality are:

- Latin America – the Foro Latinoamericano de Entes Reguladores de Telecomunicaciones (Regutel);
- Southern Africa – the Telecommunications Regulators Association of Southern Africa (TRASA);
- Asia-Pacific region – the Asean Telecommunication Regulators' Council (ATRC); and
- Caribbean region – the Eastern Caribbean Regulatory Telecommunications Authority (ECTEL).

Conclusions

The International Telecommunication Union has been working towards the building of an Information Society for the past 137 years and gives high priority to helping developing countries achieve that goal through a variety of ways; one of which is through the strengthening of South-South cooperation. ITU is currently in a very strategic position to continue building on its achievements in this respect as it was invited by the General Assembly to assume the leading managerial role in the Executive Secretariat of the World Summit on the Information Society (WSIS) and its preparatory process, in cooperation with other interested organizations and partners. As can be seen, the proposed themes for the WSIS dovetail with decision 2, action 6 in chapter 3 (Knowledge and Technology) of the Havana Programme of Action, which was adopted by the Heads of State and Government of the member countries of the Group of 77 at the South Summit, held in Havana in 2000. These themes include:

- Infrastructure: financing, deployment and sustainability;
- Identification and overcoming of barriers for the achievement of the information society;
- The role of government, the business sector and civil society in the promotion of ICTs for development;
- Education, human resources development and training;

- Access to information and communication technologies;
- Information network security;
- Development of a policy and regulatory framework;
- ICT applications (education, health, culture, poverty eradication, government, employment, business).

For more information on this paper contact:
Dr. Cosmas L. Zavazava
Email: zavazava@itu.int