South Asian Association for Regional Cooperation

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INTRODUCTION

The South Asian Association for Regional Cooperation (SAARC) was formed by the governments of Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka in 1985 to catalyze regional cooperation in economic and social development in the member countries. In 2007, Afghanistan joined SAARC.

The core areas of cooperation among the SAARC countries are agriculture and rural development; health and population activities; women, youth, and children; environment and forestry; science, technology, and meteorology; human resource development (HRD); and transport. SAARC activities in these areas are implemented through the Integrated Programme of Action (IPA) and coordinated by the SAARC Secretariat based in Kathmandu, Nepal. Besides the IPAs, high-level working groups consisting of ministers are formed to facilitate cooperation, including in information and communication technologies (ICTs).

However, although there has been considerable growth in connectivity, content, and capacity of the ICT sectors of South Asian countries in the last decade, SAARC's role in this advance is difficult to trace. It was only at the 9th SAARC Summit held in Malé, Maldives, in 1997 that SAARC member governments noted the lack of communication facilities as a major hindrance to economic cooperation. The Malé Summit stressed the importance of developing infrastructure and adequate communications networks in member countries to facilitate economic cooperation. The need to simplify complex documentation procedures and use transactional software to facilitate economic interaction was likewise discussed.

The First Conference of the SAARC Communications Ministers, held in Colombo in May 1998, dealt with regional

cooperation for telecommunication sector development in the region. A Plan of Action on Telecommunications (PAT) was adopted during this conference. It took another six years for the Second Conference of the SAARC Communications Ministers to take place. This Second Conference, held in Islamabad in June 2004, adopted the revised PAT 2004 with the following aims:

- To promote cooperation in the enhancement of telecommunication links and utilization of information technologies within the SAARC region;
- To minimize disparities within and among member countries in the telecommunications field;
- To harness telecommunication technology for the social and economic upliftment of the region through infrastructure development by optimal sharing of available resources and enhanced cooperation in technology transfer, standardization, and HRD; and
- To evolve a coordinated approach on issues of common concern in international telecommunications fora.

The Second Conference stressed the need to address the digital divide, knowledge sharing on ICT development among member countries, and HRD in the ICT sector. A year later, SAARC made its presence felt in the global ICT scene when it presented a common position paper on issues in the region's telecommunications sector at the November 2005 World Summit on the Information Society (WSIS) in Tunis.

The sections that follow present SAARC's key initiatives in ICT and ICT for development (ICTD) in recent years. In general,

SAARC's role in fostering regional collaboration in ICTD has been lacklustre. The concluding section outlines some steps that SAARC can take to improve the situation.

KEY ICTD INSTITUTIONS IN SAARC

As an inter-governmental agency, SAARC works mostly through inter-governmental ministries and line agencies such as the Ministries of Information and Communications. It also forms specialized working groups in the form of technical committees, and works through several regional centres that deal with specific issues in South Asia. Currently, there are nine such regional centres located in various member countries:

- SAARC Agricultural Information Centre (SAIC) in Dhaka, Bangladesh
- 2. SAARC Meterological Research Centre (SMRC) in Dhaka, Bangladesh
- 3. SAARC Tuberculosis Centre (STC) in Kathmandu, Nepal
- SAARC Documentation Centre (SDC) in New Delhi, India
- SAARC Human Resource Development Centre (SHRDC) in Islamabad, Pakistan
- SAARC Coastal Zone Management Centre (SCZMC) in Malé, Maldives
- 7. SAARC Information Centre (SIC) in Kathmandu, Nepal
- 8. SAARC Energy Centre (SEC) in Pakistan
- SAARC Disaster Management Centre (SDMC) in New Delhi, India.

Some regional centres generate and share information and they have organized meetings on some of the ICT sectors, such as radio and television. The SDC has also conducted short-term and attachment training programs on information technology applications for library, documentation, and information professionals in the member states.

While there is no SAARC centre that specifically deals with the development of the ICT and ICTD sector in the region, some ICT and ICTD-related issues in HRD, online services, knowledge sharing, and others can be integrated within the current structure of the SAARC regional centres in a more organized way. For example, the SHRDC could have a regular program on ICT HRD. Similarly, the SIC in Kathmandu could carry out ICT-related research and development (R&D) activities. It can also collect data and build a database on ICTs and ICTD in South Asia.

The SDMC was set up in October 2006 to provide policy advice on and capacity-building for strategic learning, research,

training, system development, and exchange of information for effective disaster risk reduction and management in South Asia. One of its more notable ICT-related research initiatives is the preparation of a digitized vulnerability atlas of South Asia integrating spatial data on physical, demographic, and socioeconomic features of different regions in the member countries. The vulnerability atlas shall be prepared on a GIS platform using the latest remote sensing data showing geo-physical and climatic hazard zone classification on a specific scale and integrating available census data on demography, socio-economic conditions, housing types, and the like. In addition, the SDMC's networking strategy specifically mentions 'use [of] information and communication technologies to develop a virtual resource centre for disaster management in South Asia'. However, no information is currently available on the status of these ICTsupported activities for disaster management in the region.

ENABLING POLICIES AND PROGRAMS

Several policies and plans for the development of the ICT sector and ICTD in the member countries have been adopted at the SAARC Summits. The extent to which these have been implemented remains unclear. Nevertheless, some of their more significant provisions are worth mentioning.

Plan of Action on Telecommunication 2004

The revised PAT 2004 adopted by the SAARC communications ministers recommends the reduction of telecom tariffs within the SAARC region to the lowest extent feasible within the framework of cost orientation based on international benchmarks. It also recommends the use of direct links or of a hubbing/transit facility for intra-regional traffic. Special rates are to be offered by the member states for transiting regional traffic and utilization of the facilities by the other member states for overflow traffic. For this purpose, licenced international long distance operators are to be encouraged to frequently negotiate agreements for offering the lowest possible tariffs.

To facilitate intra-regional communications for travellers and entrepreneurs, the revised plan recommends the promotion of country direct services, calling cards, cellular roaming, and liberalized leased lines within the regulatory frameworks of the member states. For this purpose the member states are to encourage: (i) complete digitalization of inter-country links as soon as possible; (ii) settlement of inter-operator revenues within the timeframe set under international telecommunication regulations; (iii) calling card services by facilitating centralized or

decentralized credit verification systems; (iv) a cellular roaming facility within the region; and (v) determining the feasibility of establishing an intra-regional high bandwidth hub for leased lines.

Since 2004, most of the SAARC member countries have reduced telecom tariffs and they have set up hubbing facilities that allow among others mobile roaming in several South Asian countries. Beginning 1 June 2008, the Pakistan Telecommunication Authority (PTA) reduced Mobile Termination Rates (MTR) by about 30 percent. In September 2008, Nepal Telecom revised tariffs on Global System for Mobile communication (GSM) mobile, Code Division Multiple Access (CDMA) and Public Switched Telephone Network (PSTN) phones, and the Internet.

The revised plan also recommends the following:

- Promotion of R&D activities and exchange of expertise in telecommunications disciplines;
- Enhancement of HRD in the telecoms sector through greater cooperation and better utilization of the existing training facilities in the region (including the provision of fellowships by the member states);
- While liberalizing telecommunication services, ensuring:

 (i) universal access;
 (ii) development of rural services with affordable tariffs;
 (iii) viable incentives to service providers to achieve these goals;
- Consultations at multiple levels among communications ministries and regulatory authorities to evolve common positions on telecommunication issues of regional concern at international fora;
- Cooperation among regulatory authorities and administrations to develop policies to increase teledensity and access to ICT at affordable rates; and
- Exchange of information and expertise in the development and utilization of ICT in e-commerce, healthcare, education, and other areas.

SAARC Common Position on the Information Society

The SAARC position paper on the Information Society presented at the WSIS in Tunis in 2005 basically supported the implementation and follow-up of the Geneva Declaration of Principles and Plan of Action by stakeholders at national, regional, and international levels, with particular attention to challenges facing the least developed countries. It also expressed support for the Tehran Declaration on Building the Information Society and Regional Action Plan toward the Information Society in Asia and the Pacific adopted at the High-Level Asia

Pacific Conference for the World Summit on the Information Society in Tehran. Stakeholders, including governments, the private sector, civil society, and regional and international organizations, were called upon to strengthen their partnerships to implement the Regional Action Plan toward the Information Society at all levels.

The SAARC common position also expressed support in principle for a funding mechanism to support the development of ICT in low-income countries, and the conduct of internet governance in a more democratic way. It affirmed the role of governments in internet governance and sought to review the report of the Working Group on Internet Governance (WGIG) in this context.

The development of action plans giving special attention to issues common in the region, and of ICT networks in rural areas to reinforce the process of economic cooperation was also affirmed by the SAARC common position. Recognizing ICT as an effective tool to promote e-governance and improve services to citizens, the position paper called for harnessing ICT for social and economic development, preservation of linguistic and cultural diversity, increasing literacy rates, and access to information for all. Specific mechanisms that were mentioned were building and expanding community-based multi-purpose ICT centres and providing support for public service broadcasting.

The role of media in building the Information Society was affirmed, and specific recommendations were given to:

- develop regional networks and associations among media organizations;
- encourage media projection of development activities and other achievements in different fields;
- continue to pursue freedom of expression and plurality of media, including promotion of private electronic channels, with the objective of discouraging negative projections of member countries;
- continue to promote, through media, peace and fundamental values of freedom, equality, solidarity, and tolerance and shared responsibilities;
- invest in technological and institutional solutions to promote universal access to media; and
- accelerate steps to strengthen cooperation in institution building and training of media personnel.

There was also a commitment to improve the free flow of information in the member countries by building adequate communication networks and creating appropriate legal and institutional systems, including devising an appropriate and legally enforceable instrument to combat cybercrime.

SASEC ICT Development Master Plan

Distinct from SAARC but still within the ambit of regional cooperation is the South Asia Subregional Economic Cooperation (SASEC) that includes Bangladesh, Bhutan, India (i.e. the eastern states of India), and Nepal. SASEC provides a forum for participating countries to discuss, identify, prioritize, and implement sub-regional cooperation projects in six priority sectors, including ICT. The ICT Working Group (ICTWG) composed of secretaries and/or joint secretaries from finance ministries of the SASEC countries, secretaries and/or joint secretaries from the ICT ministries of the SASEC countries, and representatives of development partners, is responsible for the identification and implementation of country and regional projects in the ICT sector. Such projects are in line with an ICT master plan formulated by the ICTWG (see 'The SASEC Information Highway Project').

DIGITAL CONTENT AND ONLINE SERVICES

The SAARC Audio-Visual Exchange (SAVE) program is one of the earliest digital content initiatives in the region. Launched in November 1987 during the 3rd SAARC Summit in Kathmandu, the SAVE program includes exchange of audio-visual materials as well as joint audio-visual productions on thematic issues concerning the environment, disabled persons, youth, literacy, participatory governance, safe and clean water, mountains and hills, and the like.

SAIC is mandated to build a regional network of information centres in the Member States and foster the exchange of regionally generated technical information to strengthen agricultural research, development, and innovation. To this end, SAIC produces audiovisual materials and videos in Beta-cam, DV-cam, and Hi-band formats on various subjects. The SAIC Video Library consists of more than 110 videos in a Video Home System (VHS) format produced by the member states. Audiovisual collected by SAIC are reproduced in a video compact disc (VCD) format and print materials photocopied for distribution to institutions and to people whenever requests for information are received.

SAIC also maintains Compact Disc-Read Only Memory (CD-ROM) databases of the Agricultural Bibliographic Information Service (ABIS). The internationally procured CD-ROM databases are updated regularly. They include: CAB ABSTRACTS (1990–2005); Crop science database (1973–2003); AGRICOLA (1970–2005); FSTA (1990–2005); PG and breeding database (1973–2005); BEAST CD (1973–1999); Veterinary science database (1973–2003); soil science database (1973–2003); forest science database (1972–2004); horticultural science database (1973–2003); parasitology database (1972–2005); AGRIS (2004); and biological abstracts (1995–1997).

The SAICNet program provides access to agricultural information through a Web-based information network. This networking service enhances the existing agricultural knowledge and information systems of the SAARC Member States and provides a platform for the exchange of ideas, information, and knowledge.

The SASEC Information Highway Project

The SASEC ICT Development Master Plan was formulated in 2001 with the support of the Asian Development Bank (ADB). A key project under the master plan is the SASEC Information Highway. The project, which has three components, is the first multi-country investment project in South Asia supported by the ADB. Its first component is the establishment of the SASEC regional network to integrate member countries and reduce Internet costs, particularly for the landlocked countries of Bhutan and Nepal. The second component is building the SASEC village network to expand broadband wireless connectivity to rural communities and enable them to better access services such as telemedicine, distance learning, and e-government services. The third component is establishing the SASEC regional research and training network of communities, businesses, and research institutes, to facilitate the flow and integration of information, knowledge, and services among member countries. These networks will be established and operated through a public-private partnership with a strong focus on entrepreneurship.

Also in line with its ICT Master Plan, the ICTWG has implemented the Community e-Centres (CeCs) project, which aims to bridge the digital divide between rural and urban communities by establishing telecentres in rural villages in SASEC participating countries. The project has received support from the ADB and the United Nations Economic and Social Commission for the Asia and the Pacific (UN ESCAP).

(Source: Asian Development Bank 2007)

Also worth mentioning is the work of the SDC to enable exchange of information in the biological, physical, chemical, engineering, and life sciences, as well as in developmental matters. The documentation system consists of a central facility (i.e. SDC) and national focal points in all the member states, which act as repositories.

At the first meeting of the information ministers in Dhaka held in April 1998, the SAARC strategy for sub-regional cooperation in media and information was adopted with the following objectives:

- To actively encourage greater flow of information in the SAARC region on all issues of common concern to member countries for the promotion of peace and harmony in South Asia as well as sustained development of the region;
- To generate, disseminate, and exchange information materials in support of SAARC and all SAARC initiatives in important areas, with special emphasis on trade and investment, social and cultural development, functional cooperation, environmental protection, and HRD;
- To promote the optimal utilization of available resources and facilities in the SAARC region to strengthen cooperation in the field of media and information and upgrade the professionalism of media persons through HRD programs and regional exchanges;
- To initiate collective regional actions to enable member countries to fully benefit from the use of new technologies to ensure greater flow of information within the region and between South Asia and the outside world; and
- To consistently work to project and promote a positive image of SAARC abroad as well as provide regular information on specific SAARC initiatives.

To achieve these objectives, the Information Ministers agreed to implement the 18-point SAARC Plan of Action on Information and Media (PAIM), which promotes cooperation to:

- ensure the free flow of information, newspapers, periodicals, books, and other publications;
- reduce postal and telecommunication rates for media transmission and information materials;
- increase cooperation among news agencies of SAARC countries:
- facilitate easier travel for media persons within the region;
- work toward the evolution of a SAARC-recognized regional media forum;
- hold an annual conference of editors and working journalists from SAARC countries;
- create a Web page for exchange of news among news agencies of SAARC countries;

- enhance exchange of data through email and the Internet;
- arrange regular exchange of TV and radio programs;
- organize regular exchange and joint production of documentaries and films as well as periodic SAARC film festivals;
- arrange training for media persons of SAARC countries;
- include SAARC orientation modules in the syllabi of national media training institutes;
- improve programs under SAVE by making them more attractive and popular and increasing their frequency;
- hold annual meetings of heads of national TV and radio organizations to review the SAVE programs;
- evolve model guidelines on trans-national satellite broadcasting in the region;
- examine the financial and technical feasibility of establishing a SAARC satellite:
- explore the feasibility of setting up a SAARC Information Centre with media production, research and training units, as well as a SAARC Media Development Fund; and
- discourage negative projection of member countries by media in SAARC countries.

In general, SAARC has been slow to implement the PAIM. However, it set up the SIC in Kathmandu in May 2005. The SIC serves as a regional information hub, acting as a nodal agency for the collection of information about SAARC and its member states. It coordinates radio and television (TV) productions; facilitates research and conducts training and skill transfer activities; acts as an information bank for SAARC and its members; forges stronger intra-regional links for cooperation and collaboration among the media of the SAARC countries; and interacts with the SAVE, the SAARC regional centres, the SAARC apex, and recognized bodies and other programs within SAARC. In addition, the SIC maintains a database covering economic, social, and other information on the region and a library of various programs on core areas of cooperation, and makes the information available to the member countries through the Internet.

ICT CAPACITY-BUILDING AND RESEARCH AND DEVELOPMENT INITIATIVES

As discussed, although some of the SAARC regional centres have been conducting HRD activities, in general SAARC's capacity-building with respect to infrastructure and HRD in the ICT and ICTD sectors has not been significant. There are plans in this regard, such as the PAT 2004, but these have not been implemented in a systematic and sustained manner.

The same may be said of SAARC's performance in R&D in ICT and ICTD. Unlike the SASEC, which has developed a master plan on ICT, neither the SAARC nor its regional centres have been observed to have done the same. At the most recent SAARC Summit held in 2007 in Delhi, one of the declarations adopted had to do with the development of a telemedicine network in South Asia. How this will develop in the years to come is eagerly anticipated.

However, there are regional R&D efforts involving South Asian countries outside of the ambit of SAARC itself. One of the most significant is the PAN Localization Project supported by the International Development Research Centre (IDRC) of Canada (see 'PAN Localization: Building Local Language Computing Capacity in Asia Project').

CHALLENGES AND OPPORTUNITIES

Given that one-third of the world's population and almost half of the world's poor inhabit South Asian countries, and given the internationally recognized strengths of the ICT sector of some countries in the region, notably India and Sri Lanka, the challenge for SAARC is how to harness ICT to help reduce poverty in South Asia. How can SAARC facilitate cooperation among the member countries for the development of the ICT and ICTD sectors to accelerate regional economic and social development?

Finding precise answers to these questions is not easy. But this review of what SAARC has done so far suggests some action points, starting with following up and monitoring the implementation of policies and plans adopted at the SAARC Summits. SAARC should also follow through on its position paper at the WSIS Summit, particularly its statement about developing a regional policy on ICTD in South Asia.

SAARC might also consider forming a functional and effective technical committee and/or a regional centre for ICT and ICTD sector development in South Asia. This should work in tandem with other SAARC Regional Centres on infrastructure and HRD, as well as research in ICT and ICTD in South Asian countries.

PAN Localization: Building Local Language Computing Capacity in Asia Project

In collaboration with the Centre for Research in Urdu Language Processing (CRULP) in Lahore, Pakistan, the Pan Asia Networking (PAN) Programme of the International Development Research Centre (IDRC) of Canada is helping to generate tools to translate Internet content into local languages, build capacity for local language computing, and advance policy for local language content creation and access across Asia. This includes the development of character sets, fonts, spelling and grammar checkers, speech recognition systems, machine translation, and other related local language applications.

The project involves six South Asian countries, namely, Afghanistan, Bangladesh, Bhutan, Nepal, Pakistan, and Sri Lanka. Its main goal is to develop a process framework for local language computing development. In this connection, the project:

- Conducts research into linguistics, computing, and language processing for selected local languages;
- Develops training material and provides training in local language computing;
- Develops computer standards and software that enable local language computing;
- Experiments with marketing strategies to promote the use of local language tools for content development;
- Nurtures a regional network of researchers, practitioners, and policymakers for collaborative learning in local language computing;
- · Consolidates a regional platform and voice on local language computing issues; and
- Contributes to the state-of-practice in local language computing through a rigorous research publication program.

Many countries participating in this project have been able to develop and standardize local fonts, for example in Nepali (Nepal), Bangla (Bangladesh), and Urdu (Pakistan). The challenge for this project is how to build the capacity of the local communities to benefit from these localized fonts.

(Source: International Development Research Centre 2007)

Separately or in tandem with the SASEC, SAARC could develop an ICTD Master Plan or a SAARC ICT and ICTD Strategy.

Finally, SAARC could explore setting up a fund for ICT and ICTD sector development in South Asia, along the lines of the funding mechanism created by the Association of Southeast Asian Nations (ASEAN) after its 7th ASEAN TELMIN. The ASEAN ICT Fund comes from a USD 100,000 annual contribution by each member country over a period of five years ending in 2010. For 2007–2008, USD 45,000 was allocated to each of the 11 approved projects of the various ASEAN Working Groups. Similarly, SAARC should be able to work with international donors and agencies to put in place a funding mechanism for ICT and ICTD sector development in South Asia.

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