

Special
ICT
Edition



JOBS
ASSISTING ENTERPRISES
TO CREATE EMPLOYMENT



An innovative USAID/ Bangladesh initiative implemented by the IRIS Center at University of Maryland.

JOBS NEWSLETTER

Creating an E-friendly Environment in Bangladesh

By Imran Shauket, Senior Policy Advisor

The JOBS Project was one of the first donor funded projects to actively engage in IT development in Bangladesh. Its sponsors and managers immediately appreciated the vast potential of the IT sector to generate new employment and revenue for the country, and realized that expeditious economic development required that the private sector have real-time access to the global marketplace. Therefore, we created our EC/ICT team in the last quarter of 2000, with a mandate to develop an e-commerce enabling environment in Bangladesh.

To achieve this goal, the team first identified existing barriers to the development of e-commerce, advocated with the government and stakeholders for the changes needed to overcome these barriers, and took practical and concrete steps to implement e-commerce and e-governance. Our most notable achievements to date are listed on page 7, but we are not content. We realize how much still needs to be done – creating a suitable regulatory environment, developing the needed infrastructure, providing training and human resources development, fostering market access, etc., – and we are committed to providing support and technical assistance to policy makers and stakeholders to make prudent decisions expeditiously.

Successive governments have identified IT as a thrust sector, and taken tentative steps to promote IT in Bangladesh. Unfortunately, these actions have not kept up with the pace at which the rest of the world is being propelled forward through the use of IT. Bangladesh must adopt the right policies and take the necessary actions NOW, not months from now, to realize the benefits that IT can bring to this promising nation.

Government has recently circulated a working paper on a new IT Law. While this is a welcome step, a great deal of time will be required for this draft to be enacted into law, and time is a luxury not available to the private sector. Experts recommend that an e-commerce law that provides a base for the private sector to delve into international business be promulgated immediately. (This issue is addressed further in an article on page 7.)

As you browse through this edition of The JOBS Newsletter, you will see that JOBS, assisted by the insight

of the stakeholders regarding the many issues involved, has already established the essential elements of an IT enabling environment. The elements of an e-commerce law have been identified. Studies and documents covering all aspects of IT related regulations have been compiled on the IRIS web page. Recommendations and action plans have been scrutinized, and a team of international and local experts has been engaged.

Prompt passage of e-commerce enabling regulations—an IT Act, or a more specific e-commerce act—would expedite implementation of the other actions needed in the areas of human resource development, market access, and infrastructure to allow Bangladesh's full entry into the IT century.



Left to right, Sr. Policy Advisor, Imran Shauket, IRIS EC/ICT Team Leader, Dr. Thierry Van Bastelaer, and JOBS Director, Reid Lohr.

<http://www.iris.umd.edu> *A Web Page for Policy Makers*

The JOBS Project web page is a valuable source of information regarding IT developments in Bangladesh. The page regularly reports on the deliberations of government committees working on IT issues and on the progress toward developing a legal and regulatory environment supportive of e-commerce, and provides resources for policy makers and interested members of the public.

Anyone interested in the progress of the Information Technology Act now being considered by the GoB will find the

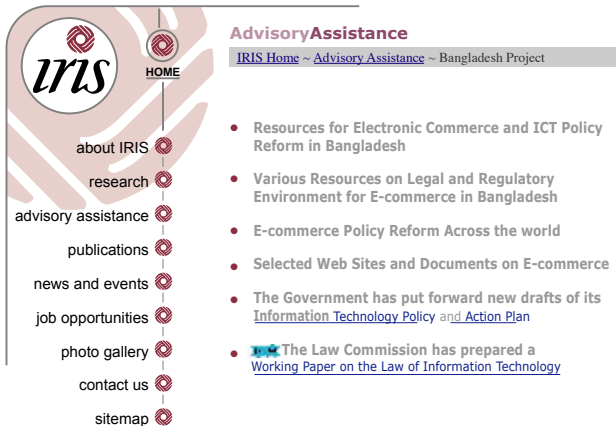
page a particularly useful source of information regarding the current status of the proposed law. The URL of the web page is <http://www.iris.umd.edu/adass/proj/ecomresources.asp>. Currently the page contains Bangladesh's IT Policy and Action Plan and IT Law, information on IT policy reforms around the world, minutes of meetings of the Government of Bangladesh Information Technology Task Force, a policy brief on e-commerce and Internet communication technology, and information on resources regarding the legal and regulatory environment for e-commerce in Bangladesh.

The JOBS' web page is part of a larger page developed by the IRIS Center at the University of Maryland, which implements JOBS'

work in Bangladesh.

The IRIS Center is an internationally recognized source of research and advisory expertise regarding issues of economic growth and governance in transitional and developing countries. Its web page provides a variety of information useful to anyone interested in the development of an institutional environment supportive of:

- Democracy, Governance and the Rule of Law, including anti-corruption;
- Property and Contract Rights;
- Civil Society/Social Capital;
- Political, Administrative and Fiscal Decentralization;
- Small and Micro Enterprise Development;
- Secured/Unsecured Lending and Financial Sector Reform;
- Economic Policy Reform;
- Economic and Legal Research; and,
- Training.



www.bangladeshIT.com

A Door to International Markets

The JOBS' sponsored web portal www.bangladeshIT.com is the only portal in the country that provides a register of all IT related firms in Bangladesh and describes their capabilities. Any organization worldwide in need of low cost IT expertise can find it among the IT firms described in the portal. Eventually, the portal will also:

- Inform international consumers about the country's existing IT services and capacity as well as the potential for the future of the IT industry in Bangladesh;

- Facilitate communication between Bangladeshi IT firms and consumers world-wide to more effectively direct industry efforts to expand into international markets;
- Establish a clear institutional structure for the nation's IT industry;
- Strengthen the country's IT expertise by fostering the exchange of information and ideas

among domestic and international IT enterprises; and,

- Contribute to the economic growth of Bangladesh.



Information Technology Enabled Services

The findings of a comprehensive survey to assess Bangladesh's competitiveness in domestic and international Information Technology Enabled Services (ITES) markets were the topic of a one-day workshop held this April. The workshop was jointly sponsored by The Ministry of Science and Information & Communication Technology (MOSICT), USAID, Carana Corporation, and the JOBS Program. The survey of 500 stakeholders was funded by USAID/Bangladesh and conducted by Carana in close collaboration with JOBS.

Workshop participants examined Bangladesh's goals in the ITES market, and appropriate steps to promote growth in this area. A case study on public-private partnerships to expand ITES markets was presented and Bangladeshi entrepreneurs described their successes and difficulties in penetrating international ITES markets. Participants broke into working groups to develop recommendations for the government and private sector to help expand ITES markets here.



Newly-arrived USAID Director Gene George (right) welcomes the opportunity to meet with MOSICT's Minister Dr. Khan (center), Secretary Karar M. Hasan (left) and colleagues.

Mr. Imran Shauket, EC/IT Senior Policy Advisor of the JOBS Program, moderated the session on "Business Development and Marketing for ITES in Bangladesh." Both short and long-term recommendations were developed.

Mr. Karar Mahmudul Hasan, Secretary-in-



USAID's Team Member for Economic Growth, Mr. Dewan Alamgir, presents his views in a working group.

Charge of the Ministry of Science and Technology, later told Mr. Shauket that "The workshop has encouraged us tremendously for working together with the private sector, NGO's and international organizations. Now we are ready to implement the recommendations derived from the brainstorming."

More than a hundred representatives from government ministries and the private sector, including representatives of the telecommunications regulatory agency, training institutes, NGOs, universities, and international organizations, participated in the workshop.

The meeting was chaired by the Honorable Secretary for



JOBS Senior Policy Advisor Imran Shauket confers with Dr. Abdul Moyeen Khan, Honorable Minister, MOSICT.

MOSICT, Mr. Karar M. Hasan. Guests included Mr. Dr. Abdul M. Khan, the Honorable Minister of MOSICT; Dr. Mary Ott, USAID Deputy Director and US Mission Team Leader for IT; President of ISP Association Mr. A. Manju; President of BASIS Mr. H. N. Kabir; Director of BCC Dr. Sobhan and President of BCS Mr. Sabur Khan. The newly arrived Director of USAID, Mr.

Gene George, joined the afternoon



USAID's Team Leader for Economic Growth, Mr. Allen Fleming, confers with ITES Team Leader Dr. Larry Forgy.

session.

The final report of the study, including recommendations from the study team and the workshop participants, is expected to be available by mid May 2002 and can be assessed through the IRIS website.

Bangladesh: Policy Priorities

As Information Technology revolutionizes commerce in the rest of the world, Bangladesh is among the developing countries that risks falling behind if it does not adjust its institutional environment to support electronic commerce.

To help jump start Bangladesh's participation in e-commerce, in January, 2001 JOBS collaborated with the Ministry of Planning and the Ministry of Science and Technology to organize a high-level



US Ambassador Mary Ann Peters addresses the conference.

conference on the policy opportunities and challenges presented by e-commerce. The event represented the first large-scale opportunity to bring together public and private sector representatives to focus on these issues.

The conference attracted many participants who will affect, implement and support necessary policy changes, including government Ministers, Secretaries, the U.S. Ambassador, the USAID Mission Director, and representatives of the banking sector, the e-business community, and the media. Among the resulting recommendations, those that require immediate attention are:

In the area of Human Resource Development:

- Establishing a world-standard IT University to promote graduates of international caliber;
- Developing standards for IT training institutes; and,
- Expanding access of the broader population to computers and the internet through cyber cafes.

In the Financial Sector:

- Achieving full computerization of financial institutions to promote a paperless environment;
- Providing venture funds for IT entrepreneurs.
- Accepting and adopting Electronic Letters of Credit

In the area of Telecommunications:



Ambassador Peters confers with USAID Mission Director, Gordon West at the conference.

- Obtaining international broadband access under the Ministry of Post and Telecommunications;
- Privatizing telecommunications and telegraph;
- Opening the telecommunications market for new investments; and,
- Legalizing the Voice Over Internet Protocol (VOIP).

In the area of E-governance:

- Computerizing the government for greater transparency;
- Adopting an electronic pay roll for government employees;
- Computerizing inventories; and,
- Establishing electronic procurement procedures.

In the area of Legal Systems:

- Acceptance of electronic contracts; and,
- Adoption of Digital Signatures for identity authentication.

For more information on these issues, visit <http://www.iris.umd.edu/adass/proj/ecomconf.asp>



In a light mood after a working session, from left to right, Prof. Jamilur Reza Chowdhury, Prof. Dr. Sobhan, Dr. Theiry Van Bastelaer and Dr. Catherine L. Mann.

Tech Transfer 2002

"Tech Transfer 2002", an international convention held in Dhaka in January 2002, was designed to bridge non-resident Bangladeshis with local IT firms to develop potential business ties and thus speed the transfer of this important new technology to Bangladesh. The convention was inaugurated by Commerce Minister Amir Khasru Mahmud Chowdhury, who assured a promising IT future for Bangladesh. TechBangla, a reputed, non-profit local research organization, organized the conference in collaboration with JOBS.

In the inauguration ceremony of "Tech Transfer 2002," JOBS Project Director Reid B. Lohr credited the government of Bangladesh for its commitment to the growth of the IT sector, while also stressing the importance of allowing the private sector and the market place the freedom necessary to chart its own course. The government should create an enabling environment in which the private sector can fully support the country's IT entrepreneurs, Reid said.

The seminar provided an opportunity for senior government officials, non-resident Bangladeshis, entrepreneurs, IT experts, NGO donors, and representatives of local think tanks to meet to discuss both the potential for the growth of the IT sector in Bangladesh and the barriers that currently limit that potential, and to develop recommendations for overcoming those barriers.

Information and Communication Technology (ICT) experts from Bangladesh and abroad mentioned the need to privatize the Bangladesh Telegraph and Telephone Board (BTTB). Inadequate telecommunications infrastructure is one of the major impediments to the growth of the IT sector here. BTTB's efforts to meet these challenges were deemed inadequate, in particular the agency's failure to provide a Voice over Internet Protocol, the cheapest mode of overseas voice communication.

The government was encouraged to foster the growth of IT by implementing e-governance in the public sector. Launching of e-governance would bring transparency and accountability to



Cleveland Charles, U.S. Embassy Representative, confers with Honorable Minister, Mr. Amir Khasru Mahmood Chowdhury at the Inauguration. Sitting far left, Mr. Basab Shee of APCTT.

the activities of government and would ensure the people's right to know. The need for clear, focused policy guidelines for the IT sector was also cited.

One of JOBS' initiatives on behalf of the IT sector hailed at the conference was its financing and



Honorable Commerce Minister Mr. Chowdhury makes his opening speech as Mr. Sabur Khan, President BCS, looks on.

supervision of the development of www.BangladeshIT.com. This portal is a major ICT marketing initiative that will register all the software, hardware, networking and other IT related firms in Bangladesh in one platform. It was presented at the ICT Marketing and Promotion session.

JOBS participated in panel discussions on ICT Infrastructure, E-governance and ICT Marketing and Promotion. The United Nations, the Dhaka Chamber of Commerce, the Export Promotion Bureau, Bangladesh Computer Samity and BASIS co-sponsored the event.

Others present at the opening ceremony were DCCI President Matiur Rahman Minto, BASIS President Habibullah N Karim and BCS President Sabur Khan.

Micro Level IT Training: A Small Success Story with a Big Impact

It is important that all Bangladeshi businessmen, from the largest to the smallest, understand the vast potential of IT to create employment as well as expand markets.

To get the word out to the many small businesses that are the focus of its work in Bangladesh, JOBS organized a Basic Computer Training program for 20 clients from the handloom, handicraft, and footwear

sectors.

The trainees were taught basic computer skills, including Microsoft Office, to manage their day-to-day office activities. After completing the basic training, the entrepreneurs were eager to arrange advanced training for their staffs and understood the advantage of hiring an IT expert for their organizations.

The Export Pavilion of Bangladesh: An E-Commerce Solution for the Export Sector

Finding the web-site of any individual Bangladeshi company is like looking for the proverbial needle in a haystack; yet, if Bangladeshi exporters are to benefit from the new markets promised by e-commerce, buyers must be able to find their sites. To address this concern, the JOBS EC/ICT and SME teams will soon establish a web portal that will make the search a snap—or, perhaps, a click.

The simple and easy-to-learn layout of the Export Pavilion Bangladesh will capture all of the



An exporter's on-line catalog

essential functions of e-commerce, including:

- **Searchable directories** to enable buyers to find producers of whatever product they care to purchase.
- **On-line, detailed profiles of exporters**, highlighting their strengths (eg., their lack of child labor or compliance with international certifications such as ISO-9000 (Quality Management), ISO-14000 (Environmental Management), and SA-8000 (Social Accountability).
- **On-line virtual tours of production facilities.**
- **User-friendly data-entry screens** to enable sellers to update their profiles and catalogs using only a Web browser.
- **A business-to-business exchange** where buyers can post want ads for goods they wish to buy. Any seller viewing these ads can negotiate and



A leather goods exporter's profile

close deals through a private e-mail channel.

- **On-line product catalogs** with pictures, descriptions and prices of goods.
- **Auto-notification preferences**, enabling the system to e-mail exporters whenever a buyer requests a product that an exporter can supply.
- **An excess inventory and stock lot auction bulletin board** where exporters can sell goods quickly and at the highest possible prices.

Creating a New Dimension in Export Marketing

A major difficulty facing Bangladeshi exporters is the lack of the modern marketing tools and technology enjoyed by exporters from competing countries. A specific lack is the up-to-date promotional materials prerequisite for success in e-markets.

The JOBS SME development team recently helped eight leading export footwear firms overcome this difficulty by developing descriptive, digital

brochures of their products. This is the first such effort in Bangladesh. With JOBS' help, the firms have



Packing footwear for export; a snap shot from JOBS Digital Brochure.

designed promotional CD ROMS featuring virtual displays of their production facilities and their products. The CD ROMS will be distributed to potential buyers in targeted export markets and displayed at major international fairs. These interactive CDs are user friendly, easy to update, and promise to reduce the firms' long-term marketing costs.

JOBS plans similar marketing initiatives in other sectors in the near future.

Structuring Life in an E-World

Business in the virtual market created by IT is a new game played by new rules. Can Bangladesh become a player in this dynamic and fast moving new game? It is true the country lacks both the infrastructure and adequate human resources to join the international league quite yet, but a carefully designed game plan can make up for lost opportunities.

WHILE GOVERNMENT intervention in the private sector is generally not desirable, the present level of social and economic development in Bangladesh requires it in the IT sector, which has the potential to make a huge impact on a struggling economy. If Information Technology were a small industry, touching a small fraction of the society, it would not be a state matter. But IT will be omnipresent, touching every tier of society and changing living standards, life styles and thinking patterns across the country. The GoB should play a much-needed referee role by structuring the market and establishing the ground rules, in close collaboration with stakeholders, and then stepping aside to allow the private sector to play the vast opportunities made available in the new, level, state-of-the-art field.

The first issue that must be formally addressed is how electronically produced documents can be legally accepted as binding contracts. Under the current law in Bangladesh, a physical signature is required to generate a contract. What happens if one party defaults on terms agreed to by e-mail? A new or amended law is needed to delineate when, how, and under what conditions an electronically generated document would be regarded as a binding contract in a dispute.

Second is the need for a process to authenticate the identity of a person generating an electronic document. This requires a digital signature, an encryption technique that verifies the identity of a person online and links the document to that person, ensuring that the sender of a message is the person s/he claims to be. The legality of digital

signatures must be recognized and the encryption method and related matters decided on.

The third matter is to allow electronically generated documents as evidence in court or arbitration. In a cyber world of contracts entered into electronically, it is vital that these documents be given legal recognition and accepted as evidence.

The fourth issue relates to the necessity for legal recourse to penalize unauthorized alteration, deletion, addition, or other changes to electronically generated documents, or the unauthorized entry or damage to the computer files of another individual. Prevention of such cyber crime is essential to maintain the integrity of the information network. The government must also decide the tribunal where such disputes would be adjudicated.

The final issue regards assuring consumers that their rights are protected in the virtual market, where buyers and sellers make business deals without face to face interaction. This question must be addressed in order to solidify the faith of consumers in a system based on Information Technology.

THESE FIVE ISSUES need to be addressed by the government to adequately structure an IT-based market. New IT-based businesses will have a strong impact on other, more traditional, enterprises. It remains to be seen exactly how these businesses will interact, but without prompt and effective government intervention to regulate activities and establish ground rules, some disorder in the system is almost certain.

It is therefore vital for the government to create an enabling environment for private entrepreneurs to foster and utilize the huge potential of the IT sector to earn revenue and create jobs. Only by addressing the issues outlined above can Bangladesh structure the market for smooth operation both domestically and internationally.

JOBS and USAID IN E-MOTION Stepping into the IT Century

April 2002: JOBS organizes and sponsors a workshop, "Bangladesh and the International Market for **IT Enabled Services: Opportunities and Challenges**," in collaboration with MOSICT, USAID, and Carana Corp., based on the findings of a survey of stakeholders.

March 2002: The Bangladesh Law Commission requests JOBS to comment on its high priority working paper on Information Technology before it is finalized.

January 2002: JOBS sponsors discussions on **policy, infrastructure, and marketing** in a three day conference, organized by TechBangla, on different aspects of IT and its potential and pitfalls in Bangladesh.

December 2001: JOBS compiles input from a team of experts and presents detailed comments on the **GOB IT Policy and Action Plan** to MOST.

September 2001: JOBS launches a **web page** consolidating IT related information – IT Acts and regulations of various countries, studies, links to useful sites, etc. – to assist policy reformers. (You can find the site at <http://www.iris.umd.edu/adass/proj/ecomresources.asp>)

September 2001: A team of local and international experts is sponsored by JOBS to develop **critical components of an E-Commerce Act**, which are presented to MOST to be incorporated into an IT Act.

July 2001: JOBS sponsors the development of an **IT related firm registry**, a searchable database of IT firms in Bangladesh.

July 2001: JOBS organizes a seminar to promote a prototype **business-to-business web portal** that enables businesses to conduct e-commerce.

May 2001: In collaboration with the Ministry of Science and Technology, The Bangladesh Computer Council, and TechBangla, JOBS implements a pilot project to put **MOST forms** on the web to facilitate public access.

March 2001: JOBS assists in the first of its kind live **video conference**, organized by the U.S. Mission in Bangladesh, which focuses on e-governance and brings together representatives of the U.S government and Bangladeshi policy makers and stakeholders.

Jan. 2001: JOBS' acclaimed **E-conference**, attended by high level officials and stakeholders, culminates with the compilation of 35 IT enabling environment recommendations.

Dec. 2000: JOBS sponsors the **E-commerce readiness survey**, conducted by TechBangla, to understand where Bangladesh stands compared to the global IT industry and what can be done to participate in the global league.

Nov. 2000: JOBS sponsors "**E-Commerce in Bangladesh: Status, Potential and Constraints**," a paper by Dr. Najmul Hossain that highlights the status and potential of and constraints to e-commerce development in Bangladesh and lists specific policy changes to improve the legal and regulatory environment.

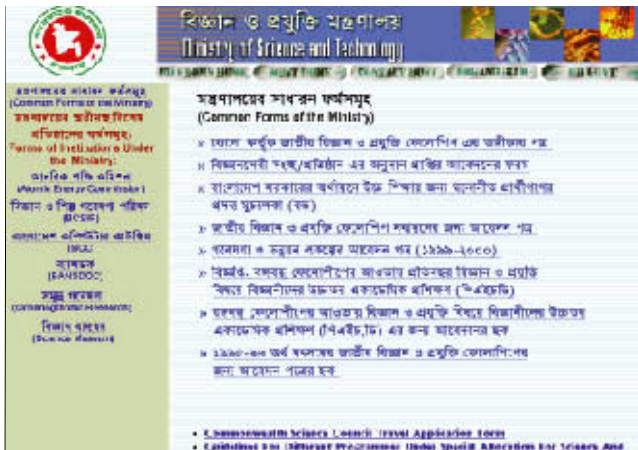
Sept. 2000: As a result of the White House's IED initiative, JOBS collaborates with USAID consultant Mr. J. Metzger in an **in-depth analysis** of the Bangladesh IT sector. The study produces a list of short, medium and long-term recommendations for the development of IT.

Oct. 2000: Nation wide **programming contest** jointly launched by JOBS and Computer Jagat to encourage the development of computer programming.

Establishing E-governance

The JOBS Project has assisted the Bangladesh Ministry of Science & Technology and the Bangladesh Computer Council in taking an initial step toward establishing e-governance in the country by putting MOST forms on the BCC web site.

Because the GoB is a major buyer of goods and services from the private sector, it will be one of the leading practitioners of e-commerce in Bangladesh. A commitment to improve governance through the use of



Information Technology will also be critical to strengthening the country's fledgling democratic institutions.

In addition to the more efficient use of time and the cost reductions, the resulting increase in transparency from the use of IT promises to reduce lengthy bureaucratic procedures and corruption. The resulting international confidence in the government could foster interest on the part of foreign businesses, donor agencies and non-governmental organizations in increasing investments and assistance levels to the country.

The following further steps are essential to fully establish e-governance here:

- Posting all government forms online, including tender documents;
- Hosting government budgets, documents and publications;
- Computerizing government offices;
- Computerizing inventories; and,
- Establishing websites for all government ministries

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