India and the U.S.: Partners in a Tech-Driven World

Monday, March, 29, 2010

On Monday March 29th, Mr. Sachin Pilot, the Minister of State in the Ministry of Communications and Technology, presented his visions of a modern, technologically driven India and discussed potential areas of bilateral collaboration between India and the U.S.

IT and Communications: Background and the way forward

Mr. Pilot's opening remarks provided a brief overview of India's flourishing IT and communications sector. Despite the recent setback caused by the global economic downturn, these companies were still able to report profits and continued to hire. The IT sector currently employs 2.4 million Indians directly, and 8.3 million indirectly. By 2012 that number is projected to expand to 13 million. However, Mr. Pilot strongly believes that the IT sector needs to continue to "reinvent itself" in order to sustain these robust growth rates.

Faced with intense international competition over lowering service costs, Mr. Pilot argues that India must wean itself off of its reliance on IT services, which make up 57% of the industry's contributions to the economy. He sees a need for industry to diversify into research, development and IT manufacturing. He believes that this holds the key for securing India's economic future and integrating its youth. To that end, Mr. Pilot has advocated providing hardware and software training for 10 million young Indians by 2020. He also expressed the need to broaden India's export destination portfolio, moving beyond U.S. and West Europe buyers and developing larger markets in Africa, Russia, South-East Asia, and China.

The Revolution of the Mobile Phone: Leapfrogging Infrastructure

Mr. Pilot commented that India's average teledensity (number of phone lines per 100 people) in 1995 was a meager 1.5%. However, the introduction of mobile technology in India in the 1990s "leapfrogged" India into the future. It removed the need for costly and time consuming physical infrastructure required for traditional lines. Today, teledensity has grown to 51%, and the proliferation of mobile users has brought down call rates in India to amongst the lowest in the world, at 1-2 cents a minute.

However Mr. Pilot regrets that rural India has largely been left out of this technology revolution. While in urban centers like Delhi, Mumbai, and Hyderabad teledensity has gone up by 120-130%, which is comparable to U.S. cities, rural areas have fallen far behind with 15-20% coverage. Mr. Pilot has been a powerful voice behind bridging the digital divide, and making the benefits of the technology revolution available to all. Recently the government established the Universal Service Obligation Fund, which allocates $4-4.5 billion toward the construction of mobile towers in rural India. While this is a large capital expenditure, Mr. Pilot explains it is a worthy investment, given that a strong technology base offers tremendous scope for poverty alleviation.

Mobile Banking

India has 555 million mobile users and about 15-18 million new users are added per month. However, according to Mr. Pilot, only about 40% of these users have bank accounts, excluding a

large bankable proportion of Indians. This greatly undermines the effectiveness of economic development efforts. At the same time it creates an opportunity for collaboration between U.S. and Indian companies for the development of mobile banking technology. Mr. Pilot posits, that if India can establish mobile banking system modeled after successful operations in Kenya and the Philippines, mobile proliferation can be used as an effective tool for increasing financial inclusion in India.

E-governance in India

Mr. Pilot pointed out that India's development continues to be hindered by a sparse telecommunications network. This is a particularly large impediment considering the government's vision of implementing e-Governance. E-Governance includes the automated digitalization of low level administrative work for the government, including land records and marriage certificates, thus improving civilian access and government transparency.

To that end, the President of India has ambitiously promised to connect every panchayat (clusters of 4-5 villages) by broadband within the next three years. The government will also establish common service centers in every 6th of India's roughly 600,000 villages. This network will provide the basic infrastructure required for entrepreneurs to scale up technology services in India's most remote areas. Mr. Pilot also acknowledged that the government must interface with private companies and NGO"s for effective national e-Governance. According to Mr. Pilot, rural connectivity will result in a paradigm shift in the conduct and implementation of Indian business.

Hardware Deficit

The number of internet users in India, as a percentage of the population, is remarkably low at 7%. In addition to poor infrastructure in rural areas, low internet penetration is also a result of a lack of available hardware. Mr. Pilot rightfully warned that without the proliferation of devices and machines into rural areas, the government cannot achieve its development and e-Governance goals. According to Mr. Pilot, by 2014 India will demand $400 billion dollars worth of hardware. Currently, domestic manufacturing industry doesn't have the capacity to fill this gap. If the situation remains unchanged it will pose a major problem. India will be forced to import almost $280 billion in hardware, making the exchange outflow second only to what is spent on energy imports.

Yet overall, Mr. Pilot is confident about India's ability to transform its domestic IT manufacturing industry. The Indian government is keen on this initiative, and recognizes the need for easing the economic strain of high priced imports. The development of the manufacturing industry would not only create jobs, but, as Mr. Pilot points out is another ripe area for foreign investment, particularly from the United States.

Cyber Security

Mr. Pilot urged the US and India to widen the scope of their bilateral collaboration, to include the issue of cyber security. He believes that the kind of damage attackers could do through the cyber medium is disproportionate to their conventional capacity and Mr. Pilot cautioned that not enough is being done.

However, last year recognizing that it is in their best interest to secure cyber space, the Indian government passed new cyber security laws. India also set up a special tribunal to deal with cyber law violations, which the traditional adjudication process is not well suited to. Mr. Pilot advised that India must build safeguards and firewalls not just for internal security but also to create assurances and build confidence among foreign investors.

Collaboration with the United States

In his conclusion, Mr. Pilot emphasized the symbiotic nature of the U.S-India partnership, and was optimistic of the role the U.S. could play in furthering the development of India's IT and telecommunications sectors. U.S. firms are investing in the Indian economy, but the scope and magnitude of their bi-lateral collaboration has yet to harness its full potential.