Asia-Pacific Digital Societies Policy Forum 2016 Session: 2 Advancing Digital Societies in Asia Pacific

27-28 April 2016 Centara Grand at Centara World, Bangkok

Digital Bangladesh

Saida Muna Tasneem

Ambassador of Bangladesh to Thailand

27 April 2016

Bangkok



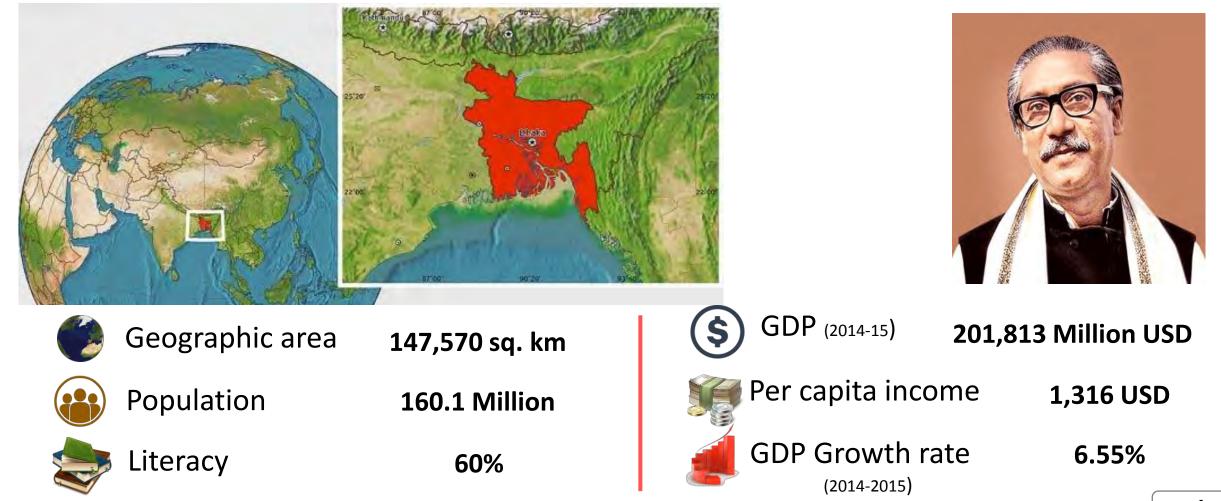


People's Republic of Bangladesh



Bangladesh overview

Born out of a heroic war under the leadership of the Father of the Nation **Bangabandhu Sheikh Mujibur Rahman**, Bangladesh is a secular and inclusive democracy and a responsible member of the international community.





- 8th Largest country in terms of population
- 43th Largest economy in terms of Gross Domestic Product (GDP)
- 35th Economy in terms of GDP growth



2nd Largest garments industry



Highest Jute producing country



9th Largest Mobile phone market based on current subscription

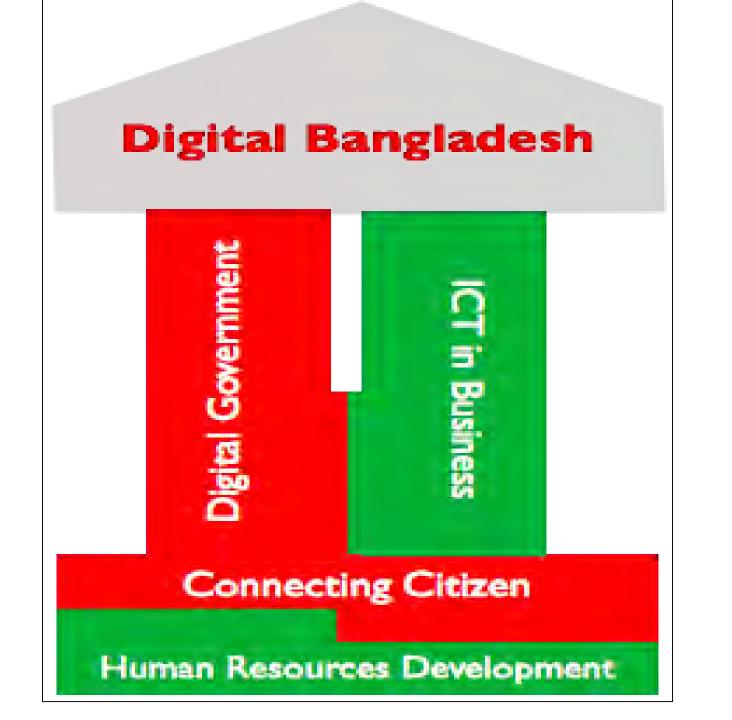
Vision 2021 Digital Bangladesh

We are committed to establish Digital Bangladesh by 2021

Sheikh Hasina

4 Pillars of Governance of Bangladesh

- Good Governance
- Inclusiveness
- Transparency
- Accountability
- Vision 2021: Electoral Promise of Prime Minister Sheikh Hasina in 2008
- Transform Bangladesh into a digitally driven knowledge based society and a Middle Income Country by 2021, 50th year of Independence
- Reincarnation of Bangabndhus ' Sonar Bangka" Golden Bengal



Vision for a Digital Bangladesh:

- Digital Government and digitally connected citizens
- Empowering people through access to digitialisation
- Digital Bangladesh : Mainstream ICTs as a pro-poor tool. Indeed, vision of poverty reduction and human development leveraging ICTs
- Policy and Acts on ICT
- National Information and Communication Policy 2009
- National Information and Communication Policy 2015 (updated)
- 6th Five Year Plan (2009-2015) was dedicated to enhancing tele-density and internet density

Achievements 2009-2015 as a result of the Policy

```
Tele density – 35% upto 84 %
MBP-35%-84.3%
Internet Penetration- from 5% to 34%
Smart Phone users – 1% to 20%
Mobile subscription - 132 Million
Internet Subscription-56 Million
Mobile usage – 43.7 m. to 133.7 m
25,000 km optical fibre coverage
99% geographical coverage of voice and data
Reduction of Price of Internet Bandwidth by 90%
```

7th Five Year Plan Telecom Focus

- 7th Five Year Plan (2015-2020) aims at universal tele and internet density,
- Make internet more accessible and affordable
- Developing telecom and IT infrastructure
- Connecting Citizen's, e-governance, ecommerce, e-finance, e-agriculture

Future Ambitions

- Equitable access for everyone
- •4G by 2016
- MNP (Mobile Number Portability)by 2016
- Smart City by 2017
- Getting 1300 GBPS from SEA ME WE5
- First Geo-sattelite: Bangabandhu Satellite by 2017

Digital Government : e-Connectivity and ICT Infrastructure

Connecting Government :

Independent ICT Ministry in 2009

Bangla GovNet Project: 58 Ministry, 227 department, 64 districts, 64 selected sub-district

- **Info Sarkar-2 Project**: 18,500 government offices connection established
- 25,000 tab for the government officers
- A2 I project: 5200 Digital Centre at lowest tier of local Government
- Video Concerning is the new mode of communication
- Bangladesh Computer Council-750 Terabyte webhosting capacity
- **BCC** Specialized ICT lab for training of all

National Special Initiatives-2

- National Enterprise Architecture (NEA)
- ICT Division for National Enterprise Architecture (NEA)
- Development of National ICT Infra-Network for Bangladesh Government Phase-3
- Judicial System Digitization Project
- Paperless Office
- Comptroller of certifying Authority for Digital Signature for SMART Card
- Digital Forensic Lab
- National Cyber Security Agency
- IT Park in 12 Districts
- Stablishing Digital Connectivity Project

National Special Initiatives for Digital Government

- Establishment of National Call Centre for information disseminations
- Establishment of World Fifth Biggest National Data Center
- About 5000 Digital Centers at the Union level
- 2000 Computer and Language Lab across the country
- Innovation Design and Entrepreneurship Academy and R&D Centre
- Software Certification Centre
- Training and Incubation Centre
- Big data Analytics and Titaniam Lab
- Mobile ICT Training Lab for Women Empowerment

IT Enabled Skilled Human Resource Development

- Specialized ICT Lab in 20 Universities
- 500,000 IT skilled people in 3 years
- BCC-Leveraging ICT for Growth and Employment and Governance (LIST)
- 4000 Fast Track Future Leader (FTFL)
- 10,000 top up IT
- 20,000 Foundation Training

IT Enabled HRD: Digitization of the Information and Service through Innovations

- Inspiring innovation in ICT
- Idea Generation Workshop
- Bangla Optical Character Recognition (OCR)
- Interactive Multimedia Digital Textbook in all educational insititues
- Programming Contest, ICT debate Completion

ICT Infrastructure and Industry Development

- Hi-tech Park at kaliakoir
- Software technology Park- Jessore
- Electronic City in Sylhet
- Barendro Silicon City in Rajshahi
- IT Training and Incubation Centre in Natore
- IT Business Incubator in Chittagong University of Engineering and technology
- **5 private institute declared as Software Technology Park by BD** High-Tech Park Authority

Infrastructure

Connectivity

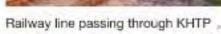
- 25 km from Hazrat Shahjalal International Airport
- · 40 km from Dhaka City

Location

- Latitude: 24°3'58.97
- Longitude: 90°13'12.91



Proposed Dhaka-Ashulia Elevated Expressway



Good Road Network

- · Dhaka Savar Kallakoir: 4-tane Road
- Dhaka Airport Tongi Bhogra Kaliakoir Road
- · Rapid Bus Transit Facility from Dhaka Airport Tongi Bhogra
- · Bhogra to KHTP through Asian Highway Road
- Dhaka Airport Ashulia KHTP Road

Internal Infrastructure at Kaliakoir **Hi-Tech Park**





HI-TECH PARKS IN BANGLADESH

30,000 sqf. area is already operational. Government-run special transport service from Dhaka will be operational from March, 2016.

Basic off-site facilities available

- Internal Roads
- Electric Substation
- Water Reservoir and Supply System
- Sewerage System with Treatment Plant
- Street Lights

THE REAL PROPERTY AND PROPERTY AND TO DESIGN

- Gas Connectivity
- Fibre Optic Connectivity
- Telephone Sub-Exchange

Kaliakoir Hi-Tech Park (KHTP), Gazipur

- First Hi-Tech Park in Bangladesh
- Situated 40 km north from Dhaka City
- Surrounded by more than 40 universities
- Two private developers appointed to develop the Park and ensure world-class facilities
- World-class techno-township model planned with residential facility, dormitory, gymnasium, hospital, shopping mall, hotel, convention centre, etc
- Government support to scale up the skills of employees at the Park
- Land available for lease
- Space will be available by September, 2016

Janata Tower Software Technology Park, Dhaka

- Twelve-storied multi-tenant building with 72,000 sqf. at the heart of Dhaka City
- Conducive business environment has been created for smooth operations
- IT companies have started operations

"The Government will establish Hi-Tech Parks in every district followed by every division."

Hon'ble Prime Minister Sheikh Hasina

Sylhet Electronic City

- Proficient IT-trained manpower is easily available
- Evergreen environment-friendly district
- 163 acres of land allocated for park development
- Additional 500 acres is to be acquired
- · Connected to Dhaka and Shillong, India through Asian highway
- Connected through railway network
- Only/15 km from the Osmania International Airport
- Land lease will be available by June, 2016



131.44 Million Mobile • Phone Subscribers

- 51.98 Million Internet Subscribers
 - Total Bandwidth: 200 GBPS (SEA-ME-WE-4)
 - 1,300 GBPS more will be added by December, 2016 (SEA-ME-WE-5)
- 6 terrestrial connectivity through India •
- More than 20,500 km fibre optic network .

Barendra Silicon City, Rajshahi

- Centrally located in Rajshahi, the education city
- Surrounded by five universities, engineering and medical colleges, and other educational institutions
- Planned as an integrated township with state-of-the-art infrastructure for the IT/ITES and Telecom industry
- An area covering 34 acres of land has been demarcated
- Proper road and rail connectivity with Dhaka and other cities
- · Land available for lease

Global Recognition for Bangladesh's Contribution to ICT & other Sectors



ICT's Sustainable Development Award 2015

Hon'ble PM Sheikh Hasina receiving the award from ------International Telecommunication Union (ITU) Secretary General on September 27, 2015

Global ICT Excellence Award 2014

Mr. Zunaid Ahmed Palak, Hon'ble State Minister for ICT Division, received the award from World Information Technology and Services Alliance (WITSA) on September 31, 2014 in Mexico for effectively using ICT in public service delivery

South-South Cooperation Visionary Award 2014

PM's ICT Affairs Adviser Mr. Sajeeb Wazed receiving the award given by the United Nations on November 21, 2014 for advancing Bangladesh towards a digital system and the expansion of education



Bangladesh was elected as an executive member of the International Telecommunication Union (ITU) for the **2nd** time at the election held in South Korea on October 27, 2014

World Summit on Information Technology 2014

Hon'ble State Minister for ICT Division Mr. Zunaid Ahmed Palak received the award from International Telecommunication Union (ITU) in Geneva on June 10, 2014 for improving people's lives through the use of ICT



Bangladesh has been ranked 17th for investor protection



Endorsement by WORLD LEADERS for Investing in Bangladesh

"From Zimbabwe to Bangladesh, citizens work to keep elections safe, using the crowdsourcing platform Ushahidi - and that's a great idea."

Barack Obama at Global Entrepreneurship Summit 2015 in Kenya "Bangladesh 'wildly adopting' technology and has been a shining example of using ICT."

Bill Gates

The Wall Street Journal October 8, 2015

20 Government Projects in ICT US \$ 277 million

40+ ODC

(Offshore Development Centers) & Joint Ventures

industry size and Financi

Financial Sector Secured Network US \$ 300 million

FSD Project by Bangladesh Bank

Domestic IT Spendings US \$ 150 million+ Some large companies operating in Bangladesh

IT companies of Bangladesh serving globally



Bjit







NewsCred

REVE Systems

Global companies in Bangladesh



Investment Opportunity in Bangladesh

High Potential of IT Growth

- Over 2,50,000 IT professionals are working in about 800 software and IT service companies. Around 160 of these companies are specialized in serving overseas clients
- IT/ITES services exported to Japan, US, Canada, UK, Australia, India, and other nations
- 1,400 colleges across the country offer IT education programs. Every year, over 8,000 IT graduates pass out from universities and colleges
- A large number of these IT graduates also possess global IT vendor certificates (e.g. from Microsoft, CISCO, Oracle, Sun) along with their academic degrees
- Large number of firms are ISO, CMMIL-3, CMMIL-5 certified
- Since 1996, Government has been allowing zero/low tariff on computers and other capital goods required for software industries
- One-stop service for all Government approvals by BHTPA

Lower Operational Costs in Bangladesh

Internet Charges	: 1.2 USD per GB approx.
Average Space Rent	: 0.60 USD per sqf. p.m. approx.
Electricity Charges	: 0.13 USD per KwH
Land Lease Rent Rate	: 1.25 to 2.2 USD per sqm. p.m.
	: 255 USD p.m. for entry level Manager/ Engineer
Company and the second state of the second sta	the state descent state of a state

Some space will be available at a discounted rate

Key Drivers for INVESTMEN in Bangladesh

 One of the largest and fastest growing technology markets in Southeast Asia

 Stable local currency and macro-economic situation ensuring stable returns on investment

 A large number of highly skilled IT professionals and English-speaking youths

 Competitive cost for HR and other infrastructures

Above 6% GDP growth

Ease of doing business

- One-stop service in HTP/STP investment
- Matured capital market for exit on investment.
- Huge number of English-speaking youths
- Skilled protessionals and ICT graduates
- Low cost of operations
- Low attrition rate
- No license required for operating call centres, only registration with BTRC
- · Fiscal support to IT/ITES industry
- · ICT business-friendly BHTPA Act

One of the best FDI policies in the region
 Special double taxation avoidance treaty with many countries

Bangladesh at a glance*

Area : 147.570 sq. km Population : 164 Million GDP : \$ 209 Billion Growth : 6.5%+ Constant growth GNI per Capita : \$ 1315 Forex Reserve : \$ 28 Billion Economically Active : 83% of Males Population (15+ yrs) : 59% of Females * BBS 2014

J.P.Morgan

"Bangladesh has been named as one of the 'Frontier Five' (along with Vietnam, Kazakhstan, Kenya and Nigeria)."

Goldman Sachs

"Bangladesh is one of the members of the Next Eleven (N-11)

countries, having strong potential to become one of the world's largest economies along with BRICS, exihibiting highly promising investment and future growth."



"Bangladesh ranked 33rd in terms of GDP (PPP)."



BCG



"Bangladesh is one of the top **20** IT outsourcing destinations." - European Union

Gartner

"Bangladesh has been enlisted in the Gartner's report as one of the Top **30** IT outsourcing destinations."

Moody's

"Moody's has given Bangladesh a Ba3 stable rating for the 4th consecutive year, while S&P has given the country a BB-Sovereign Credit rating for the 3rd consecutive year."

coface

"Bangladesh enlisted into the next 10 emerging countries."

ATKearney

"Global Service Location Index (GSLI) has ranked Bangladesh **22nd & in terms of financial** attractiveness Bangladesh has ranked **1st.**"

Power Generation in Bangladesh

13,000 12,000 11,000 10,000 9,000							/	Z.
8,000 7,000 6,000 5,000 4,000			_	_	/	~		
3,000 2,000 1,000						_		-
0	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
					-	-	-	

12 15 F.mm

Upcoming Nuclear Power Plant

9172 9 3 3 3 1

Education in Bangladesh at a glance*	Literac Univers College Profest Expense High S
University of	Polytec Medica Dental Teache Gradua Scienc IT Grad "BBS 20

eracy Rate (%)	71.1
iversities	121
lleges	3,547
ofessional Edu. Institutes	316
penditure on Education	14.1%
gh Schools	19,208
lytechnic Institutes	103
edical Colleges	82
ntal Colleges	13
achers' Edu. Institutes	209
aduate Students	2 M+
ience Graduate Students	670 K-
Graduates per year	10 K+
IS 2014	



Bangladesh University of Engineering and Technology (BUET), Dhaka

Some large companies operating in Bangladesh

IT companies of Bangladesh serving globally



Bji



DIGICON

REVE Systems



NewsCred

Global companies in Bangladesh



DEVELOPERS FOR KALIAKOIR HI-TECH PARK

ABOUT BANGLADESH TECHNOSITY LIMITED

A subsidiary of Fiber@Home Ltd., the leading telecommunication infrastructure company of Bangladesh.

A Bangladesh-Malaysia joint venture company, "Bangladesh Technosity Limited", registered under the laws of Bangladesh, was created to design, develop and operate Block 3 of Kaliakoir Hi-Tech Park (KHTP) in Gazipur, Dhaka, Bangladesh,

Committed to develop a world-class special economic zone for technology companies and to promote Bangladesh and Kaliakoir Hi-Tech Park (KHTP) as a lucrative investment destination for investors to consider.

VISION

"To promote and develop the IT & technology-oriented industries in Bangladesh by facilitating safe, convenient, and state-of-the-art industrial facilities for the existing and upcoming generations of innovators and entrepreneurs."



THE FIRST MULTI-TENANT BUILDING AT BLOCK-3



"Empowering Bangladesh"

Power Generation

- First power plant built almost 18 years ago
 Today the largest independent power
- Generating 17% of Bangladesh's power
- Operating over 1200 MW, 1500 MW in
- pipeline pipeline

27000 km of fiber optic network in Bengladesh

Covering 61 districts and 319 upazillas
 Total client base 337

Telecommunication

Infrastructure

- Licensed to provide dateway services
- Doensed to provide gateway services
 Connecting Bangladesh globally via
- international terrestrial cable

Energy Fuel Trading and Supply

- Imports, supplies and transports energy tuel of to power plants around Bandadesh
- · 6 coastal tankers
- Storage facilities with 100,000 MT capacity
- . Key suppliers include BP. Shell, Vital

Port Operations

Began uperations in 2003
20% of Bangladesh containenzed import and export cargo holding
Completed construction of river terminal, first of its kind in the private sector
Clients include Maersk, Damoa, APL, etc.

Commercial Real Estate Development

- 3 million sqit, built up space underconstruction on 15 acres in Dhaka City
- 5 Star and 3 Star hotels underconstruction
- Concessionaire to develop the first hi-tech park in Bangladesh

SUMMIT TECHNOPOLIS LTD.

Kaliakoir Hi-Tech Park Block-2 & 5: Area- 91 Acres

- To become a regional manufacturing destination
- To empower the youth of Bangladesh
- To incubate and nurture homegrown start-ups and creat a platform to work alongside MNCs
- We will set the highest "Green" Standards
- To support Bangladesh to move on to more value addition, more technology driven, more quality manufacturing
- To build a self-sustaining campus to promote innovation, successful commercialization of science and technology and economic growth to complement 'Vision 2021'

Block II







JUMMIT

Location: Block II, Kaliakoir Hi Tech Park Site Area: 1,68,535 sqft. (15,657 sqm) Total Footprint Area: 55,585 sqft. (5,165 sqm) [39% of site area] Green Space: 61% of the total site area

BUILDING DETAIL

Total Buildable Area: 1,63,045 sqft. (15,148 sqm) Internal Courtyard: 12,731 sqft. (1,182 sqm) Total Office Area: 97,500 sqft. (9,040 sqm) Number of Floors: 03

SIGNATURE BUILDING OF SUMMIT TECHNOPOLIS LIMITED 'A SYMBIOSIS OF NATURE, TECHNOLOGY AND CULTURE'



Functional Amenities:

Ground Floor: Reception Lobby, Internal Courtyard, Rentable Plug & Play Office Spaces, Food Court, Indoor Games, Outdoor Recreational Spaces, Utility Services.

First Floor: Reception Lobby, Rentable Plug & Play Office Spaces, Customizable Manufacturing Units, Services

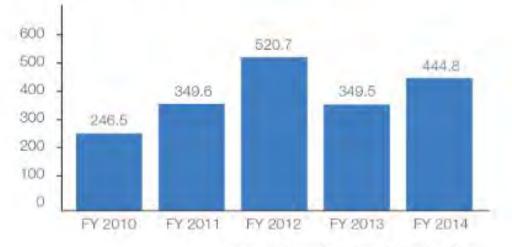
Second Floor: Reception, Rentable Plug & Play Office Spaces, Conference spaces/Training Centre, Services.



Bangladesh's edge

- Consistent high operating profit forecast by foreign companies in Bangladesh
- 90% communications and software companies expect same or better operating profit
- 71% companies plan to expand operations
- Stable increase in wages and other costs

Trend in ICT Export (Million USD)



Source : Bangladesh Seventh Five Year Plan

Lower base staff salary*

Bangladesh	273
Sri Lanka	309
Philippines	474
India	570
Malaysia	991

*USD p.m. JETRO Report Asia Oceania 2014



Bangladesh Hi-Tech Park Authority

ICT Division, Ministry of Posts, Telecommunications & Information Technology BCC Bhaban (10th Floor), Agargaon, Sher-E-Bangla Nagar, Dhaka-1207, Bangladesh

www.bhtpa.gov.bd www.ictd.gov.bd

OF THE EARTH

Champions of the Earth

Honorable Prime Minister Sheikh Hasina received the UN's highest environmental award on September, 2015 for outstanding leadership on the frontline of climate change, recognizing visionary people and organisations all over the world that exemplify leadership, and advocate action on sustainable development, climate change and a life of dignity for all.

WILISA

Bangladesh

is the host country for WITSA 2021

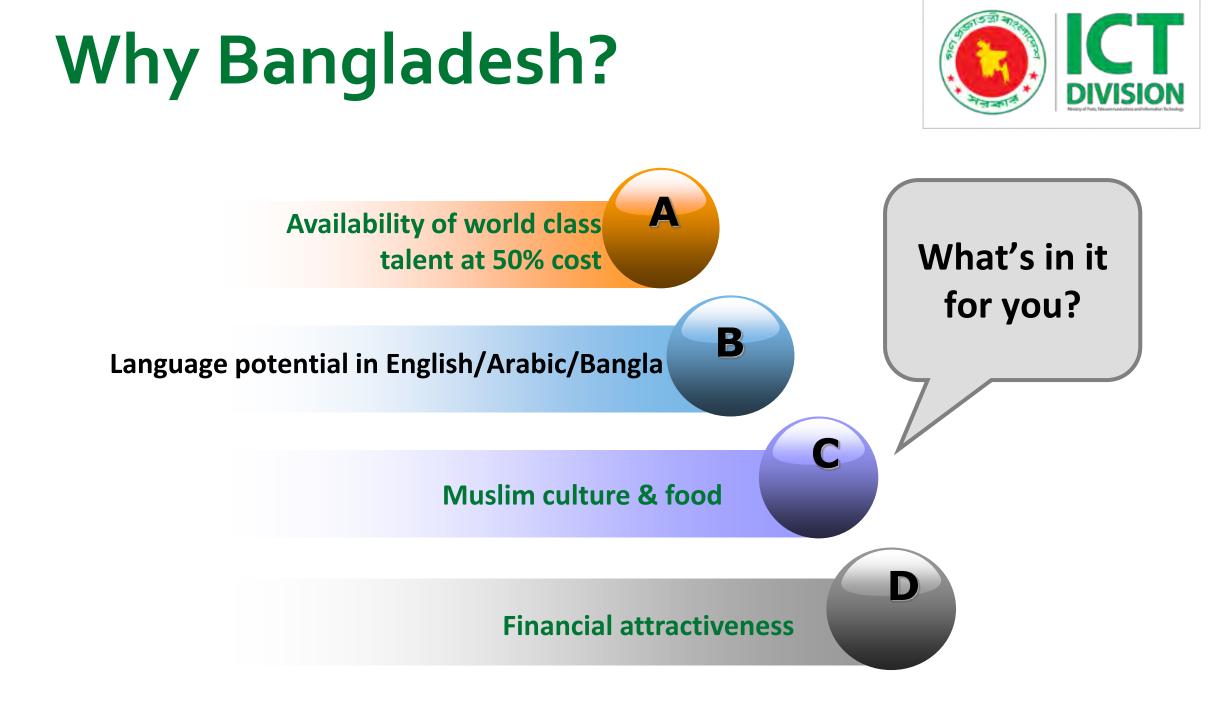
BANGLADESH Your Destination for NEXT IT/ITES Investment





October 2015









e-Governance, e-Services & Citizen connectivity



Rise of IT enabled Knowledge based Human Resource & Economy

Fundamentals For A Better Destination

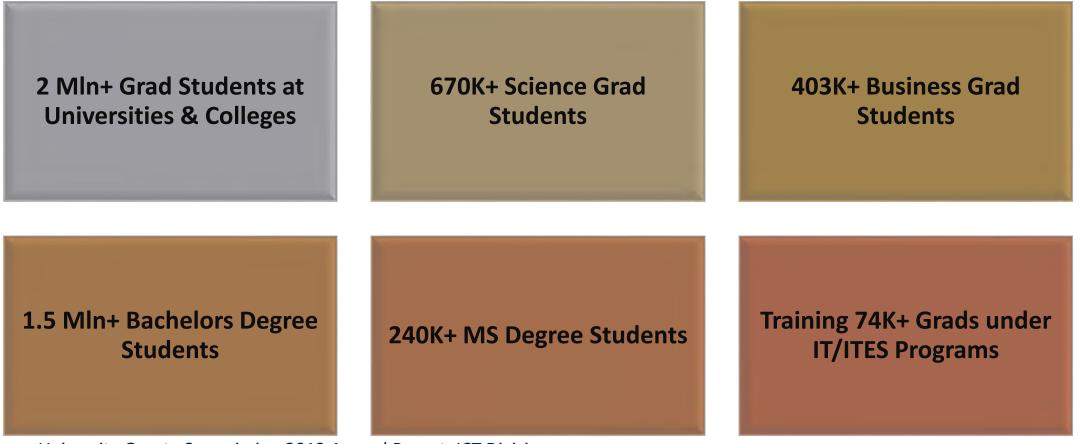
IT ecosystem, Infrastructure & Business



Rise of IT enabled Knowledge based Human Resource & Economy



Large Young Population with Skill, Education & Talent

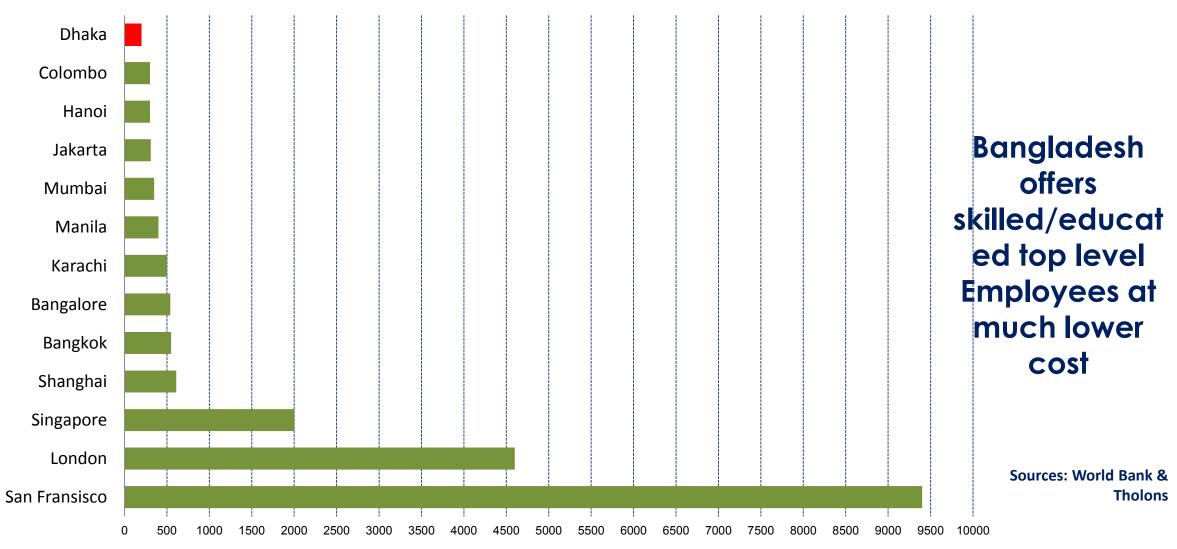


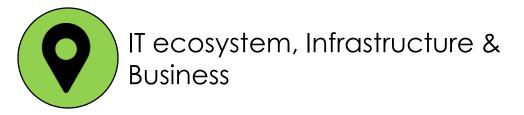
Source: University Grants Commission 2013 Annual Report, ICT Division



Rise of IT enabled Knowledge based Human Resource & Economy

Comparative costs of a mid level engineer's monthly wage in US\$





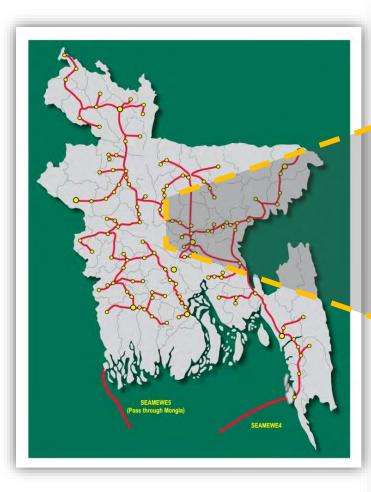
Hassle-free Investment	Stable Political Scenario	Special Incentives under
Process	Government Commitment: Tax	HTP & STP Act
Ease of Communication via Road, Air & Train	Holidays, exemptions on Income Tax & duties	Trade Union free Hi-Tech Parks



New Era of Communication & Connectivity



IT ecosystem, Infrastructure & Business





High Speed Fiber Connectivity SEAMEWE 4 & SEAMEWE 5 (99.99%)

Stable Power: 227% Growth (5 Years)

35 Minutes drive from Airport to BDBL STP

1 Hour 14 Minutes Drive from Airport to Kaliakoir HTP

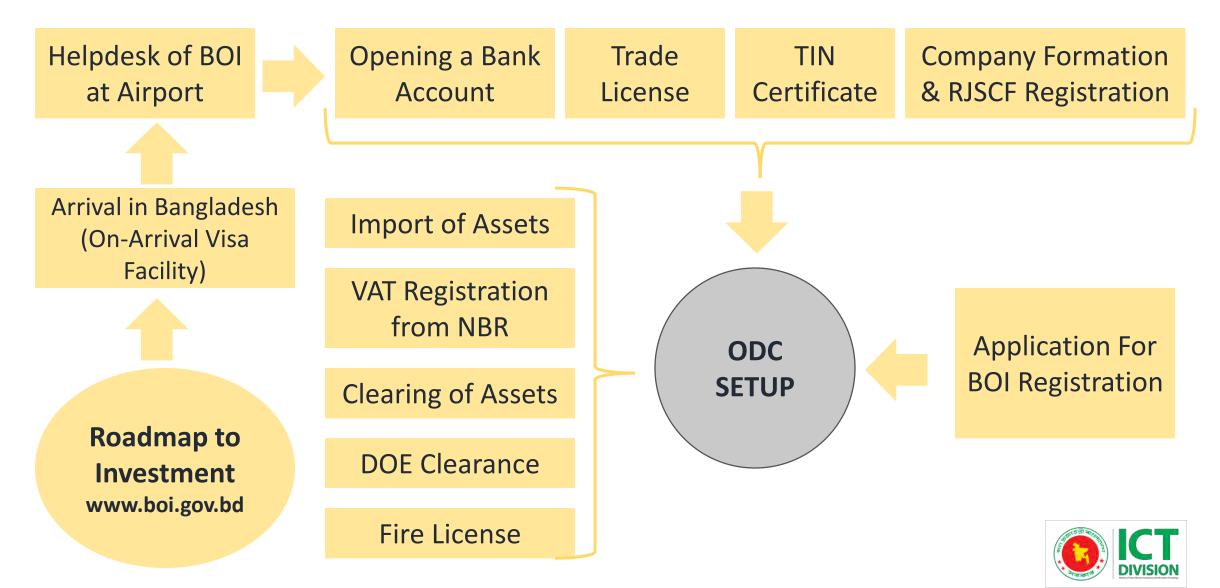
Highways & Airports connecting all the Hi-Tech Parks



Roadmap to Investment in Bangladesh



IT ecosystem, Infrastructure & Business



Special Incentives under Hi-Tech Park

+ + +



IT ecosystem, Infrastructure & Business

Twelve years tax exemption for Developers

Ten years tax exemption for IT/ITES Companies

Duty free import of capital machineries and other assets

Bonded Warehouse station facilities in HTP/STP

Duty free import of 2 vehicles



100% ownership for foreign investors

100 % profit repatriation for foreign

investors



Industry Size & Growth Potential

40 + 0DC

(Offshore Development

Centers) & Joint Ventures

Sources: BTRC, BASIS, BOI, EPB

20 Government

Projects in ICT

US \$ 277 million

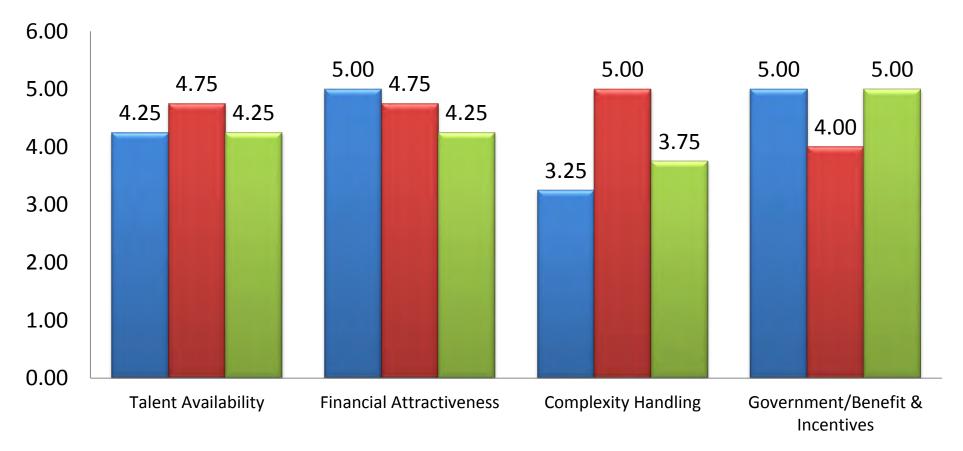
Export Revenue 2014 US\$ 124 million CAGR 25% over last 6 Years

Domestic IT Spends US \$ 150 million +



A Comparative Competency Analysis





🖬 Dhaka 📓 Bangalore 📓 Manila

Source: Tholons

A Comparative Competency Analysis



Particulars	Unit	Dhaka	Bangalore	Manila
Population	in million	16.04	10.83	1.88
Land Area	in sq. km	816	741	39
Attrition Rate	in % per year	5-8%	18-20%	20%
Communication Bandwidth	USD/10 mbps (unlimited data)	45	19	64
Rental Unfurnished Space	in USD/500 SFT	408	528	976
Salary Graduate Employee	in USD/annum	2800	5340	6124
Literacy Rate	in %	74.6	89%	95.60%



0 "Bangladesh Your YouTube S NEXT **IT-BPM** Y Destination"

• Action items (306)