Report On
Development of Conducive Business Environment for Private Sector Investors
following Public Procurement Rules using World Bank Fund in the 'Support to
Development of Kaliakoir Hi-Tech Park/IT Parks Project'

By

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An internship report submitted to the BRAC Institute of Governance and Development (BIGD)
To partial fulfilment of the requirements for the degree of

**MASTERS IN PROCUREMENT AND SUPPLY MANAGEMENT (MPSM)**

**It is hereby declared that**

1. The internship report submitted is my/our own original work while completing degree at BRAC University.

2. The report does not contain material previously published or written by a third party, except where this is appropriately cited through full and accurate referencing.

3. The report does not contain material which has been accepted, or submitted, for any other degree or diploma at a university or other institution.

4. I/We have acknowledged all main sources of help.

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To
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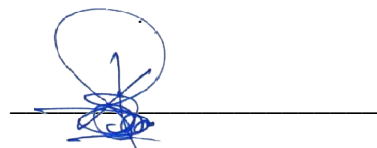BRAC University
66 Mohakhali, Dhaka-1212

Subject: Submission of internship report on "Development of conducive business environment for private sector investors following public procurement rules using World Bank fund in the 'Support to development of Kaliakoir Hi-Tech Park/IT Parks Project.'

Dear Sir,

It is an immense pleasure for me to submit my internship report titled "Development of conducive business environment for private sector investors following public procurement rules using World Bank fund in the 'Support to development of Kaliakoir Hi-Tech Park/IT Parks Project". I was assigned to work at my work place at the Head office of Bangladesh Hi-Tech Park Authority (BHTPA), ICT Tower, 9th Floor, Agargaon, Sher-e-Bangla Nagar, Dhaka-1207. I have tried my level best to fulfil all my requirements for this course and tried to follow my supervisor's instructions while preparing this report.

It would be a profound pleasure for me if the report can serve its purpose. I would be available at any time to explain to you any queries if feel necessary. I trust that the report will meet the desired requirements.

Sincerely yours,

Engr. Mohammad Atiqul Islam
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Date: March 10, 2021

## ACKNOWLADGEMENT

## EXECUTIVE SUMMARY

The Government has declared 'Vision 2021' with a target to make Bangladesh as a middle-income country using Information and Communication Technology (ICT) and development of favourable business environment for innovative companies. ICT has been considered as a thrust sector. Government has taken various initiatives to achieve the target. Among them conducive business environment in Hi-Tech Parks (HTPs) is mentionable. So, HTPs, Information Technology (IT) Village, Software Technology Park (STP) will play an important role and contribute for the development of Bangladesh. Bangladesh Hi-Tech Park Authority (BHTPA) is to make provision for the establishment and expansion of Hi-Tech industry for the creation of employment opportunity in country.

Bangladesh Hi-Tech Park Authority (BHTPA) is implementing 08 projects and among them "Support to Development of Kaliakoir Hi-Tech (and others Hi-Tech Park) Project (SDKHTP)" is one of the important initiatives to create an investment ecosystem in Bangladesh. The SDKHTP project is financed by the World Bank and DFID through the Private Sector Development Support Project (PSDSP). Initially the project aimed to develop off-site infrastructure in Bangabandhu Hi-Tech City, Kaliakoir but afterward the scope was extended to Sheikh Hasina Software Technology Park, Jashore; Bangabandhu Sheikh Mujeeb Hi-Tech Park, Rajshahi; Sylhet, and Khulna University of Engineering & Technology. This Park (SDKHTP) developed for investors having 355 acres of land with natural settings is in an ideal and ready place for investment. It is located near Dhaka city and connected with all over the country through road, rail and international airport. The 232 acres of land Area of Bangabandhu Hi-Tech City has been divided into 5 blocks as per the master plan. Bangladesh Hi-Tech Park Authority has already appointed developers for the development of Bangabandhu Hi-tech City as per the PPP model and onsite infrastructure development is going on in full swing. The park will be considered as a specialized zone to attract investors especially foreign investors where they could utilize the vast potential of young educated and technically skilled workforce. Eventually, the country's economy will substantially grow with more foreign exchange earnings. This paper analyse the development of a conducive business environment for private sector investors following public procurement rules using World Bank funds to the Support to development of the Kaliakoir Hi-Tech Park/IT Parks Project.

## KEYWORDS

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*Chapter 6: Human Resource Development*

| | | |
|---|---|---|
| ADP | : | Annual Development Plan |
| BACCO | : | Bangladesh Association of Call Centre & Outsourcing |
| BASIS | : | Bangladesh Association of Software and Information Services |
| BBS | : | Bangladesh Bureau of Statistics |
| BCC | : | Bangladesh Computer Council |
| BHTPA | : | Bangladesh Hi-Tech Park Authority |
| BPO | : | Business Process Outsourcing |
| CIT | : | Computer and Information Technology |
| CSE | : | Computer Science and Engineering |
| DOE | : | Department of Environment |
| DoF | : | Department of Fisheries |
| EDCF | : | Economic Development Cooperation Fund |
| GoB | : | Government of Bangladesh |
| HTP | : | Hi-Tech Park |
| HTS | : | High Throughput Satellite |
| ICT | : | Information and Communications Technology |
| ITES | : | IT-Enabled Services |
| ITU | : | International Telecommunication Union |
| KPO | : | Knowledge Process Outsourcing |
| LCC | : | Location Clearance Certificate |
| LGD | : | Local Government Division |
| MBPS | : | Megabits Per Second. |
| MIS | : | Management Information System |
| MoEFCC | : | Ministry of Environment, Forests and Climate Change |
| MTB | : | Multi-Tenant Building |
| PWD | : | Public Works Department |
| R&D | : | Research and Development |
| PPP | : | Public Private Partnership |

# Chapter 1

# BACKGROUND

The Vision 2021 and the Seventh Five-Year Plan (2016-2021) of Bangladesh called for a shift to a new development paradigm of Bangladesh. The plan sets ambitious target for average economic growth of 7.4% supported by economic and export diversification, job creation, human resources, and technology development. Among other initiatives, the government upholds the vision of "Digital Bangladesh" to transform the economy. To this end, creating an appropriate IT/IT-enabled Service (ITES) business ecosystem through establishing more Hi-Tech Parks and Software Technology Parks throughout the country has been considered as one of the major policy strategies of the government. This would help to grow ICT sector diversify the export basket of Bangladesh and achieving the ambitious yet achievable USD 5.0 billion export target by 2025. To attain sustainable growth in IT/ITES export, the policy framework stressed the need to concentrate on introducing their own products and services equally along with outsourcing business. For this purpose, an innovative ecosystem comprising of required infrastructure, well trained human resources and supportive policy regime is of paramount importance.

Bangladesh Hi-Tech Park Authority has been established under the Bangladesh Hi-Tech Park Authority Act 2010, to flourish Hi-Tech industry by creating an investment-friendly environment and employment opportunity through the development of Hi-Tech Industry including Information technology-based industries in the country. The BHTPA is responsible for bringing economic prosperity to the country through the development of suitable investment infrastructure, efficient human resources to invest in the IT/ITES sector and for increased employment. To achieve these goals, the Bangladesh Hi-Tech Park Authority is creating a conducive investment environment by setting up high-tech parks/software technology parks/training and incubation centres in different parts of the country. BHTPA has also taken various initiatives to build skilled human resources to ensure the employment of the youths across the country. These initiatives will help in achieving the SDG goals, 7th five-year target, and election manifesto of the present government.

**The government's election manifesto for 2014 and the Sustainable Development Target (SDG) is linked to the activities undertaken by the Bangladesh High-Tech Park Authority:**

| BTPA's Activities | Election Manifesto-2014 | SDG Target |
|---|---|---|
| 1) Building Infrastructure and Business Buildings in Hi-Tech/IT park<br>2) Building human resources and training infrastructure<br>3. Entrepreneur/self-employment<br>4. Business promotion and incentives<br>5. Employment creation<br>6. Investment-export and income | 3.16　　　　　Industrial Development:<br><br>3.16.13 The IT industry parks are set up in the divisional cities and these parks will generate significant number of jobs in the next five years. | SDG Targets 9 & 8<br>**Target-8:** Achieves full and productive employment and stable, inclusive and sustainable economic growth for all<br><br>**Target-9:** The development and innovation of the ambitious infrastructure, development of infrastructure and sustainable infrastructure |

**Digital Bangladesh** implies latest philosophy of effective use of technology in terms of implementing the commitments of the present govt made in the field of education, job placement, and poverty reduction. This concept comprises ensuring human rights, transparency, accountability and ensuring government services to the citizens of Bangladesh. The ultimate goal of the Digital Bangladesh Vision is improvement of the daily lifestyle of peoples of Bangladesh.

The government also give emphasized to four elements of Vision 2021, which are HR development, people engagement, services and use of IT in business. Activities to achieve these set targets are to be performed following four pillars of the Vision 2021 as following:
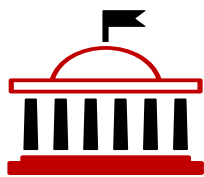
**Digital Government**

**Connectivity and Infrastructure**

**Human Resource Development**

**ICT Industry Development**

**"Bangabandhu Hi-Tech City", Kaliakoir, Gazipur**

A land measuring 355 acre was transferred from erstwhile T&T (presently BTCL) department to present ICT Division of MoPTIT of Govt. of Bangladesh, for establishing **Kaliakoir Hi-Tech Park (KHTP)**. The basic infrastructures in the area have been developed by the government from its own fund and with World Bank financing. This includes the external boundary wall, internal roads with walkways and some other utilities like internal drainage, sewerage network with STP, high tension cable lines (under the walkway) for different blocks, intelligent street lights, solar panel installations, internet and telecommunication lines.

Presently, this park has been renamed as "**Bangabandhu Hi-Tech City (BHTC)**". However, we have used the term BHTC for this Park throughout the report.

The BHTC (355 acres) is divided into **6 Blocs**. One bloc is kept with BHTPA for providing administrative and basic facilities at the Park. Other 5 blocs are designated for leased allotment to private developer.

The situation of these 6 Blocks are as follows:

| | |
|---|---|
| Bloc 1 – 65 acre | Maintained by BHTPA, which is primarily the Administrative bloc. |
| Bloc 2 – 62 acre | Allotted to M/S Summit Technopolis Ltd., for development of the area as IT Park, as PPP developer. |
| Bloc 3 – 40 acre | Allotted to M/S Bangladesh TechnoSity Ltd. (Fiber@Home), for development of the area as IT Park, as PPP developer |
| Bloc 4 – 36 acre | Allotted to private sector by G2B model |
| Bloc 5 – 29 acre | Allotted to M/S Summit Technopolis Ltd., for development of the area as IT Park, as PPP developer. |
| Bloc 6 – 29 acre | Allotted to private sector by G2B model. |

After demarcating the 6 Blocs with areas as mentioned above and allotment to different parties, additional 26 acre land is available in the Park. Actual land area within the boundary wall is 258 acre, instead of 232 acre. This additional area of 26 acre may be considered as additional Block, say R&D Bloc. From this additional land, 7 acre land has been allotted to Bangladesh Computer Council (BCC) for development of 'Tier IV National Data Centre'. The construction work for this project has been completed. Remaining land of this additional Bloc may be kept for R&D purpose. Small pieces of plots from this land may be allotted to different companies, for R&D and other IT/ITES activities.

| | |
|---|---|
| Additional Bloc – 26 acre | 7 acre allotted to BCC for development of 'Tier IV National Data Centre'. Remaining land area is with BHTPA for allocation for other developments. |

*Existing situation at Bloc-1*
Presently the following buildings and facilities are available in Block-1 and around:

1. Entry Gate with guard house
2. The Admin. Building, 3 storied building, on 0.87 acre land
3. The Common Service Building (Custom building), 2 storied building of 13,000sft plinth area, with foundation for 10 storied building (Upper 8 floors are designed for 10,000 sft. per floor)
4. Solar panel on the street lights (intelligent lighting system)
5. Sewage Treatment Plant STP, 3 MLD capacity, on 1.34 acre land

*Common facilities in City*
Some common utility facilities are provided in the Park, with World Bank and GoB financing, for all the Blocs. These include:

1. Internal road network, (for all the blocs)
2. Foot-path/ walkways, (for all the blocs), along the road network
3. Rain water drains, (for all the blocs), under the foot-path/walkways, along the road network
4. High tension cable network, (for all the blocs), under the foot-path/walkways, on side wall of the drains
5. Internal electric lines and road light posts, (for all the blocs), along the road network
6. Sewerage network pipelines, (for all the blocs)

*Facilities in Admin. Building*
Presently, only the Administrative Building is operational in Bloc-1. This is a three storied modern building with 10,000 sq.ft. in each floor. There are some offices running in this building. The offices include:

- Bangladesh High Tech Park Authority
- National Help Desk
- Summit Technopolis Ltd.
- Bangladesh TechnoSity Ltd.
- and some other private offices related to IT and ITES business

There are still some more spaces vacant in this building, to be rented to private offices.

**Project Location**

*Location of Bangabandhu Hi-Tech City*
The BHTC site is located on the Dhaka-Tangail highway. The main railway line from Dhaka to Sirajganj passing through the site divides the area into two parts. A major portion of the site is an undulating land with grass and bushes. Some water bodies are present in the site. A 33 KV overhead transmission line crosses the site at two locations. The site is located about 1.5 km southwest of the river Bangshi, a tributary to the river Turag.

The surroundings of the entire BHTC site are:

- West -    Dhaka-Tangail highway
- East -    Bakterpur village, Kamarpur village, Rice mill
- South -   Bakterpur village, Forest area, Alamin spinning mill
- North -   Sanerchala village

**Site Assessment**

*Accessibility*

- Kaliakoir Upazila HQ and Pourashava HQ        03 KM
- Kaliakoir Railway station (Under/construction)    < ½ KM
- Nearest city Gazipur – (City Corporation)        30 KM
- Distance from Dhaka city            40 KM
- Distance from Dhaka International Airport   25 KM
- Chittagong Sea Port            350 KM
- Mongla Sea Port        (near Khulna)        200 KM

**Chapter 2**

**CONDUCIVE BUSINESS ENVIRONMENT FOR INVESTORS IN KALIAKOIR**

As a part of the infrastructure development, Government of Bangladesh is implementing the Private Sector Development Support Project (PSDSP) with financial assistance from The World Bank and DFID. As a part of PSDSP Bangladesh Hi-Tech Park Authority is implementing a project entitled "Support to Development of Kaliakoir (and others Hi-Tech Park) Project (SDKHTP)" under the Information and Communication Technology Division. Initially the project scope was only to establish off-site infrastructure in Bangbandhu Hi-Tech City, Kaliakoir. But the project scope was expanded in Janata Tower Software Technology Park, Karwan Bazar, Dhaka; Sheikh Hasina Software Technology Park, Jashore, Bangabandhu Sheikh Mujib Hi-Tech Park, Sylhet and Rajshahi, Chattagram Software Technology Park as well as.

There are three modalities of the development and management followed in such activities. These are as follows:

      i) Developed and Managed by Government;
      ii) Developed through Public Private Partnership (PPP) Modality;
      iii) Developed by government and managed by private operation.

In this project, Bangladesh Hi-Tech Park Authority is following the mixed model i.e. government shall develop the basic infrastructure and private partner will develop rest of the infrastructure with long time operates. For this mixed model generally two (2) types of Infrastructures are required for a Hi-Tech city:

     i)   On-site Infrastructure, and
     ii)  Off-site Infrastructures.

**Off-site Infrastructures (inside of the city)**

The BHTC, Kaliakoir is being developed as Techno Township. The **off-site Infrastructures** are the structure and facilities within the city, for proper functioning of the park. These included:

| | |
|---|---|
| i. | Land development, (land cutting, filling and tree plantation) |
| ii. | Service Building) |
| iii. | Internal Main Road (with provision of non-mechanized traffic, when possible) |
| iv. | Walkways/ footpath (with provision of utility duct beneath, wherever possible) |
| v. | Internal Electric facilities (lines, street light posts, etc.) |
| vi. | Water supply system (Tube well, Water Reservoir, WTP, Pumps, etc. as required) |
| vii. | Fire-hydrant networks |
| viii. | Sewerage system (pipelines network and Treatment Plant, STP) |
| ix. | Storm Drainage networks |

    x.        Uninterrupted Power Supply system

    xi.      Recreational area, playgrounds, parks etc.

   xii.     Landscaping, tree plantation

  xiii.    Lake beautification works

  xiv.    Sewerage Treatment Plant.

The **on-site Infrastructures** include the following site utility buildings for the Park.

    i)     Gate house and Security bloc

    ii)    Administrative Bloc (IT Offices, Govt. Offices, Utility offices)

   iii)   Ancillary Commercial Tower (Banks, trade offices, Hotels, Restaurants, etc.)

   iv)   Multi-Tenant Building, MTB – for renting to IT/ITES companies

    v)    Business Incubation Centre, BIC – for renting to small IT/ITES entrepreneurs

   vi)   Dormitory building and Guest house

   vii)  Residential buildings

  viii)  Substation, Generator house, etc.

   ix)   Fire station

    x)    Medical Centre

   xi)   Barrack for security personnel

   xii)  Other special buildings, if required

**Off-site Infrastructures (outside of the city)**

The **off-site Infrastructures** are outside the Park area and supports facilitation of Park works. These generally include the following:

    i.      Access Road to site

    ii.     Utility facilities (Electricity/ Power Supply, Gas connection)

   iii.    Internet and telecommunication lines

   iv.    Different Environmental Infrastructures

    v.     Any other site specific requirement, outside the Park site

Bangladesh Hi-Tech Park Authority has already appointed developers for the development of Bangabandhu Hi-Tech City as per the PPP model and onsite infrastructure development is going in full swing. The park will be considered as a specialized zone to attract investors especially foreign investors where they could utilize the vast potential of a young educated and technically skilled workforce. Eventually, the country's economy will substantially grow by increasing earning of foreign exchange.

Initially Support to Development of the Kaliakoir (and others Hi-Tech Park) project (SDKHTP) was taken only to develop offsite infrastructure of Bangabandhu Hi-tech City to support software, hardware, biotech companies in Kaliakoir along with human resource development component and promoting the companies globally to expand their business reach. The World Bank is providing for Additional Financing under PSDSP with extending the project

duration up to December 2019 as the project achieved most of the Project Objective well ahead of the time.

The basic off-site infrastructure under the project such as the construction of Alternate Road, the construction of Internal Access Road, Construction of Sewerage line, Street lighting, Boundary Wall, Sewerage treatment plant, Custom House (Service Building), Lake Development, establishment of Internal HT Electricity line, construction of Internal Road (Branch Road), construction of a bridge on the lake and Water supply system, Procure 2 AC Buses for transporting employees from Dhaka city to Kaliakoir, Installation of specialized R&D labs covering AI, Machine learning, IoT, etc.

# Chapter 3

## PRESENT INDUSTRY STATUS AND ROLE OF BANGLADESH HI-TECH PARK AUTHORITY IN DEVELOPING A FAVOURABLE BUSINESS ENVIRONMENT FOR INVESTTORS

Bangladesh is one of the fastest-growing nations in the Asia. Bangladesh is achieving significant GDP growth more than 7% in consecutive years. Based on the World Bank's estimates, the country's gross domestic product (GDP) was US$249 billion with an annual growth rate of 8.13% in 2019. In spite of COVID, Bangladesh has achieved 5.4% GDP growth in 2020. In terms of the absolute GDP split, services accounted for 56.5%, whereas manufacturing accounted for 29.3% in 2017. However, the rising per capita and increasing disposable incomes have resulted in changing consumption patterns around the usage of devices such as laptops and high-end smartphones. Feeding off these new private consumption patterns and intending to achieve the status of a middle-income economy by 2021, the Bangladesh government launched "Vision 2021." One of the core objectives of this initiative is to make Bangladesh a destination for global manufacturing and services. From an operational point of view, the government has been looking at ways to encourage the high-tech sector (specifically around mobile phones and laptops) to produce locally either by assembling semi-knocked-down (SKD) or completely knocked down (CKD) goods. Further, the government has initiated a series of policy changes that allow organizations to set up production bases in Bangladesh, intending to cater to the domestic and regional demand of neighbouring countries, such as Bhutan, India, Myanmar, and Nepal.

Since the global IT/ITES market continues to grow and several Bangladeshi Companies have been successful in penetrating the global IT/ITES market. There is a huge potential for Bangladesh to grab additional market share. To create a competitive market base, this sector needs:

**Skilled manpower in competitive cost:** Bangladesh has huge young educated unemployed populations, which can be used for content development. Currently, public and private universities offering IT-related courses.

Bangladesh has a much lower IT/ITES labour cost compared to India, China, and Pakistan. It is estimated that the IT/ITES skilled labour cost is as much as 50% less in Bangladesh than its neighbouring countries (KPMG Report 2012). This is an important advantage since labour is the most intensive cost component across most IT/ITES segments and having an edge over the cost along with a sizable young population can attract investors and grow the IT/ITES industry in Bangladesh.

Companies seeking to invest primarily select the outsourcing agency factoring in the quality of service, language skills, cost of the product, and the availability of skilled manpower in both the present and the future. In this aspect, Bangladesh has prepared a quality workforce, train its manpower to comply with international standards and guidelines.

Bangladesh has to take advantage of talent across the country by expanding IT/ITES businesses to cities, districts, and divisions outside of the capital region of Dhaka. Moreover, Bangladesh needs to tap into its female labour force to facilitate growth in IT/ITES. This can help Bangladesh increase its supply of talent, maintain its cost advantage, and gain momentum in its pursuit of the IT/ITES industry.

**Quality of Public infrastructure and appropriate business environment:** To cater to the investment needs of the high-tech industry players, the Bangladesh government has formed the Bangladesh Hi-Tech Parks Authority (BHTPA). Along with the infrastructure support, investors are provided with a host of benefits, such as income tax (IT) exemption for 10 years, dividend tax exemption, and duty exemption on exports. The main objective of the project is to create employment opportunities by creating a business environment for establishing knowledge-based industries in general, IT/ITES, and advanced Hi-Tech industries in particular for achieving the Government's vision of Digital Bangladesh by 2021. To achieve this target BHTPA is working to develop infrastructure to support this robust network of hi-tech industries by providing them organized parks with all technical logistics and social amenities to host investors.

## Chapter 4

## QUALITATIVE ANALYSIS OF THE PPP MODEL IN BUILDING INFRASTRUCTURES IN THE BANGBANDHU HI-TECH CITY, KALIAKOIR

By nature, a PPP project is very different from a conventional public sector project as it can only be realized through a complex contract. It is essentially a business for a lengthy period of time and not a short-term construction project. Essentially the PPP project identification and structuring are driven by the government but private sectors can engage by providing an unsolicited proposal to the government for its development. Project development is the most crucial part of materializing a PPP project. After the project development and contract award phase, the public sector mainly plays a regulator role with the private sector leading the project implementation and management.

In the development of the Support to Development of the Kaliakoir project, BHTPA was the deciding authority that led to the identification and structuring of the project. Upon specifying the activities to develop infrastructures, skill development components, and industry development activities the PPP was derived and finalized to ensure timely execution of the projects.

The Project is financed by the World Bank under the Private Sector Development Support Project (PSDSP). The World Bank is providing Financing under PSDSP with extending the project duration up to December 2020 to February 2021 as the project achieved most of the Project Objectives well ahead of time. Bangabandhu Hi-Tech City, Kaliakoir is a pivotal park in terms of setting up a standard in developing Hi-Tech Parks in Bangladesh.

**Chapter 5**

**IMPLEMENTATION PROGRESS OF THE VARIOUS COMPONENT OF THE PROJECT AT BANGABANDHU HI-TECH CITY, KALIAKOIR**

Bangabandhu Hi-Tech City Project is one of the flagships projects of Bangladesh Hi-Tech Park Authority with an area of 355 acres. To ensure the park to be an effective and green investment facility, for which the BHTPA created necessary infrastructure. The following major off-site infrastructure were created through the project:
(1) Internal Access Road;
(2) Alternate Road
(3) Street Light
(4) Street light line for Alternate Road for the villagers
(5) Sewage Line
(6) Sewage Treatment Plant
(7) Boundary Wall
(8) Electricity Line
 (9) Water Reservoir and Water Transmission System
(10) Lake Development
(11) Construction of Culverts
(12) Construction of bridge on the lake
(13) Construction of Service Building
(14) Reformation in Administrative Building for Tenants
(15) Interiors, Furniture and Fit-outs for Existing Building
(16) Procuring 2 AC Bus etc

## 5.1    Internal Access Road:

BHTC comprises 6 blocks. Block 1 is for administrative purposes and the remaining 5 blocks are for industrial use. The consulting firm PricewaterhouseCoopers (PwC) conducted the feasibility study of the park and proposed a road network for the Bangabandhu Hi-Tech City (Kaliakoir Hi-Tech Park) in the report. The arterial and primary road was proposed to ensure easy access to all the blocs. The main access road from the main gate to the end of bloc 1 was constructed by using the GoB fund and the remaining part through this project.

The actual contract price of the work was BDT 2783 lac for the length of 2225 meters. Due to the lake and other physical obstructions, a 1700 meter long road with a width of 46 feet and a drainage facility was constructed. To utilize the remaining money, a 1300 meter long road with a 5.5-meter width, without drainage system was included in the contract. The Honourable State Minister for ICT Division, Ministry of Posts, Telecommunications & IT has inaugurated **Internal Access Road** on 16 April 2015.

An additional 1150 m long road was constructed to ensure access to the remaining 91 acres of land. The construction of the Internal Branch Road in KHTP was completed on Mid of the March 2017. The length of the road is around1150 meters and the total contract value was around 500.00 lac.

Construction phase



Construction phase



Internal Access road of Bangabandhu
Hi-Tech City



Opening of the Access Road by Honourable
State Minister, ICT-Division on 16.04.15

## 5.2    Alternate Road:

Bangabandhu Hi-Tech City covers a total land area of 355 acres allocated by the government. The park, being a business place with limited access to common mass, is surrounded by a boundary wall. Before the construction of the wall, different access roads inside the park, were accessible to the inhabitants of neighbouring villages. The construction of the wall was hindering the villagers' access to Upazila, school, market, hospital even highway etc. So, to minimize the villagers' sufferings, BHTPA decided to construct a new alternate road for ensure easy accessibility for public.

The original plan was to construct a new road within the boundary of the park but after stockholder consultation, BHTPA agreed to developed the existing narrow kutcha road. An 18 feet wide alternate road has been constructed for the villagers for their easy access. Finally, BHTPA constructed alternate roads in two phases. Firstly around 2700 meters and secondly it is 1150 meters and cost was BDT 1301 lac & BDT 419.80 lac.

Alternate road for the villagers




Inter Road (Branch Road)     Internal Access Road

## 5.3    Street Light in BHTC:

Solar-based environment-friendly street light has been installed along both sides of the internal access road in BHTC. In total, BDT 208.77 lac was spent for installing 96 nos. of solar lights in the park. The work was completed in December 2017 and inaugurated by the Honourable State Minister, ICT Division Mr. Zunaid Ahmed Palak, MP on the Mid of April 2017.
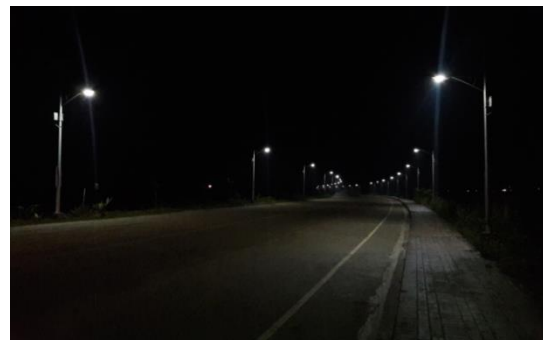



Street light

## 5.4  Street light line for Alternate Road for the villagers:

Bangladesh Hi-Tech Park Authority was constructed around 3750-meter-long road for the villagers of the neighbouring village. The Authority also decided to set up street lights on both sides of the roads through spending around BDT 50.00 lac. The street lights construction was completed in March 2017 and its was inaugurated also by Mr. Zunaid Ahmed Palak, MP, Honourable State Minister, ICT Division.


Street light for Alternate Road

## 5.5      Sewerage Line in BHTC:

The sewerage line is one of the most important components for Bangabandhu Hi-Tech City. It was constructed all the blocks (Block 1-5) and part of the block-6 with a cost of BDT 210.00 lac. The work was completed in December 2017.


Sewerage line

## 5.6 Sewage Treatment Plant in BHTC:

Sewage Treatment Plant is another vital component for developing an environment-friendly industrial park. Considering the topography of the land, three STPs in BHTC were suggested by PwC in the feasibility report. BHTPA decided to establish an first STP with capacity of 3 MLD in the administrative block which covered Block-2  and part of  Block 3. The total cost was around BDT 460.00 lac and it was completed in September 2017.

Sewage Treatment Plant

## 5.7    Boundary Wall in BHTC:

The old boundary wall of was constructed in 2008 and some parts of it needed to be demolished due to the construction of an alternate road for the neighbouring villagers. Initially, area the park was 232 acres and the government allocated additional 97 acres of land for the park. To enclose the new area of the park, a 3500-meter-long boundary wall was constructed by November 2017 under the project with a cost of BDT 621.26 lac.


Newly constructed boundary wall

## 5.8    Establishment Electric Line at BHTC:

For ensuring an uninterrupted and a quality power supply at BHTC, a high-tension electric line was constructed in March 2017 worth BDT 603.00 lac. Total five electric sub-stations in 5 places of the park were constructed along with necessary electric line. The line mostly passes through an underground route with partial placement through the drain beside the Internal Access Road.

Substation

## 5.9    Water Reservoir and Water Transmission System in BHTC:

A water reservoir and water transmission system is a most important part of water supply for adequately deliver water to satisfy residential, commercial, industrial and firefighting requirements.  For fulfilment of water requirement around 5200-meter-long water supply line along with 3 pump-house with a water reservoir was constructed. The water reservoir has a capacity of 43 lac litres, which is an alternate source of water for 50000 people for approximately 8.25 days of the city. The total expenditure was BDT 578.59 lac and was completed in March 2017.



Water Supply System

## 5.10    Lake Development of BHTC:

Several lakes are located inside BHTC area, but most of them were silted and inaccessible due to bush and shrubs. BHTPA decided to excavate existing water bodies and work on beautifying the banks through constructing different seating arrangement beside the banks of the lakes and neighbouring roads. The total cost for this component was BDT 165.63 lac  and was completed in March 2017.

Lake development of BHTC with sitting facilities

## 5.11    Construction of 6 Culverts in BHTC:

Six culverts were constructed to drain out rainwater from the parking area by spending BDT 65.13 lac which were completed in February 2017.


Culvert in BHTC

## 5.12    Construction of bridge on the lake of BHTC:

BHTC was divided into 6 well- connected blocks. An internal access road was constructed to connect all the blocks but the communication was disrupted due to some technical difficulties in Block-2. A 60-meter prestressed girder bridge has been constructed on the lake to ensure easy and smooth communications inside the city worth BDT 582.50 lac. The work was completed on December 2016.

| Bridge | Night view of the bridge |

### 5.13 Construction of Service Building in BHTC:

A two-storied service building (with 8 storied foundations) in Bangabandhu Hi-Tech City has been constructed by spending BDT 983.96 lac. The work was completed on December 2016. The building had been built for multi-purpose use, particularly custom operation, however, for a temporary period, two investors intended for IOT manufacturing have been allocated space in the building.



| Design of the Service Building | Constructed Service Building |

### 5.14 Reformation in Administrative Building for Tenants of BHTC:

The existing 3 storied administrative building was unutilized since its construction in 2009. The BHTPA has decided to rent out the building space to interested IT/ITES firms to operationalize the park as suggested by the World Bank. The reformation of the space of the building was completed in February 2016 and BDT 32.28 lac was spent for the complete setup of the necessary interior facility in the building. An emergency call centre service of the Government (Dial 999) was operating in the building of that time.

### 5.15 Interiors, Furniture and Fit-outs for Existing Building of BHTC:

BHTPA decided to get a tenant for the existing 3 storied building to start the park activity on a limited level as suggested by the World Bank. The BHTPA has selected 5 IT/ITES firms by

placing furniture and interiors suitable for IT/ITES operation by plug & play. The total contract value was BDT 60.35 lac and the work was completed on 31 December 2015.



National Help Desk 999 is operating in the Admin building of BHTC

## 5.16    Procuring 2 AC Bus:

Bangabandhu Hi-Tech City is 40 km away from Dhaka City. The BHTC is connected through a network of fully functioning train stations and for a smoother communication between the Dhaka City and BHTC, two Air-Conditioned buses were procured under project in 2016.



AC Buses

# Chapter 6

## HUMAN RESOURCE DEVELOPMENT

One of the main objectives of the project is to enhance the capacity of the IT/ITES sector of Bangladesh. The project included a training program which was designed to improve the quality of the CEO of the IT/ITES of the firm and enhance skill of the employees. A well-planned C-suite training was organized for 25 CEOs in University of Hong Kong (HKU). The program required the C-Suite personnel of Hong Kong to act as trainers and follow the HKU curricula. Several Mid-Level officials and newly appointed employees of the IT/ ITES firms had also undergone rigorous training and the sessions were held at the HTP/STP and outside of the park. Additionally, special training sessions were designed and implemented in order to develop women leadership and technical skills. Through executing the Skill Enhancement Program and providing financial support through Employment Incentive Program, a pool of skilled HR personnel were developed and the competitiveness of the different IT/ITES firms was ensured. Furthermore, 100 CSE engineers were sent to Infosys Mysore Campus to get training on JAVA programming. The objectives of these programs are as follows:

- Providing employment opportunities for young in the IT/ITES sector;
- Creating a readily employable workforce to be absorbed in the IT/ITES sector;
- Encouraging IT/ITES companies to set up their operations at the Hi-Tech;
- Upgrading operational management, soft skills, and technical skills of mid-level leaders working in the IT/ITES sector;
- Supporting IT/ITES companies in building skilled human resources by implementing skill-development training on skills that are essential to their internal business processes and successfully laying the growth path for them to become mid/large size companies;
- Upgrading skills of employees working in the IT/ITES industry by enabling its growth with better-qualified human resources;
- Increasing self-employment opportunities for the young Bangladeshis in the IT/ITES sectors;
- Providing globally recognized vendor-specific certification and training programs covering IT/ITES industry needs;
- Establishing an internationally-recognized quality certification program for IT/ITES companies.

## 6.1    Skill Enhancement Training Program:

Skill Enhancement is another important initiative designed to increase employment and self-employment opportunities of young Bangladeshis, specifically employees and recent graduates in the Information Technology (IT) or IT Enabled Services (ITES) sector. The project aims to upgrade skills and achieve specific vendor certification and to assist the growing freelancer community to participate in microwork on crowdsourcing platforms and promote the opportunities for employment in IT/ITES companies. The overarching aim of Bangladesh Hi-Tech Park Authority is to support human resource development through the Skills Enhancement Training Program for better employability.

The main objectives of the program:

1. Creating a readily employable workforce for  IT/ITES sector;
2. Increasing self-employment opportunities for the youth in the IT/ITES sectors;
3. Upgrading skills of employees working in the IT/ITES industry;
4. Providing globally recognized vendor-specific certification;
5. Increased freelancer community;

**Progress of the Skill Enhancement Training Program:**

- Total 32 institutes were selected
- Training conducted on 25 courses
- Total number of participants were 4735
- Total job created around 2312

**Online Assessment Test:**

An Online Assessment Test was introduced to ensure the quality of the training program. A committee was formed in December 2014 to conduct the online assessment test for evaluating the participants after successfully completing the training course. Accordingly, a question bank was created for individual courses to conduct the online assessment test.

**Payment Method of the Program:**

The cost varied on the topic of the training and the project authority paid 90% of the total cost. Institutes claimed 25% of the total training cost after starting the training. However, the final 50% of the cost was paid after completion of the course, online assessment test, and submission of the job placement report to the project. Throughout the process, an amount of BDT 803 lac has been paid to the institutes.

**Communicative English Course:**

The project has also provided training on English Communicative courses for the participants who have completed the training under the Skill Enhancement Program. The course was carried out as per the syllabus of the APTIS program conducted by the British Council. Participants are required to score at least a B1 level in the examination. Total 421 trainees completed the training with APTIS certification and a total of BDT 72 lac has been disbursed for the training.

**Progress of the Program:**

The program was started in April 2014 with a target to train up to 3000 IT personnel and unemployed youth graduates. The target has been achieved as 4735 participants have completed the training. Course wise training status is as follows:

| SL | Course Name | Duration (Hrs) | No of Trainees |
|----|-------------|----------------|----------------|
| 1 | Call Center Solution | 48 | 285 |
| 2 | Android Apps Development | 144 | 293 |
| 3 | English Language | 140 | 63 |
| 4 | C# .Net | 144 | 548 |
| 5 | C++ Programming  Language | 72 | 133 |
| 6 | 3D Animation | 192 | 417 |
| 7 | Cyber Forensic | 72 | 16 |
| 8 | Drupal | 120 | 53 |
| 9 | Basic Networking | 108 | 226 |
| 10 | Graphic Design | 108 | 734 |
| 11 | HTML5 | 72 | 237 |
| 12 | Training on HTML5, CSS3, Joomla 2.5 and WordPress Basics | 144 | 173 |
| 13 | Java | 144 | 347 |
| 14 | Java Script | 60 | 98 |
| 15 | Magento | 80 | 171 |
| 16 | iPhone App Development | 100 | 15 |
| 17 | Phone gap | 75 | 59 |
| 18 | PHP | 140 | 98 |
| 19 | Python | 144 | 78 |
| 20 | Computer Training, Special batch for visually impaired | 148 | 30 |
| 21 | Search Engine Optimization | 72 | 151 |
| 22 | Software Testing & Quality Assurance | 60 | 60 |
| 23 | SQL Language | 108 | 265 |
| 24 | Titanium | 48 | 40 |
| 25 | VMware cloud | 64 | 115 |
| 26 | Responsive Web Design | 192 | 30 |
| | Total | | 4735 |

## 6.2    Training on Lean Six Sigma, Oracle & SAP

The project has taken initiatives to provide capacity building support for private sector IT/ITES companies, IT/ITES association members with skill development training, and freelancers training for an enhanced business environment with increased opportunities for growth. The training on 'Lean Six Sigma Black Belt', 'Oracle' and 'SAP' along with certification is specialized training which has increasing demand and interest in the IT sector.

**Objectives:**

i.    Providing training services leading to certification for the courses: Lean Six Sigma Black Belt, Oracle & SAP training;
ii.   Providing assistance to develop and update the training contents and
iii.  Providing support to the mid and top-level management of the IT/ITES industry.

**Selected Training Provider:**

Following training institutes were selected through open bidding for conducting the training:

| Course Name | Training Providers |
|---|---|
| Oracle | (1) IBCS Primax Software (Bangladesh) Ltd |
| SAP | (1) Mars Solutions Ltd. |
| Lean Six Sigma (Black Belt) | (1) TUV SUD Bangladesh (Pvt.) Ltd<br>(2) Star Computer Systems Ltd<br>(3) Babylon Resource (Pvt.) Ltd |

**Achievement of the Training:**

| Course Name | No of participants completed | | | Certification Completed | Cost (Tk in lac) |
|---|---|---|---|---|---|
| | Total | Male | Female | | |
| Lean Six Sigma (Black Belt) | 112 | 104 | 8 | 94 | 34.07 |
| Oracle | 86 | 83 | 3 | 77 | 121.05 |
| SAP | 40 | 35 | 5 | - | 44.10 |
| Total | 238 | 222 | 16 | 171 | 199.22 |



Training of Six Sigma at TuvSud



Training of Six Sigma at TuvSud



Training of Oracle Inventory at IBCS Primax



Trainees of Oracle-DBA at IBCS Primax

**6.3    Mid-Level Training Program:**

According to a study, it was found that there is a shortage of skilled manpower in the mid-level management of the IT/ITES Sector in Bangladesh. Considering the importance of skilled mid-level management, the Government has introduced this program to scale up the capacity of the IT/ITES sector.

The objective of the training was to provide upgraded operational management, technical skills, and soft skills required for mid-level management among leaders working in the IT/ITES Sector.

The key outputs of the programs are:

- 400 mid-level managers had been trained and certified in technology management
-  250 mid-level managers had been trained and certified in operational management.
- Increased competencies of the local firms' to compete in the global market.

The training was targeted for the mid-level professional of a firm working for at least 2 years. 85% of the total cost for the training was borne by the BHTPA and the rest 15% cost was borne by the participant's firm. The program was conducted by the 7 (seven) selected training institutes.

**6.4     Training of CSE Graduates On Java at Infosys, Mysore Campus, India:**

During the visit of Mr. Md. Nazrul Islam Khan, Secretary, ICT Division to Mumbai India in 2017 at NASSCOM Leadership Summit, ICT division received an offer from Infosys Technologies Limited, India to train 100 Bangladeshi CSE or IT graduates and faculties of IT on Software Engineering. As per the offer, the training would be held in the Infosys training centre in Mysore and Infosys would cover the tuition fees and accommodation for the candidates as a goodwill gesture to Bangladesh. The other expenses would be borne by the BHTPA.

Through a standard selection process, 100 trainees (10 faculties and 90 students) were selected for the training. Among them, 98 trainees completed the 03 (three) months training from 12 January, 2018 to 24 March, 2019 in Java at Infosys.

This training has enhanced the professional capacity of the graduates and reinforced the cooperation between the IT/ITES sector in Bangladesh with that of India. After successful completion of the training at Infosys, the participants have got warm acceptance from the IT/ITES industry for employment and also got huge opportunities as entrepreneurs. The 12 week-long training on JAVA was of stringent global standards. In a word, the offer from Infosys to train candidates and faculty in the software engineering training program significantly complements the skills development component of the said project.

Closing ceremony of training program in Infosys campus, Mysore, India**.**

**6.5    Employment Incentive Program:**

BHTPA has extended its support to provide an incentive to IT/ITES companies' for appointing new employees who would undergo training on the specific company- based curriculum & processes. Under the Employment Incentive Program, the incentive was to be provided to the IT/ITES companies upon actual recruitment/employment of the trained candidates. The project has provided employment incentives based on the actual cost of training per person with a maximum ceiling of BDT 40,000.

The Main Objectives of the Program:
   a. To provide employment opportunities in the IT/ITES sector;
   b. Supporting IT/ITES companies in building human resources by training for productive; and
   c. To encourage IT/ITES companies to set up their operations at the Hi-Tech Parks.
Achievement of the Program:
   - Total 65 companies were selected for the incentive program
   - Total recruitment was 1891 by the March 2017
   - Total BDT 783 lac had been disbursed to the companies.

**Financial year wise approve and recruitment status:**

| Fin Year | No of employment Approved | No of employment created |
|---|---|---|
| 2013-2014 | 535 | 492 |
| 2014-2015 | 1012 | 895 |
| 2015-2016 | 580 | 504 |
| Total | 2127 | 1891 |

**Detail recruitment progress of the program is stated below:**

| Sl | Company | Total Approved | Total Recruitment |
|---|---|---|---|
| 1 | AUGMEDIX Bangladesh | 10 | 0 |
| 2 | Akhoni.com | 20 | 12 |
| 3 | Authentic Software | 10 | 0 |
| 4 | Ananda Computers | 20 | 20 |
| 5 | Advent Technologies | 18 | 18 |
| 6 | AKR Technology | 20 | 0 |
| 7 | Big Bang Computers Ltd. | 10 | 10 |
| 8 | Brainstation-23 | 55 | 55 |
| 9 | Copotronic InfoSystems Ltd | 25 | 24 |
| 10 | Computer Graphics & Design | 15 | 10 |
| 11 | Creative IT Ltd. | 95 | 95 |
| 12 | CSL Software Resources Ltd | 30 | 20 |

| 13 | Euro Bangla IT | 25 | 16 |
|----|----------------|-----|-----|
| 14 | FIFO Tech | 50 | 50 |
| 15 | Global Communication | 15 | 15 |
| 16 | Global Web Outsourcing Ltd | 25 | 25 |
| 17 | Grameen Solutions | 51 | 28 |
| 18 | Habib Intelligent Software Ltd | 20 | 20 |
| 19 | HN Associates Ltd. | 10 | 10 |
| 20 | I am  digital Limited | 10 | 10 |
| 21 | IJ Corporation | 45 | 45 |
| 22 | North Bengal IT Ltd | 15 | 15 |
| 23 | Daffodil Computers Limited | 10 | 10 |
| 24 | Data Soft Systems BD  Ltd | 10 | 10 |
| 25 | Databiz Software Ltd | 41 | 31 |
| 26 | Dhaka Calls | 15 | 0 |
| 27 | Digicon Technologies Ltd. | 140 | 140 |
| 28 | Divine IT Limited | 10 | 0 |
| 29 | DK Technology Ltd | 8 | 0 |
| 30 | ENERGOTECH | 20 | 20 |
| 31 | ERA InfoTech  LTD | 80 | 60 |
| 32 | Ethics Advanced Technology Ltd | 35 | 35 |
| 33 | Nrbjobs Ltd | 30 | 30 |
| 34 | Optimal IT Limited | 20 | 20 |
| 35 | Projukti Corporation Ltd | 20 | 0 |
| 36 | Radison Digital Technologies Ltd | 10 | 10 |
| 37 | Rafu soft | 15 | 11 |
| 38 | Service Solutions Ltd | 140 | 140 |
| 39 | Star Computer System Ltd | 50 | 50 |
| 40 | Subra Systems | 10 | 10 |
| 41 | Synesis IT Ltd. | 75 | 75 |
| 42 | Systech Digital Limited | 8 | 6 |
| 43 | Tech Solutions | 10 | 10 |
| 44 | Impel Service & Solutions Ltd | 95 | 95 |
| 45 | Innovation Information System | 30 | 15 |
| 46 | IPSITA Computers PTE Ltd | 10 | 10 |
| 47 | Kazi IT Center Limited | 200 | 200 |
| 48 | KR Digital Concept | 5 | 5 |
| 49 | M/S Dhaka Services Company | 10 | 10 |
| 50 | MAMTech Limited | 10 | 10 |
| 51 | MARS Solutions | 77 | 77 |
| 52 | Multimedia Content &Communication Ltd. | 10 | 10 |
| 53 | MY Outsourcing Ltd | 80 | 80 |
| 54 | Nascenia IT Ltd | 21 | 15 |
| 55 | Neosys Engineering Ltd | 8 | 8 |
| 56 | Techno Cassa Ltd. | 15 | 15 |
| 57 | Techno vista Limited | 25 | 13 |
| 58 | Times ASL Call Centre | 30 | 30 |
| 59 | Ultimate Information Architect Limited | 10 | 10 |
| 60 | UTC Associates | 15 | 0 |

| 61 | UY Systems Ltd. | 30 | 30 |
|----|-----------------|-----|-----|
| 62 | VECRAS Limited | 10 | 10 |
| 63 | Virgo | 30 | 30 |
| 64 | W3 Engineers | 45 | 45 |
| 65 | Wisdom Valley Limited | 10 | 7 |
| | Total | 2127 | 1891 |

## 6.6   C-Level Advanced Management Training:

C-Suite Training Program was designed to provide upgraded operational management and technical & soft skills among C-Suite managers working in the IT/ITES industry in Bangladesh. The first batch of C-Suit Advanced Management training consisted of 25 CEO/COO of IT/ITES companies and was organized in Hong Kong University. There the participants were trained in 9 modules. After completing the training in Hong Kong, the project has also arranged training for CEO/MD/COO of IT/ITES companies in Dhaka and Cox's Bazar, where the participants in the Hong Kong University shared their experience as resource personals.

**Progress of the C-level Training:**

| SL | Venue | Start Date | End Date | No. of Participants |
|----|-------|-----------|----------|---------------------|
| 1 | National Institute of Local Govt. (NILG), Dhaka | 22/09/19 | 02/10/19 | 25 |
| 2 | Hotel The Cox Today, Cox's Bazar | 21/05/19 | 27/05/19 | 18 |
| 3 | Hong Kong University, Hong Kong | 25/11/19 | 07/12/19 | 25 |
| 4 | Bangladesh Computer Council, Dhaka | 09/02/19 | 23/02/19 | 20 |
| | Total | | | 88 |



C-level training in Hongkong University



Local C-level  training at BCC conference room

| Local C-level training at Coxsbazar | Local C-level training at Coxsbazar |

## 6.7 Company Quality Certification Program:

Bangladesh Hi-Tech Park Authority has initiated the program of supporting local IT/ITES companies to enhance their competitiveness through achieving quality certification which will enable them to participate in local and global markets and enhance their businesses. The objective of the program is to establish an internationally recognized certification program; Capability Maturity Model Integration (CMMi) and International Organization for Standardization (ISO) for selective companies in the IT/ITES Sector under this program. The Authority provided 75% of the total cost and the rest 25% cost had been borne by the companies. The support from the authority is based on the successful implementation of the process and policies of the certification.

In the first phase, 40 (forty) companies completed their certification and in the second phase, more than 30 (thirty) companies were selected for certification.

**Current status:**

| Cert. Name | No of company selected | Certification completed | Certification ongoing |
|---|---|---|---|
| ISO:27001 | 7 | 3 | 4 |
| ISO:9001 | 41 | 25 | 16 |
| CMMiL-5 | 2 | 2 | - |
| CMMiL-3 | 20 | 10 | 10 |
| Total | 70 | 40 | 30 |

**List of companies completed certification:**

| SL | Company Name | Certification Name | Remarks |
|---|---|---|---|
| 1 | Data Soft Systems Bangladesh Ltd. | CMMiL-5 | Completed |
| 2 | Leads Soft Bangladesh Ltd. | CMMiL-5 | Completed |
| 3 | BJIT Limited | CMMiL-3 | Completed |
| 4 | Dohatec New Media | CMMiL-3 | Completed |
| 5 | ERA InfoTech LTD | CMMiL-3 | Completed |
| 6 | Ethics Advanced Technology Ltd | CMMiL-3 | Completed |
| 7 | Grameen Solutions Limited | CMMiL-3 | Completed |

| 8 | IBCS-PRIMAX Software (BD) Limited | CMMiL-3 | Completed |
|---|---|---|---|
| 9 | Spectrum Engineering Consortium Ltd | CMMiL-3 | Completed |
| 10 | Star Computer Systems Limited | CMMiL-3 | Completed |
| 11 | Techno Vista Limited | CMMiL-3 | Completed |
| 12 | Technohaven Company Limited | CMMiL-3 | Completed |
| 13 | Brainstation-23 | ISO:27001 | Completed |
| 14 | Databiz Software Ltd | ISO:27001 | Completed |
| 15 | Devnet Ltd | ISO:27001 | Completed |
| 16 | Big Bang Computers Ltd. | ISO:9001 | Completed |
| 17 | Copotronic Info Systems Ltd | ISO:9001 | Completed |
| 18 | Creative IT Limited | ISO:9001 | Completed |
| 19 | Digicon Technologies Limited | ISO:9001 | Completed |
| 20 | Energotech | ISO:9001 | Completed |
| 21 | Euro Bangla IT Ltd. | ISO:9001 | Completed |
| 22 | Global Web Outsourcing Limited | ISO:9001 | Completed |
| 23 | JB Intel Limited | ISO:9001 | Completed |
| 24 | MAP Distribution Network | ISO:9001 | Completed |
| 25 | Mars Solutions Ltd. | ISO:9001 | Completed |
| 26 | Metronet Bangladesh Limited | ISO:9001 | Completed |
| 27 | MIR Technologies | ISO:9001 | Completed |
| 28 | My Outsourcing Ltd | ISO:9001 | Completed |
| 29 | Nice Power & IT Solutions | ISO:9001 | Completed |
| 30 | Nrbjobs Ltd | ISO:9001 | Completed |
| 31 | RM Systems Ltd. | ISO:9001 | Completed |
| 32 | Service Solution Ltd | ISO:9001 | Completed |
| 33 | Square Informatix | ISO:9001 | Completed |
| 34 | SR Solutions | ISO:9001 | Completed |
| 35 | Subra Systems Ltd. | ISO:9001 | Completed |
| 36 | Synesis IT Ltd | ISO:9001 | Completed |
| 37 | Systech Digital | ISO:9001 | Completed |
| 38 | System Resource Ltd. | ISO:9001 | Completed |
| 39 | W3 Engineers | ISO:9001 | Completed |
| 40 | Windmill Infotech Ltd. | ISO:9001 | Completed |

**List of newly selected companies for certification under Addition Financing:**

| SL | Company Name | Certification Name |
|---|---|---|
| 1 | Atom AP Limited | CMMi L3 |
| 2 | Business Automation Ltd | CMMi L3 |
| 3 | Data Edge Limited | CMMi L3 |
| 4 | Divine IT Limited | CMMi L3 |
| 5 | Infinity Technology International Limited | CMMi L3 |
| 6 | Reve Systems Ltd | CMMi L3 |
| 7 | Surjomukhi Limited | CMMi L3 |
| 8 | Syntech Solutions Ltd | CMMi L3 |
| 9 | UY Systems Ltd | CMMi L3 |

| 10 | Wisdom Valley Limited | CMMi L3 |
|---|---|---|
| 11 | Daffodil Computers Limited | ISO:27001 |
| 12 | Sigma Systems Limited | ISO:27001 |
| 13 | Software Shop Limited (SSL Wireless) | ISO:27001 |
| 14 | Wintel Limited | ISO:27001 |
| 15 | Arena Phone BD Ltd | ISO:9001 |
| 16 | Aspire Tech Services & Solutions Ltd | ISO:9001 |
| 17 | Computer Source Infotech Limited | ISO:9001 |
| 18 | Dnet | ISO:9001 |
| 19 | eSoft Arena Limited | ISO:9001 |
| 20 | Fusion Infotech Limited | ISO:9001 |
| 21 | Genuity Systems Ltd | ISO:9001 |
| 22 | Impel Service & Solutions Limited | ISO:9001 |
| 23 | IPSITA COMPUTERS PTE LTD | ISO:9001 |
| 24 | M/S SAJ Telecom and Fashion | ISO:9001 |
| 25 | Radisson Digital Technology Ltd | ISO:9001 |
| 26 | Raj IT Solutions Ltd. | ISO:9001 |
| 27 | Synergy Interface Ltd | ISO:9001 |
| 28 | Nanotech Solution & Consultancy Ltd. | ISO:9001 |
| 29 | Optimal IT Limited | ISO:9001 |
| 30 | Vecras BD Ltd | ISO:9001 |



Company Certification awareness program

## 6.8 Capacity Building for Public Sector:

In line with the mandate of the project, Bangladesh Hi-Tech Park Authority has organized/facilitated training programs for the government officials for capacity building in the government sector.

### (a)    Hi-Tech Park/ Special Economic Zone Management Training:

The project organized training on Hi-Tech Park/ Special Economic Zone Management for 55 participants (3 batches) in the years 2015 and 2016 with trainees coming from different Ministries and Departments. The total duration of the training was 10 days, where the first 5 days of the training was conducted in Bangladesh and the remaining 5 days of training was

organized abroad. The main objective of the training was to make them understand various issues related to setting up and developing HTP/STP and their operation and maintenance.



Training on Zone Management



Training on PPP Formulation

**(b) Training on PPP Project Formulation and Management:**

The training on PPP project formulation and management was organized for 53 participants (3 batches) from different Ministries and Department in the year 2015 and 2016. The total duration of the training was 10 days, where the first 5 days of training was conducted in Bangladesh and the remaining 5 days of training was organized abroad. Participants were sent to Malaysia, China, and India for getting first-hand experience about PPP. The main objective of the training was to know about the current status of PPP in Bangladesh, financing PPP projects, Structuring PPP both National & International Perspective, PPP cycle, policies, processes, and project Transaction etc..

**Summary of Zone and PPP training:**

| Type of Training | Batch No | Start Date | End Date | Total No of Participants | Male | Female |
|---|---|---|---|---|---|---|
| Zone Management Training | 1 | 21/6/20 | 25/6/20 | 20 | 16 | 4 |
| | 2 | 9/4/20 | 13/4/20 | 20 | 16 | 4 |
| | 3 | 20/11/20 | 24/11/20 | 15 | 12 | 3 |
| PPP Project Formulation and Management | 1 | 16/8/20 | 20/8/20 | 20 | 17 | 3 |
| | 2 | 31/5/20 | 6/6/20 | 15 | 14 | 1 |
| | 3 | 23/10/20 | 27/10/20 | 17 | 12 | 5 |

| SL | Training Name | Batch No with Date | No of Participants | Organization of Participants | Name of Country visited |
|---|---|---|---|---|---|

| 1 | PPP Formulation and Management Issues | 1st Batch (16/8/19 – 20/8/19) | 20 | Prime Minister's Office, Bangladesh Legislative and Parliamentary , Posts & Telecommunication Division Affairs Division, BHTPA, LGED, Bangladesh Supreme Court, ICTD, KHTP Project, ERD, Ministry of Land, Bridge Authority, Department of Architecture, CCA, BCC, , Bangladesh Railway, DOICT | India Philippines, Malaysia |
|---|---|---|---|---|---|
| | | 2nd Batch (31/5/19 – 6/6/19) | 15 | Ministry of Public Administration Planning Division, ICTD, ERD, DC Legislative and Parliamentary Energy and Mineral Resources Affairs Division, Ministry of Housing and Public Works, IMED, Office (Rajshahi, Sylhet), Posts & Telecommunication Division, Division, BHTPA, Ministry of Land, | |
| | | 3rd Batch (23/10/19 - 27/10/19) | 17 | BEZA, DOICT, Bangladesh Parliament Secretariat, DC Office Chittagong, DC Office Khulna, DC Office Shariatpur, DC Office Narayangonj, ERD, FAPA, Ministry of Railways, Legislative and Parliamentary Affairs Division, ICTD, Road Transport And Highways Division, IMED, Planning Commission, NBR, Finance Division | |
| 2 | Hi-Tech Park Zone Management | 1st Batch (21/6/20 – 25/6/20) | 20 | ICTD, BCC, Legislative and Parliamentary Affairs Division, BHTPA, KHTP , IMED, CCA, UNO office Kaliakoir, UNO Office Sylhet, Planning Commission, ERD, BEZA, Department of Architecture, Ministry of Railways, Ministry of Land | India, China, Singapore, Malaysia |
| | | 2nd Batch (9/4/20 - 13/4/20) | 20 | IMED, BCC, BEZA, ICTD, ERD, NILG, Bangladesh Rural Electrification Board, Ministry of Housing and Public Works, UNO office Kaliakoir, UNO Office Sylhet, DC Office Rajshahi, DC Office Shariatpur, BHTPA-3, Road Transport And Highways Division, Legislative and Parliamentary Affairs Division, Ministry of Finance | |

| | | 3rd Batch (21/10/20 - 24/10/20) | 15 | BEZA, DOICT, ERD, FAPA, Ministry of Railways, Legislative and Parliamentary Affairs Division, ICTD, Road Transport And Highways Division, IMED, Bangladesh Parliament Secretariat, Planning Commission, DC Office Gazipur, DC Office Chittagong, BHTPA | |

## 6.9     WORKSHOP & SEMINAR

The project organized several workshops/seminars during its implementation period to identify the required skill set for the workforce and incentive packages for the potential investors, building the capacity of the stakeholders in different state of art technologies as well as policy and legal issues. Some of the workshops addressed the environmental issues and impact along with its management whereas the developing start-up ecosystems were also getting privilege. All these workshops attracted relevant stakeholders, policymakers. The outcome and recommendations help the project and BHTPA to identify appropriate interventions.  Details of all workshops are discussed below.

i.   **Workshop on Course Curricula for Skill Enhancement Program:**




ii.   **Program Awareness Workshop**




Seminar of Awareness building on IT development

Honourable minister, state minister & Secretary of ICT in the meeting of HRD

iii. **Preparatory and Farewell function of C-Level Manager**
iv. **Workshop on Preferential Package (Incentive, Allowance, and Facilitation)for Investor**



*Day long workshop n preferential package for investor in La Vinci hotel, Dhaka*

v. **Cloud computing Training:** Cloud Computing Strategy & Solution Training Course was organized by BHTPA held on 7-8 February 2015 at BCC Lab where 20 mid-level officers of the IT Sector took part. Cloud Computing Expert & founder of Cloud Camp Bangladesh Mr. Mohammad Zaman from the USA conducted the course. The training course named "Cloud Computing – Let's Build the Cloud Solution and Know What", consisting of 12 modules was completed by Mr. Zaman.
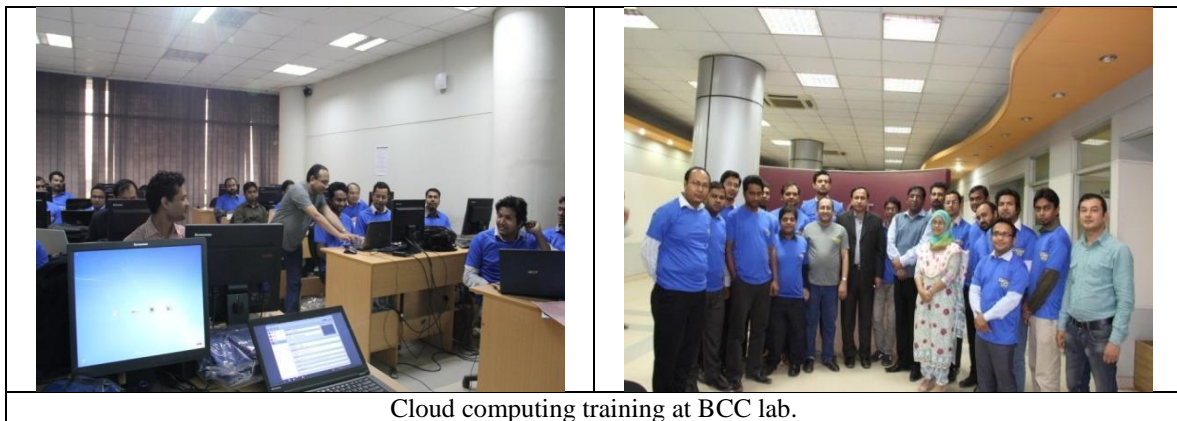


Cloud computing training at BCC lab.

vi. **Workshop on "IT/ITES/Hi-Tech Policy & Roadmap:** The Project appointed EY for providing Transaction Advisory Services. One of the deliverables under this project is the "IT/ITES/Hi-Tech Policy & Bangladesh IT/ITES Industry Roadmap Report". The draft report prepared by EY was presented in the workshop. The workshop was held on 03/09/2015 at Hotel La Vinchi, Kawran Bazar, Dhaka. Stakeholders from both government and private sectors were present in the workshop.

vii. **Workshop on "Awareness on Environment Management" for Developers & PMC:** BHTPA is working to build a Hi-Tech Park/Software Technology Park in

different places of Bangladesh. As per the World Bank EMF guideline, EMP directions, and contractors' responsibility, there were some instructions on how to handle environmental issues and maintain workers' health and safety in different phases of activities. In these circumstances, a workshop on "Awareness and Training Program on Environment Management" for Developers & PMC of different Hi-Tech Park was organized on 21 July 2016 at Conference Room, BHTPA, ICT Tower, Level-9, Agargaon, Dhaka.



Awareness workshop



World Bank environment specialist visiting the STP site

viii. **Workshop on Innovation Focusing Big Data**
ix. **Workshop on "Environment Management" for Contractors and Related Experts**



Awareness workshop on environmental issues

x. **Workshop on "Bangladesh Digital Entrepreneurship Ecosystem"**
xi. **Workshop on "Foreign Direct Investment (FDI) & relevant issues"**

Workshop on FDI attract held at Janata Tower, Kawran Bazar

xii. **Workshop on 3-minute Pitch and Capital:** A workshop on '3-minute Pitch and Capital' was held on 22 January 2017 at Janata Tower Software Technology Park, Kawran Bazar for startups. Ms Tina Jabeen, Former Policy Adviser of Startup Bangladesh spoke about different techniques and approaches for a successful 3-minute pitch for the startups. The workshop concluded with the feedback of the startups' pitches.

xiii. **Round-table meeting on "Creating a Venture Capital Ecosystem**



Round table meeting on venture capital ecosystem

xiv. **Workshop on "Innovation entrepreneurship in the digital age"**
xv. **Workshop on "Business model building for startups**

xvi. **Seminar on "Learning from the Leaders: Experience Sharing of Infosys Graduates"**

# Chapter 7

## PROMOTIONAL ACTIVITIES AND BUSINESS LINKAGE:

Support to Development of Kaliakoir (and others Hi-Tech Park) Project facilitated visits/exchange programs for government officials as well as non-government participants to promote Bangladesh's ICT sector and showcasing investment opportunities in Bangladesh. All programs ultimately assist in positive branding and showcasing Bangladesh's resources globally. The delegation was led by the high officials such as Honourable State Minister, ICT Division, Secretary, Managing Director's. Some of the events are as follows:

i. **BPO/ITO Forum in New York**
ii. **Visit different Hi-Tech Parks in Malaysia**
iii. **13th ICT East in India**
iv. **Visit Chinese Science Parks**
v. **Visit Hoa Lac Hi-Tech Park in Vietnam**

vi. **Visit Infosys, India:** A delegation consisting of 6 members led by Mr. Zunaid Ahmed Palak MP Honourable State Minister, ICT Division visited India to attend the closing ceremony of the training of CSE graduates held at Infosys Technology Ltd. Campus in Mysore from 21-25 March 2019. The delegation also visited Accenture Campus and met with the high officials of Accenture and NASSCOM along with networking with Mr. Binod Hampapur Rangadore, Executive Vice President and Global Head of Infosys, India. The visit had provided an opportunity to explore a further avenue of cooperation, mobilizing investment, and sharing international best practices for the sake of the promotion of the IT/ITES industry in Bangladesh.

vii. **Japan IT Week 2015**
viii. **World Free Zone Convention in the USA**

ix. **E-commerce Fair in London:** A delegation consisting of 21 high officials led by Mr. Zunaid Ahmed Palak MP Honorable State Minister, ICT Division, Ministry of Posts, Telecommunications & Information Technology attended the 2nd UK-Bangladesh "e-Commerce Fair" held on 13-14 November 2019. The 2nd 'UK-Bangladesh e-Commerce Fair 2015', a dedicated exhibition focusing on e-Commerce technology, was jointly organized by the Information and Communication Technology Division (ICTD), Bangladesh Hi-Tech Park Authority (BHTPA), and the Computer Jagat, the country's prominent news-monthly promoting education and technology, for the ICT and e-Commerce industry to enter into foreign markets and to establish a world-class business environment for targeted high growth industrial sector and new business.

x. **India Leadership Forum:** A delegation of 6 members attended the 24th summit of India Leadership Forum 2020, Mumbai, India organized by the National Association of Software and Services Companies (NASSCOM) during 10-12 February 2020. The team experienced some identically exponential technologies such as Industrial Biology, smart IoT, Artificial intelligence and additive technologies by a range of speakers.

xi.     **CeBIT in Germany:** A team consisting of 11 members led by Mr. Sajeeb Ahmed Wazed, Hon'ble Adviser to PM attended the largest and most internationally representative computer expo, CeBIT in Hanover, Germany on 14-18 March 2019. Hon'ble Adviser presented the Key Note in a seminar and the delegation also met different international investors and CeBIT officials. The objective of the visit was to observe the latest relevant trends and innovations as well as their impact on society and the working world.

xii.    **Japan IT Week 2017 and Korea B2B Programme**: A delegation of 14 members including the State Minister of ICT Division Mr. Zunaid Ahmed Palak MP was attended "Japan IT Week Spring 2016" held on 11-13 May 2017 at Tokyo Big Sight to strengthen the Hi-Tech Park business network and relationships with existing clients for widespread advertising and exposure to millions of consumers. The team also attended a Korea B2B Programme in Korea on 12-15 May 2017 which created a network between the firms of both countries focused on creative content.

xiii.   **India Leadership Forum 2017:** A delegation of 6 members attended the 25th summit of India Leadership Forum 2017, Mumbai, India organized by the NASSCOM during 15-17 February 2017. The intent was to present rich case studies on how global companies are leveraging these shifts, and how the technology provider's ecosystem can be a disruptive partner. The outcome was two-fold: leave with actionable insights and outline a call to action.

xiv.    **CeBIT 2017 in Germany:** A team consisting of 11 members attended CeBIT 2017 in Hanover, Germany on 18-24 March 2017. The team was led by Mr. Harunor Rashid, Additional Secretary, ICT Division. That visit had created an opportunity to enhance cooperation and resource-sharing to develop and promote the IT/ITES industry in Bangladesh. CeBIT is the only event in the world to clear focus on business would allow visitors to quickly obtain an overview of the latest digital products and solutions and find what's right for our companies. The CeBIT Global Conferences provided an all-around survey of the digital marketplace.

# Chapter 8

## IMPACT OF THE PROJECT ON CREATING BUSINESS ENVIRONMENT IN BANGABANDHU HI-TECH CITY, KALIAKOIR

Government is keen to increase investment particularly in technology sector including IT/ITES in Bangladesh. For an effective business environment there are 4 factors affecting the investment – (i) Infrastructure (ii) Policy (iii) Human Resources and (iv) Life Style. The Bangladesh Hi-Tech Park Authority created all necessary basic infrastructure such as Road, Electricity, Water supply, Sewage supply and treatment plant, etc. through the project. BHTPA not only took various initiatives to create a pool of Human Resources for the tenant but also, training was conducted according to the demand of the tenant and for the sectoral development. BHTPA conducted various promotional activities to attract both local and foreign investors by participating in the event abroad and workshops, seminars and fairs in the country. As a result of the exposure, numerous investors have shown interest to invest in the BHTC, Kaliakoir, Gazipur. The Park Developer, Summit Technopolis Ltd and Technosity Bangladesh Ltd developed around 5.0 lakh sq.ft. working space by constructing 3 buildings and one shade for individual investors. On the other hand, a 2 storied building (Service building) was constructed in BHTC, Kaliakoir, Gazipur as on site infrastructure. Currently, 2 investors are allocated space in the building. Total 48 national and International companies have taken land and spaces in the Bangabandhu Hi-Tech City, Kaliakoir.  So, it could be said that the BHTC, Kaliakoir, Gazipur has now become the hub of investment for Hi-Tech investment with a vibrant ecosystem. It has been possible to complete the onsite and offsite infrastructure and other initiatives i.e. formulating Policy, developing Human Resources and by enhancing Life Style through the relentless support from the 'Support to Development of Kaliakoir' (and others) 'Hi-Tech Park' Project authorities.

# Chapter 9

## DEVELOPMENT UPDATES FROM THE COMPANIES INVESTED IN BANGABANDHU HI-TECH CITY, KALIAKOIR

To accelerate the development of the country by utilizing the immense potential of the trillion-dollar ICT sector in the world market, the government has set a target of Seven (7) billion dollars of export income from the IT/ITES sector. Bangladesh has already exported 1 billion to the IT sector and has directly ensured the employment of 500,000 people. Therefore, if the initiatives taken by the project are implemented, a lot of jobs will be created in the IT/ITES sector in the future, and export earnings will increase. Initiatives have also been taken by the project to support start-ups and build an innovation ecosystem. Due to the current Covid-19 virus outbreak, the desired investment and infrastructure construction has been somewhat hampered. However, appropriate measures from the project have been taken to compensate for this loss and recover its pace.

| SL. No. | Name of Block | Land (Acre) | Space (sft.) | Projected Investment (M.USD) | Projected Employment (person) |
|---|---|---|---|---|---|
| 1 | All company of BHTPA | 57.21 | | 415.81 | 35167.00 |
| 2 | All company of Developer | 36.62 | 288459.00 | 681.47 | 2610.00 |
| 3 | Others (extra land) | 0.00 | 26518.00 | 0.00 | 105.00 |
| | Total (48) | 93.83 | 314977.00 | 1097.28 | 37882.00 |

In total 48 companies have taken land and spaces in the Bangabandhu Hi-Tech City, Kaliakoir Project as shown in the above table. The total projected investment of the companies investing in the project is over 1000 million USD that will create jobs for over 37000 people. By now, the employment of 5000 people has already been ensured in just 14 companies that are operational in the project. The rest of the companies are in the development phase of their facilities and starting their operation in the project. Activities to further develop more infrastructure are ongoing with a target to attract 2000 million USD within 2025 and create additional 60000 jobs.

# Chapter 10

## RECOMMENDATIONS

1. Bangladesh Hi-Tech Park Authority should be prepared attractive business plans for different technology based business like typical software and manufacturing firm to be located in the city;

2. Necessary policy and regulatory should be changes for high-tech manufacturing and targeting the consumption of the local market. Policy should be adjust regularly and strengthen ecosystem ;

3. Focus should be on developing productive knowledge through Use Cases, with the participation of industry and inclusion of start-up agenda;

4. Well-orchestrated strategies and policies should be adopted to address 4IR education and Skill issue for preparing Bangladesh's IT industry to leverage 4IR.;

5. Focus should be put to engage start-ups in creating a local innovation stream in industry development;

6. Finally, expedite the development works of the city and create the trust among likely tenants. BHTPA should prepared integrated roadmap for development of ecosystems to increase the attractiveness of cities.

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