

Impact of EPZ on National Economy of Bangladesh

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Abstract:

Export Processing Zone (EPZ) is the special industrial park developed in response to international market of cheaper goods.

Eight EPZs of Bangladesh are managed and authorized by Bangladesh Export Processing Zone Authorities (BEPZA).

EPZs as well as BEPZA influence economic development of Bangladesh by attracting Foreign Direct Investment (FDI), mobilizing investment for capital formation, creating employment opportunities for country's manpower and earning foreign exchange by boosting exports. Performance of BEPZA can be measured by analysis of investment, export, employment opportunities.

Political issues, communication problems, technological inefficiency, unskilled manpower are the obstacles in developing the EPZs in Bangladesh. To overcome the problems, Government should concentrate more in the EPZ sector.

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I. Introduction

1.1 Background of the Study

Export Processing Zones (EPZs) of Bangladesh have great contribution to investment, export and employment. Investment, export and employment are the driving forces of a country's economy. The main objective of the research is impact of EPZs on national economy of Bangladesh. EPZs are selected areas in a country that will attract foreign investment to create jobs, expand the industrial base, and introduce technology. The project also emphasized in the factors that enhance empowerment of women which supports the objectives of Sustainable Development Goal (SDG). EPZ enterprises reduce deficits in the country's balance of payments. Government functions in EPZs include creation of infrastructure (buildings, utilities, warehouses, roads etc.), processing applications for setting up industries, allotment of land or building space, insurance companies, clearing and forwarding houses, courier services, post offices etc.

1.2 Objectives of the Study

1.2.1 Primary objective

This primary objective of the study is to explore the contribution of EPZ in the economic development of Bangladesh.

1.2.2 Specific Objectives

There are some specific objectives of the study. Those are:

- i. To analyze investment and export performance and employment situations of EPZ;
- ii. To analyze the financial performance of BEPZA.
- iii. To show the promotion of national FDI from 2011-2016;
- iv. To identify the zone wise statistics in terms of industry, investment, export & employment;

1.3 Methodology of the Study

1.3.1 Research Type

This is an empirical study based on secondary sources of data.

1.3.2 Sources of Data

All the necessary information collected from mainly secondary source. Secondary sources of data are of two kinds:

Internal

Internal sources of data are-

- i. Annual Reports of BEPZA from the year 2009 to 2017 including eight EPZs.
- ii. BEPZA's website.

External

External sources of data are-

- i. Books;
- ii. Articles;
- iii. Journals;
- iv. Newspaper;
- v. Web browsing.
- vi. Financial tools:
 1. Return on Investment (ROI);
 2. Return on Equity (ROE);
 3. Profit Margin;
 4. Asset Turnover;
 5. Debt to Value;
 6. Account Receivables.

1.4 Limitations of the Study

Confidentiality was the hindrance in getting proper information. The respective personnel were not interested to share data and information due to confidential terms and conditions of the organization.

II. Literature Review:

1. Debapriya Bhattacharya (1998) conducted study on "**Export Processing Zones in Bangladesh: Economic impact and social issues**". EPZs in Bangladesh provide developed infrastructural facilities (e.g. land, factory building, and warehouse) along with utilities (e.g. water, gas, electricity, telephone) and communication facilities (e.g. convenient surface, water and air transport links).
2. M. Abu Eusuf, ABM Omor Faruque and Atiur Rahman (2007) conducted study on "**Institutions for Facilitating FDI: Issues for BEPZA, Bangladesh**". The Bangladesh Export Processing Zones Authority (BEPZA), which is responsible for the Export Processing Zones (EPZs) in Bangladesh, is a key institution in attracting and managing Foreign Direct Investment (FDI) in Bangladesh. This paper aims to provide an explanation for this massive failure, and also to discuss some of BEPZA's successful cases, through in-depth investigation of its institutional practices, trends and arrangements.
3. Md. Iftekhalrul Islam Bhuiya, Emran Ahmed & Shabuz Mahmud (2014) conducted study on "**Relative Performance of Bangladesh Export Processing Zones (BEPZs) and the Reasons for the Difference in their Performance**". In Bangladesh, Export Processing Zone (EPZ) has contributed very effectively in the economy in terms of the foreign direct investment (FDI), export and employment.
4. Karl Jonsson conducted study on "**Export Processing Zones and the Influence of the State about Export Processing Zones in Bangladesh**". The EPZ in Bangladesh are designed to promote economic growth, to reach higher rates of employment and counter the widespread poverty in the country.
5. Md. Zohurul Islam & Uzma Mukhtar conducted study on "**EPZ History in Bangladesh and its Administration and Legislation for Economic Enclave**". This study has explored the contribution of establishing EPZ in Bangladesh and how much does it contribute to country's economy in terms of employment, export and investment.
6. A.N.M Asaduzzaman Fakir, Mohammad Shahin Miah, Md. Shakawat Hossain conducted study on "**Export Diversification and Role of Export Processing Zones (EPZ) in Bangladesh**". This study has explored the contribution of EPZ in Bangladesh and how much it contributes to country's economy in terms of employment, export and investment. The paper then examines the development and economic significance of EPZs in Bangladesh.

III. Data Analysis

Performance analysis of BEPZA

Bangladesh Export Processing Zones Authority follows an open door policy to attract investment from home and abroad. Investors are facilitated in three categories:

Type- A: 100% foreign ownership investment.

Type- B: Joint Venture between Bangladeshi and Foreign investors with no limit to the extent of equity share.

Type- C: 100% Bangladeshi ownership.

3.1.1 Investment

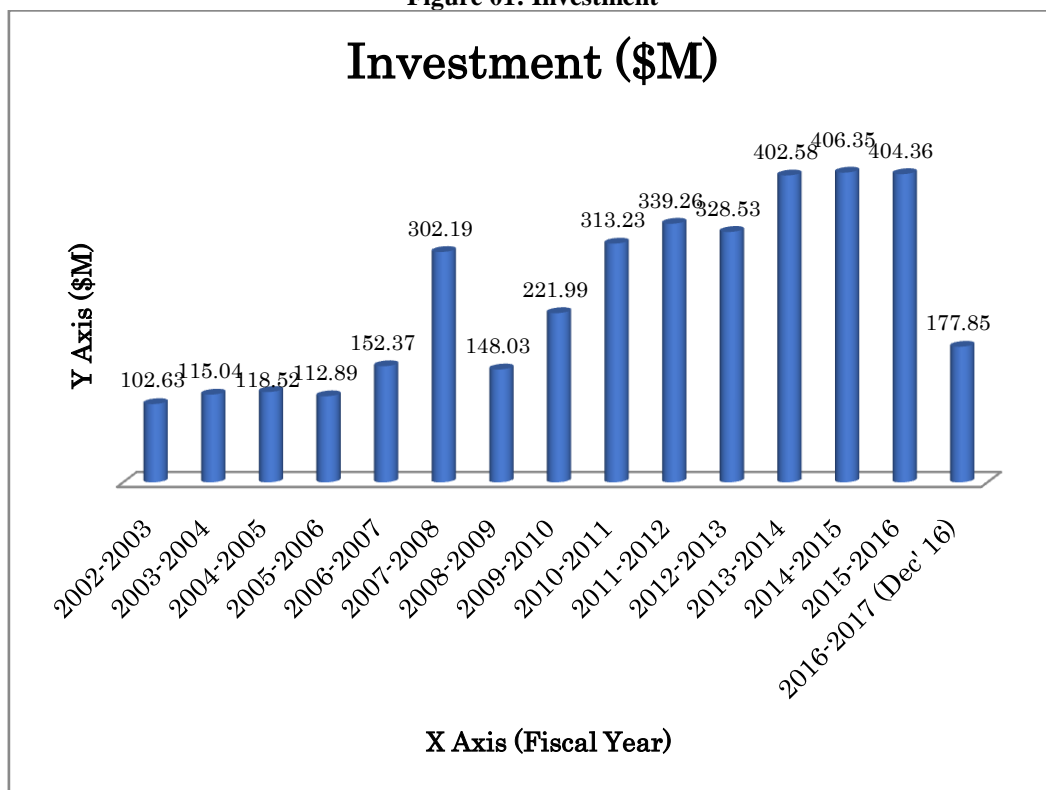
Gross capital formation through increased investment has been one of the prime objectives of promoting EPZs in an economy of Bangladesh. So analyzing investment in the EPZs is one to measure their performance.

Table 03: Investment in EPZ in Bangladesh

YEAR	INVESTMENT (\$M)
2002-2003	102.63
2003-2004	115.04
2004-2005	118.52
2005-2006	112.89
2006-2007	152.37
2007-2008	302.19
2008-2009	148.03
2009-2010	221.99
2010-2011	313.23
2011-2012	339.26
2012-2013	328.53
2013-2014	402.58
2014-2015	406.35
2015-2016	404.36
2016-2017 (Dec'16)	177.85

Source: Website of BEPZA

Figure 01: Investment



Analysis

In this graph the X axis focuses the Fiscal Year and the Y axis focuses US\$ in millions. The blue line focuses the investment of BEPZA. Investment was US\$ 102.63 million in FY 2002-2003. From FY 2002-2003 to FY 2007-2008, it was in increasing trend suddenly it was decreased to US\$ 148.03 million in FY 2008-2009. Investments of BEPZA were increased continuously over the period of 2009 to 2017. Here, since 2002-2003 FY to 2016-2017 (Dec'16) FY US\$ 3,591.6 million investment has been made in BEPZA. Figure shows there is a positive growth in terms of actual investment made in the EPZs.

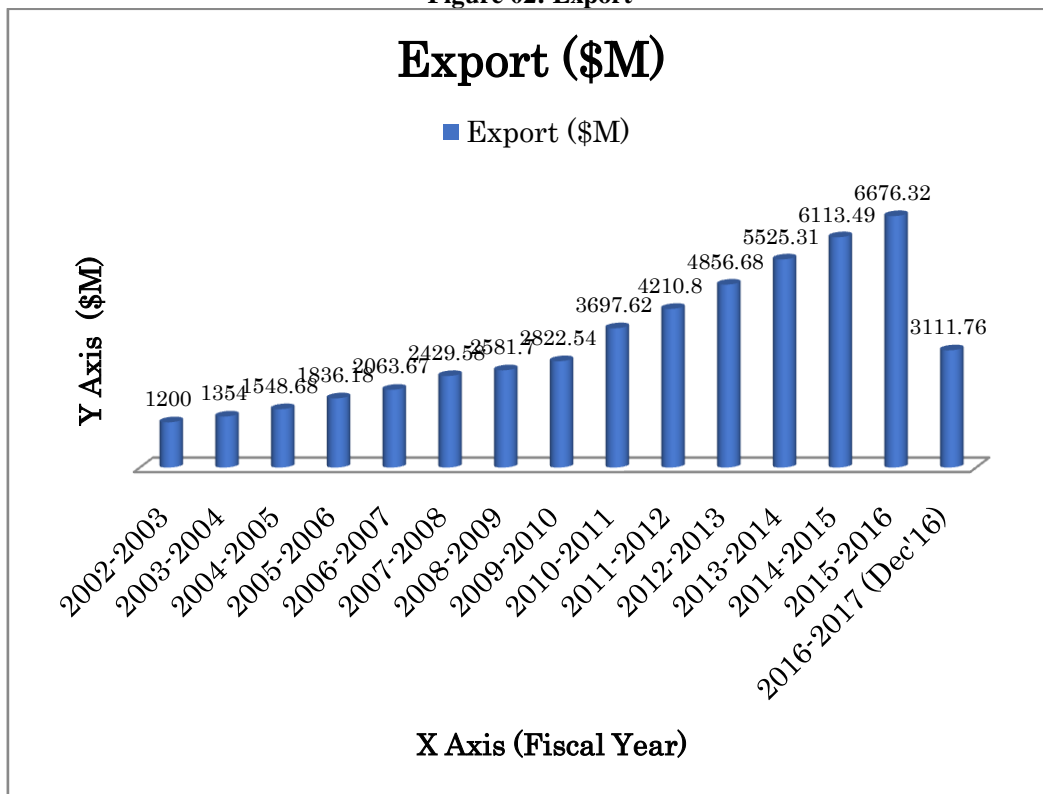
3.1.2 Export

Table 04: Export in EPZ in Bangladesh

YEAR	EXPORT (\$M)
2002-2003	1200.00
2003-2004	1354.00
2004-2005	1548.68
2005-2006	1836.18
2006-2007	2063.67
2007-2008	2429.58
2008-2009	2581.70
2009-2010	2822.54
2010-2011	3697.62
2011-2012	4210.80
2012-2013	4856.68
2013-2014	5525.31
2014-2015	6113.49
2015-2016	6676.32
2016-2017 (Dec'16)	3111.76

Source: Website of BEPZA

Figure 02: Export



Analysis

In this graph the X axis focuses the Fiscal Year and the Y axis focuses US\$ in millions. The blue line focuses the Export of BEPZA. During FY 2002-2003 to FY 2016-2017 (Dec' 2017), the enterprises of EPZ exported goods worth US\$ 50,028.33 million. With the increases of export, the contribution of EPZs to the total national export quantum is also mounting every year. Export of BEPZA was increased continuously over the period of 2002 to 2017. It was US\$ 1200.00 in FY 2002-2003 which is significantly increased to US\$ 6676.32 in FY 2015-2016. This is a positive condition for Bangladesh Economy.

3.1.3 Employment in EPZ in Bangladesh

Figure 03: Employment

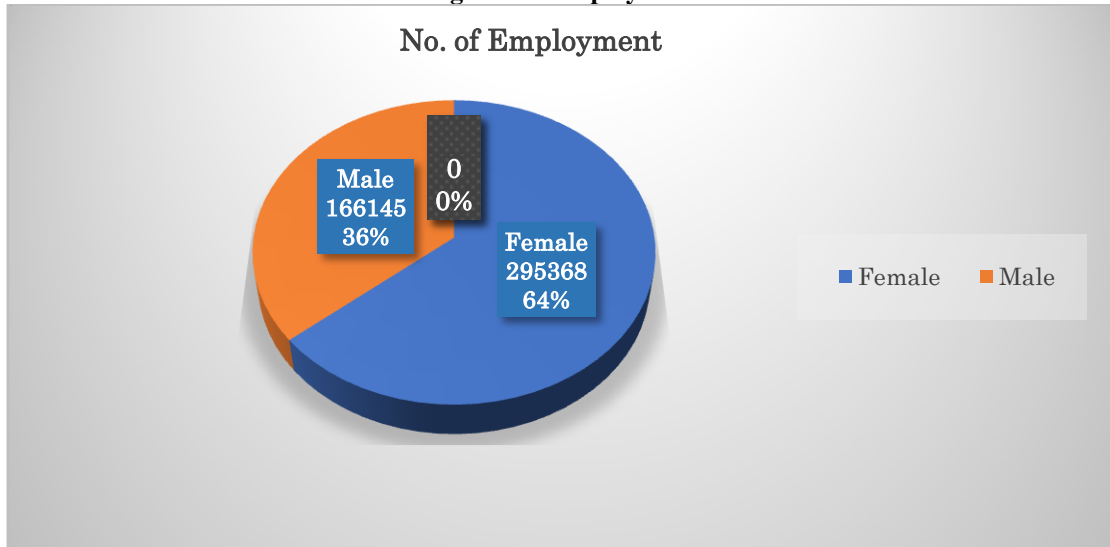
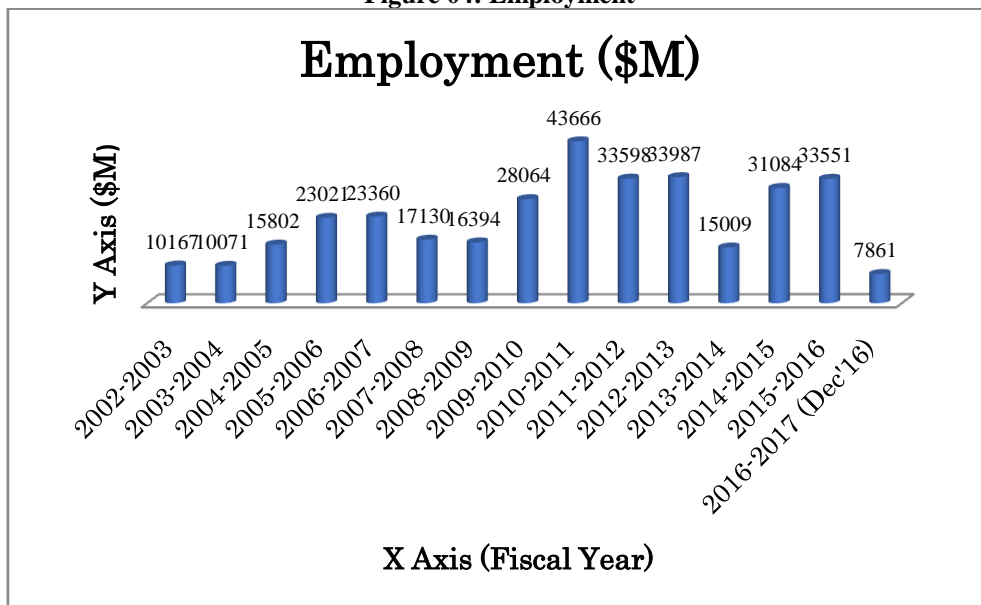


Table 05: Employment in EPZ in Bangladesh

YEAR	EMPLOYMENT
2002-2003	10,167
2003-2004	10,071
2004-2005	15,802
2005-2006	23,021
2006-2007	23,360
2007-2008	17,130
2008-2009	16,394
2009-2010	28,064
2010-2011	43,666
2011-2012	33,598
2012-2013	33,987
2013-2014	15,009
2014-2015	31,084
2015-2016	33,551
2016-2017 (Dec'16)	7,861

Source: Website of BEPZA

Figure 04: Employment



Analysis

In this graph the X axis focuses the Fiscal Year and the Y axis focuses Number of Employment. The blue line focuses the Export of BEPZA. Total 461,513 Bangladeshi nationals have directly employed in the previous 20 financial years. There are no. of female employment is 295,368 (64%) and male employment is 166,145 (36%).

3.1.4 BEPZA’s Contribution

Eight EPZs consisting 2,307.27 acres of land, from this tiny area BEPZA contributes around 20% both to national exports and to FDI for last couple of years. BEPZA set its vision to become a significant contributor for socio-economic development of Bangladesh through industrialization, promotion of investment, boost up export and generation of employment in the EPZs.

3.1.4.1 National Export

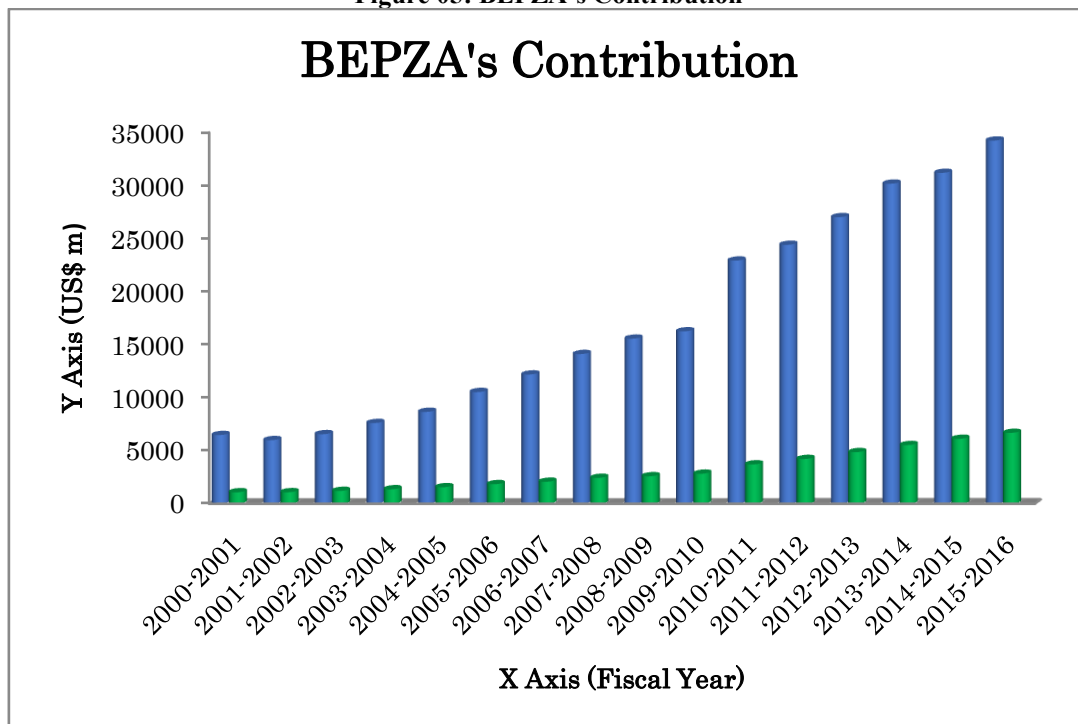
BEPZA’s success can only be illustrated by its amazing achievement 460 industries operating in eight EPZs.

Table 06: BEPZA’s contribution to National Export

Year	Total Export of Bangladesh (US\$ m)	Total Export of EPZs (US\$ m)	BEPZA’s Contribution (%)
2000-2001	6467	1068	16.51
2001-2002	5986	1077	18.00
2002-2003	6548	1200	18.33
2003-2004	7603	1354	17.80
2004-2005	8655	1549	17.90
2005-2006	10526	1836	17.44
2006-2007	12178	2064	17.00
2007-2008	14111	2429	17.22
2008-2009	15560	2582	16.60
2009-2010	16250	2822	17.36
2010-2011	22924	3698	16.13
2011-2012	24410	4210	17.24
2012-2013	27018	4856	17.97
2013-2014	30176	5525	18.30
2014-2015	31198	6113	19.59
2015-2016	34241	6676	19.50

Source: Website of BEPZA

Figure 05: BEPZA’s Contribution



Analysis

In this graph the X axis focuses the Fiscal Year and the Y axis focuses US\$ in millions. The blue line focuses the Total Export of Bangladesh, the olive green line focuses Total Export of EPZ and black line focuses BEPZA's Contribution.

Since 2000 to 2016, the total export from Bangladesh amounted to around US\$ 273,851 million, of which export from the EPZs were US\$ 49,059 million. BEPZA have contributed 16.51% to the national export on FY 2000-2001 and it was increasing to 18.33% up to FY 2002-2003. In FY 2003-2004 BEPZA's Contribution was 17.80% and it was in constant position up to FY 2012-2013 and further it was increased to 19.50% in FY 2015-2016.

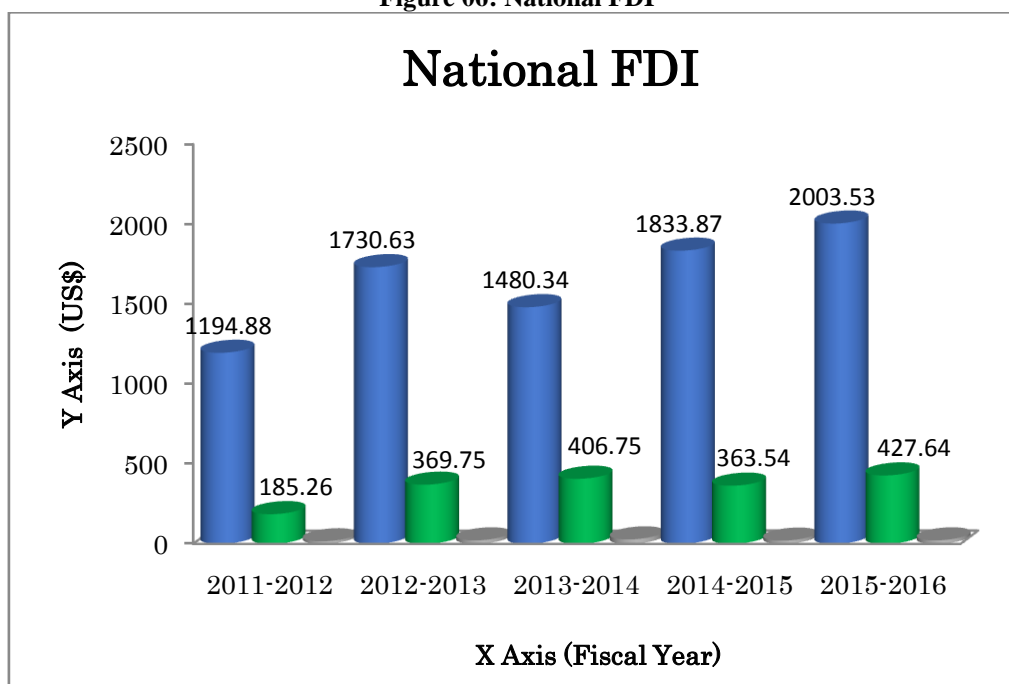
3.1.4.2 National FDI (Foreign Direct Investment)

Table 07: National FDI

Year	FDI in Flows (net) in Bangladesh (US\$ m)	FDI in Flows (net) in EPZs (US\$ m)	BEPZA's Contribution (%)
2011-2012	1194.88	185.26	15.50
2012-2013	1730.63	369.75	21.36
2013-2014	1480.34	406.75	27.44
2014-2015	1833.87	363.54	19.82
2015-2016	2003.53	427.64	21.34

Source: Website of BEPZA

Figure 06: National FDI



Analysis

In this graph the X axis focuses the Fiscal Year and the Y axis focuses US\$ in millions. The blue line focuses the FDI in flows (net) in Bangladesh (US\$ m), the olive green line focuses the FDI in flows (net) in EPZs and black line focuses BEPZA's contribution.

The amount of FDI in flows (net) in Bangladesh is US\$1194.88million and FDI in flows (net) in EPZs are US\$ 185.26 million in 2011-2012 in which BEPZA's contribution was 15.50 percent. BEPZA's contribution was highest in 2013 -2014 that is 27.44 percent. The last fiscal year BEPZA's contribution in FDI was 21.34 percent, in this year FDI in flows (net) in EPZs were higher than another fiscal year.

3.1.5 Zone Wise Statistics (up to Dec' 2016)

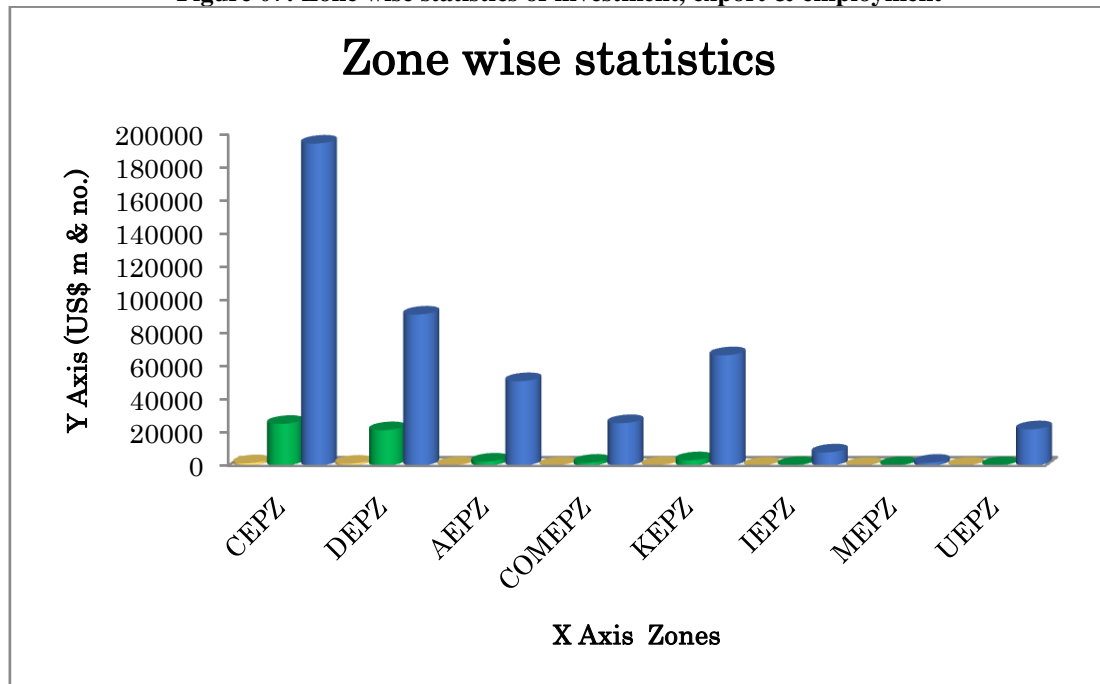
Zone wise statistics of eight EPZ in terms of investment, export and employment are shown below:

Table 08: Zone wise Statistics of Industries Investment Export and Employment of EPZ

EPZ	Industry		Investment (US\$ m)	Export (US\$ m)	Employment (No.)
	In Operation (No.)	Under Implementation (No.)			
CEPZ	172	11	1511.91	25302.95	194650
DEPZ	106	9	1257.20	21491.16	91349
AEPZ	49	18	397.82	2543.90	51114
COM EPZ	40	31	265.46	1847.59	25774
KEPZ	46	18	463.67	3318.89	66731
IEPZ	15	16	104.94	499.69	8035
MEPZ	23	15	45.02	467.81	1809
UEPZ	12	10	130.62	457.26	22051
Total	463	128	4176.63	55929.23	461513

Source: Website of BEPZA

Figure 07: Zone wise statistics of investment, export & employment



Analysis

In this graph the X axis focuses the zones and the Y axis focuses US\$ in millions. The gold line focuses Investment (US\$ m), the green line focuses Export (US\$ m) and blue line focuses Employment (no.). Zone wise statistics up to December 2016 shows that the amount of Investment in Chittagong EPZ is more than another EPZ which is US\$1511.91 million. Lower amount investment is in Mongla EPZ is US\$ 45.02 million. The amount of export in Chittagong EPZ is also higher than another EPZ which is US\$ 25302.95 million and lower amount of export is in Uttara EPZ which is 457.26. CEPZ is given more employment opportunity; about 194650 people are employed in this zone. Total 463 industries are in operation under EPZs and total 128 industries are under implementation. Total 461513 workforces are working within this tiny place of land.

3.1.6 Product Wise Enterprises (up to June 2016)

Product wise enterprises investment and employment in EPZ are shown in table:

Table 09: Product wise Enterprises Investment and Employment in EPZs

SL	Product	Enterprise (No.)	Investment (US\$ m)	Employment (No.)
1	Garments	115	1,442.53	267,031
2	Garment Accessories	89	498.17	23,878
3	Textiles	40	614.47	25,804
4	Knitting & other textile products	35	305.10	31,917
5	Footwear & Leather goods	33	242.92	35,245
6	Terry towel	18	87.14	8,154
7	Electronics & Electrical good	17	147.13	4,509
8	Plastic goods	15	56.66	4,519
9	Metal Products	13	52.66	2,716
10	Tent	10	5.90	278
11	Agro products	10	78.57	10,822
12	Service oriented industries	9	43.80	917
13	Caps	6	58.99	8,497
14	Chemical & Fertilizer	6	21.92	593
15	Furniture	3	42.67	1,530
16	Paper Products	3	2.16	114
17	Power Industry	2	99.52	132
18	Ropes	2	10.35	480
19	Sports Goods	2	8.23	477
20	Fishing Reel & Golf Equipment	1	40.62	947
21	Toys	1	23.74	2,918
22	Miscellaneous	31	115.55	22,174
	Total	461	3,998.78	453,652

Source: Website of BEPZA

3.2 Financial Analysis of BEPZA

Financial analysis of BEPZA is discussed below:

3.2.1 Financial Ratio

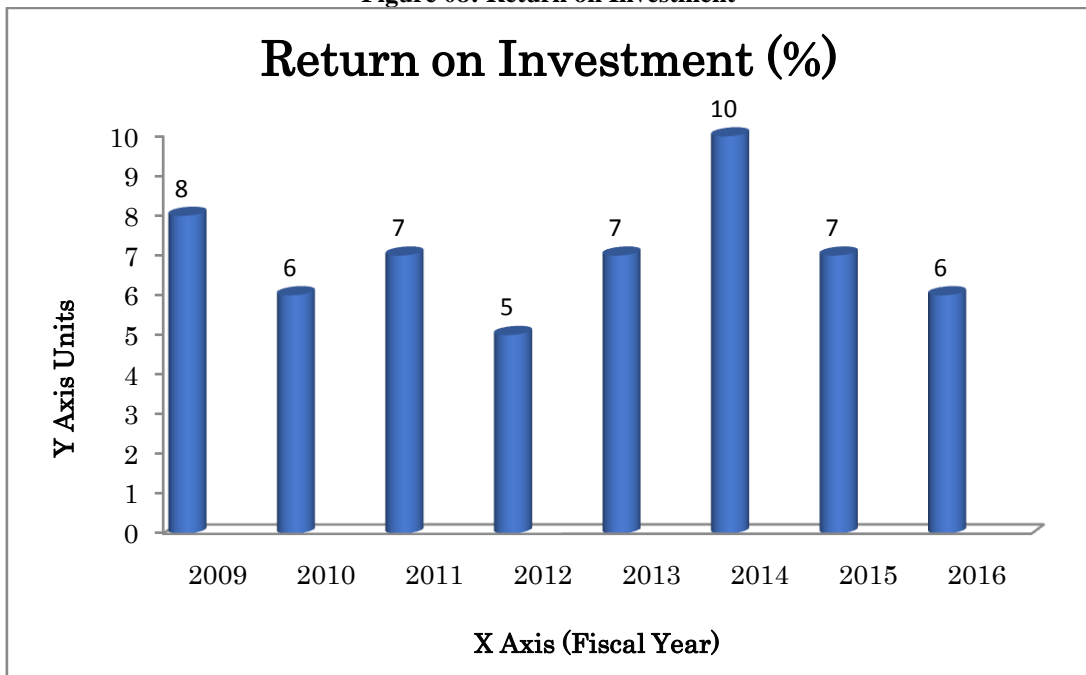
Following ratios are calculated to analyze the profitability and financial performance of BEPZA.

Table 10: Financial ratio

Ratios	Units	2009	2010	2011	2012	2013	2014	2015	2016
Return on Investment	%	8	6	7	5	7	10	7	6
Return on Equity	%	16	12	13	8	10	14	10	9
Profit Margin	%	50	45	50	38	44	49	42	35
Asset Turnover	#	0.2	0.15	0.16	0.14	0.16	0.21	0.18	0.17
Debt to Value	#	0.5	0.44	0.41	0.36	0.35	0.33	0.30	0.17
Accounts Receivables	Days	73	74	67	73	66	50	30	25

Source: Website of BEPZA

Figure 08: Return on Investment

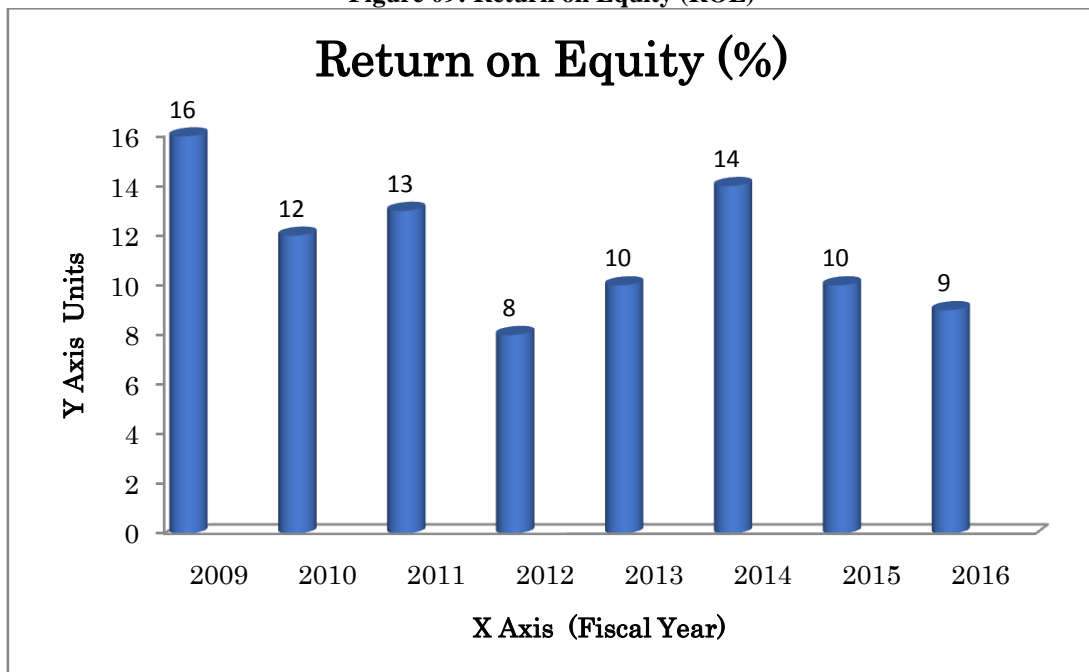


Source: Website of BEPZA

Analysis

In this graph X axis focuses Fiscal Year and the Y axis focuses Units. The blue line focuses Return on Investment (ROI) of BEPZA. ROI was 8 percent in 2009 it was decreased to 6 percent in 2010. It was increased to 7 percent in 2011 and it was further decreased to 5 percent in 2012. ROI was in increasing trend 2012 to 2014 and further it was gradually decreased and it was 6 percent in 2016. Ranges between 8 percent in 2009 and 6 percent in 2016 which is not an acceptable outcome for an infrastructural project such as EPZ.

Figure 09: Return on Equity (ROE)



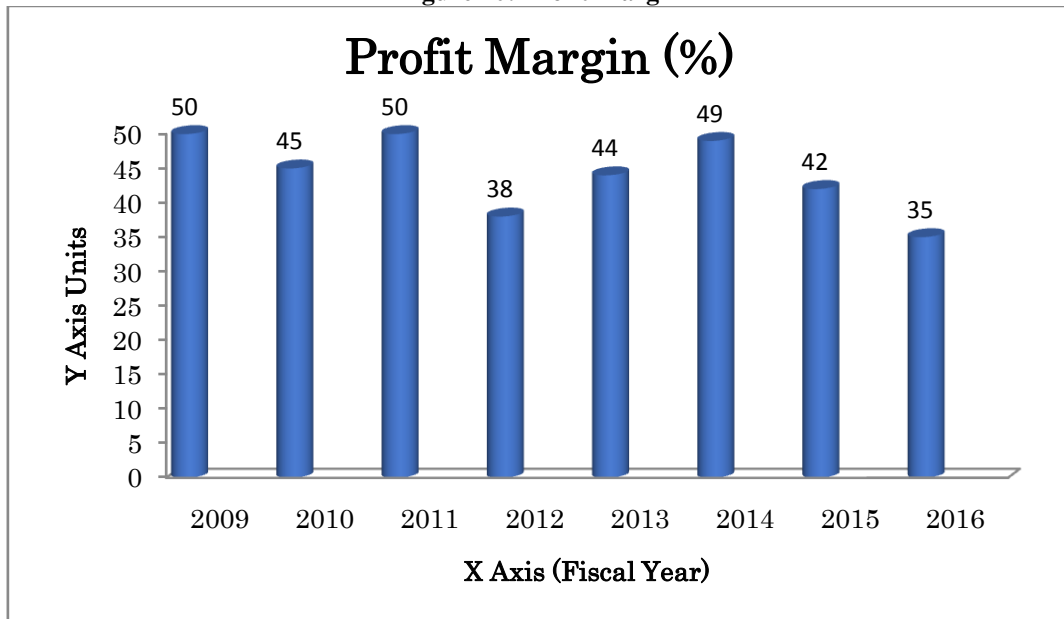
Source: Website of BEPZA

Analysis

In this graph X axis focuses Fiscal Year and the Y axis focuses Units. The blue line focuses Return on Equity (ROE) of BEPZA. The ROE of BEPZA was 16 percent in the year 2009 and it decreased to 12 percent in the year 2010, then it was increased to 13 percent in 2011 and it also widely decreased to 8 percent in 2012.

ROE was then dramatically increased to 14 percent in 2014, further it was gradually decreased in FY 2015 and FY 2016 and the ROE of BEPZA is 9 percent in 2016 which is too much lower than FY 2009.

Figure 10: Profit Margin

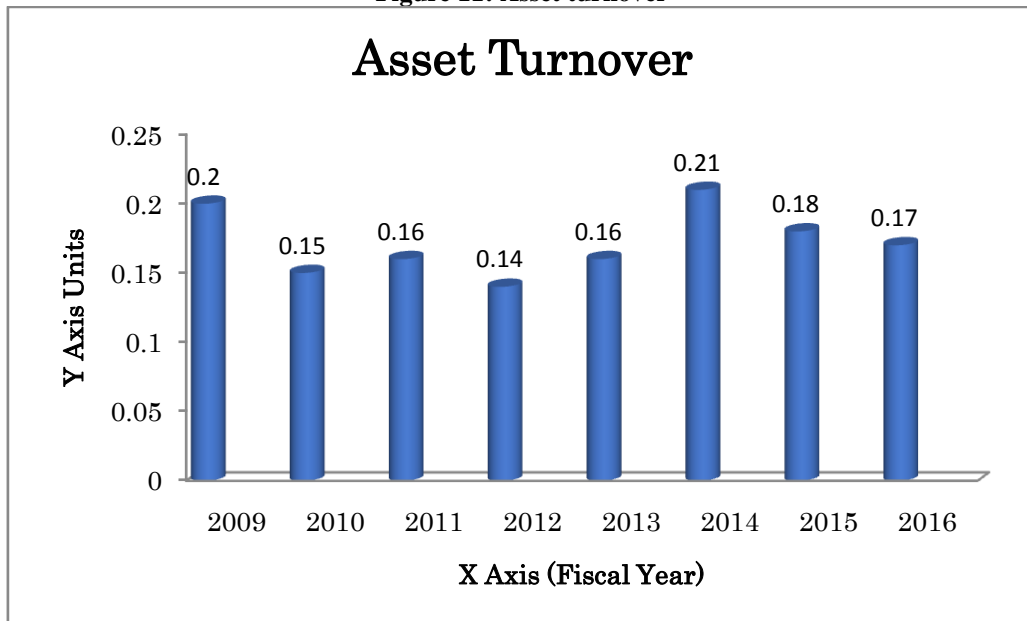


Source: Website of BEPZA

Analysis

In this graph X axis focuses Fiscal Year and the Y axis focuses Units. The blue line focuses Profit Margin of BEPZA. The Profit margin of BEPZA was 50 percent in 2009 which was satisfactory and decreased to 45 percent in 2010 and surprisingly increased to 50 percent in 2011. Profit margin is then huge widely decreased to 38 percent in 2012 and was partly recovered to 49 percent in 2014. Finally it was further decreased in the year of 2015 and decreased to 35 percent in 2016.

Figure 11: Asset turnover

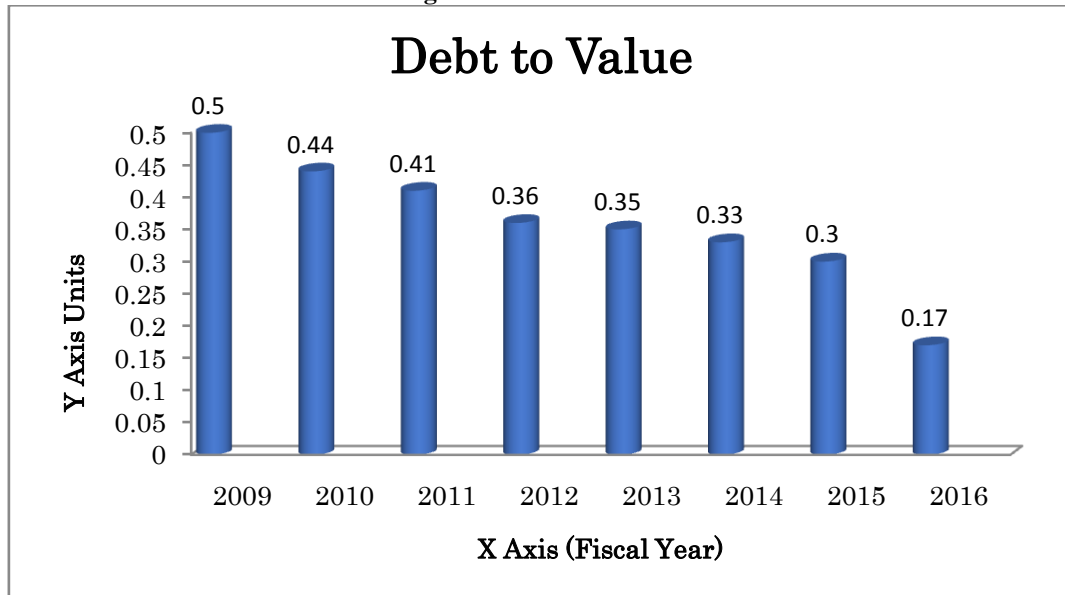


Analysis

In this graph X axis focuses Fiscal Year and the Y axis focuses Units. The blue line focuses Asset Turnover of BEPZA. The Asset Turnover of BEPZA was 0.2 in 2009 which was satisfactory and decreased to 0.15 in 2010 and surprisingly increased to 0.16 in 2011. Asset turnover is then decreased to 0.14 in 2012 and

was partly recovered to 0.16 in 2013. Finally it was widely increased in the year of 2014 and decreased to 0.17 in 2016. The higher the asset turnover ratio, the more efficient a company. Conversely, if a company has a low asset turnover ratio, it indicates it is not efficiently using its assets to generate sales. So BEPZA was more efficient in 2014 but it is not efficient in 2016.

Figure 12: Debt to Value



Analysis

In this graph X axis focuses Fiscal Year and the Y axis focuses Units. The blue line focuses Debt to Value of BEPZA. The Debt to Value of BEPZA was 0.5 in 2009 which was risky and decreased year to year which indicates satisfactory position. The debt to value ratio is 0.17 in 2016. This lower debt to value ratio implies a more financially stable business.

IV. Major Findings, Recommendations and Conclusion:

4.1 Major Findings

From the analysis of BEPZA's financial data and examine growth rate, the study concludes some findings about contribution of EPZs in Bangladesh. These are stated bellow-

1. EPZs provide foreign exchange earnings by promoting non-traditional exports;
2. EPZs Provide jobs to alleviate unemployment and underemployment and assist in income creation. Employment opportunity are also increasing each year;
3. EPZs attract foreign direct investment (FDI) and engender technological transfer, knowledge spillover .From the analysis it is reflected that total investment, export of EPZs are increasing year to year;
4. Net profit margin ratio of BEPZA is fluctuated so it is not good. But in 2014 it surprisingly increased 49% than last four years but due to unfavorable economic condition and political condition it came down to 35% in 2016;
5. The BEPZA's ROE was extremely good in 2009 but it turned down year to year.

4.2 Recommendations

The study is conducted primarily to provide a critical analysis of impact of EPZs in Bangladesh. EPZs have been a common development tool throughout the developing world utilized as part of structural adjustment programs or set up by governments hoping to invigorate their economies' exporting capabilities and capacity. Recommendations on the basis of the study are stated below:

1. Development of the EPZs should be a strategic priority for the Government. In particular the adequacy of gas and electricity supplies in BEPZA should be prioritized.
2. The availability of high skill workers should be enhanced by expanding training facilities.
3. Besides developing roads and highways, it is also necessary to have airports near to EPZs.
4. Encouraging diversified investment is another recommendation that comes from this analysis.
5. Political stability is very much helpful for the sustainable and continuing performance of EPZ.

6. Though BEPZA has open “One window service”, but in reality investors are waiting long period for getting decision, as the structure is itself bureaucratic. Therefore, procedure and other administrative support service to enhanced and efficient, moreover some authority should be delegated for more rapidly action.

4.3 Conclusion

The EPZ will have some resources that can attract investment such as natural resources, cheap skilled labor, orlogistical advantages. Nations can also encourage investment in the EPZ by offering minimal customs regulations, duty-free tax incentives, such as a ten year tax holiday, and developing infrastructure to investor's requirements. Areas where EPZs have been established have become special growth centers in the economy of Bangladesh as a result of organized and fast development of infrastructure including roads, electricity gas, water supply, telecommunication, fire brigade, post office etc. The private sector around the EPZ areas have come up with support investments in shopping centers and market, transport agencies, accommodation and recreation facilities etc. which have accelerated the pace of economic activities. The EPZs in Bangladesh have been instrumental in creating salutary direct benefits in terms of flow of foreign investment, employment generation, export and foreign exchange earnings, and value added.

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