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Seminar on
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Strategy of Bangladesh - A Developed
Nation by 2041

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**Seminar on
Human Resource Development (HRD) Strategy
of Bangladesh - A Developed Nation by 2041**

**Organized by
National Defence Course 2018
on 12 April 2018**



**NATIONAL DEFENCE COLLEGE
BANGLADESH**

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Foreword

The concept of human resources development emphasizes the integration of human capital and human needs aspects of human resources in development. The various components of development - health, education, environment, employment, manpower development, and science and technology are not new. What is new is their combination in a unified approach to development policy making and planning that focuses on the role of human beings as both a critical input to, and the ultimate beneficiaries of, the development process.

In Bangladesh, development programmes touch on virtually all aspects of human resource development, but the integrated approach has not yet been generally adopted. There has been a tendency to emphasize either economic-dominated or social welfare-dominated strategy - the human capital approach or the human needs approach. In several cases, a strong commitment to social development concerns has encountered serious budget constraints associated with disappointing performance. Where there has been a strong human capital orientation, failure to address the critical quality-of-life issues have contributed to manpower bottlenecks, low productivity growth and social instability.

Public awareness concerning the people's participation as an aspect of human resources development is relatively new in Bangladesh. Almost all government and non-government agencies operating in the social development sector are currently organizing people at the grassroots and even competing in their effort to enhance their delivery of service. This competition is not necessarily promoting the people's welfare or self-reliance.

A central goal of development should be to effect an equitable distribution of human resources development opportunities and benefits. At the same time, priority should be given to those population groups which could benefit most from such opportunities by virtue of either the emergency of their needs or their ability to put them to best use, not only for themselves but for the development of priority sectors.

I express my earnest gratitude and sincere thanks to the editors' panel for their painstaking effort to bring out this publication. May Allah bless us all.



Lieutenant General Sheikh Mamun Khaled, SUP, rcds, psc, PhD

Commandant

National Defence College

Editorial

Human Resources are the most powerful propeller of a country's economic growth and development. Human Resource Development (HRD) is concerned with improving the aptitudes, skills, abilities, knowledge, understanding and attitude of the employees of an enterprise (Jucius, 1993).

Government, NGO and other private organizations are working to develop human resources to ensure that Bangladesh can compete in local and global markets. Academicians, researchers, the Government, decision-makers, and others planners and administrators agree that human resources are the most vital factor in the industrial development of Bangladesh.

Human Resource Development requires huge investment in the education and health sector along with other social sectors. Considering this beneficial impact on the economy the Government has been spending around 24 percent of the total public outlay in the social sector. The Government considers the development of both health and education sectors as foundation for human resource development.

Human resources development strategy changes would be appropriate at given stages of socio-cultural and economic development. Human resources development programmes based on different strategies would bear fruit at different points in time, and their impact over time would vary.

I thank all the writers for their contribution and convey my special gratitude to all personnel involved in publishing the paper. May the success of this paper work as a source of inspiration.



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Overview of the Seminar

As part of the course curriculum, National Defence College (NDC) arranges a good number of seminars and other individual and group research works for the course members.

The seminar on “Human Resource Development (HRD) Strategy of Bangladesh- A Developed Nation by 2041” was held at NDC on 08 and 12 April 2018 as part of the course curriculum of National Defence (ND) Course 2018. The seminars were participated by four groups of Course Members of ND Course 2018. All groups presented their keynote papers and critique groups provided their comments and suggestions to the respective groups. Finally, a group of selected Course Members presented the paper on 12 April 2018 combining all four themes.

The panel of presenters covered three sub-themes, namely:

- HRD Strategy to Achieve Vision-2041
- Implementation of Proposed HRD Strategy
- Monitor and Evaluation of Proposed HRD Strategy

The topic of the seminar was very much effective for the present context of Bangladesh. All the keynote speakers upheld important sides of the themes and the discussion contributed a lot to fulfill the aim of the seminar. At the end of the presentation there was an interactive session where Commandant NDC, Resource Persons, Faculty, Sponsor Senior Directing Staffs and all Course Members of National Defence Course 2018 participated and contributed.

Executive Summary

The Seminar on ‘Human Resource Development (HRD) Strategy of Bangladesh: A Developed Nation By 2041’

General: A two-day long seminar was organized by National Defence College (NDC) on 08 and 12 April 2018 respectively. The theme of the seminar was “Human Resource Development (HRD) Strategy of Bangladesh: A Developed Nation by 2041”. For Day-1 of the Seminar, the course members of ND Course 2018 were divided into four groups. Each group presented their keynote paper on 08 April 2018. On Day-2, one final seminar paper was presented by a team of selected course members namely ‘Group X’ from the whole course.

Theme and Major Areas of the Seminar

- The theme of the seminar was “Human Resource Development (HRD) Strategy of Bangladesh: A Developed Nation by 2041”. The theme is a very timely one that demands thorough study and analysis for adopting an appropriate and effective HRD strategy for Bangladesh. Although there are multiple dimensions of the issue, three areas were the focus of the study:
 - HRD Strategy to Achieve Vision-2041.
 - Implementation of the Proposed Strategy.
 - Monitoring and Evaluation of the Proposed Strategy.
- Bangladesh is transforming from a lower middle income country to a middle income country and aspiring to be a high income nation by 2041. In pursuance of the aspiration of the people of Bangladesh, Honourable Prime Minister Sheikh Hasina declared her Vision 2041 on 5th February 2014, in the national parliament stating, “In implementing the Vision 2041, Bangladesh will be a peaceful, prosperous, happy and developed nation comparable with the developed world.” Therefore it was imperative to focus on the issues which would make Bangladesh a Developed Nation

by 2041. From various research, experience and empirical observations, it is evident that a developed human resource as an outcome of an effective HRD strategy can help us to a great extent in turning this dream into a reality.

- The term ‘Human Resource Development (HRD)’ considers humans as a resource and resource can be defined as “the total means available or an available supply that can be drawn on when needed”. The meaning of HRD is vast and diverse. It is more complicated when we talk about international and cross national HRD. Human Resources Development (HRD) would entail creation of competent human beings imbued with right kind of education, values, training, life expectancy, standard of living, and in an implied way, positive and critical thinking ability. Human resource constitutes the ultimate basis for wealth of the nation. According to 2016 HDR report of UNDP, Bangladesh still lacks far behind in all the Human Development Index (HDI) though it has made significant progress in some sectors like life expectancy, female education etcetera. Therefore, HRD remains as a daunting challenge for Bangladesh to become a Developed Nation by 2041.
- The seminar was aimed at evaluating HRD strategy of Bangladesh and propose a future HRD strategy along with its monitoring and evaluation mechanism in achieving the vision of a Developed Country by 2041. In this seminar paper, ‘A Developed Country’ meant a country- with a highly developed economy (with per capita income more than US\$ 12,235 as per World Bank), high level of industrialization, infrastructure and standard of living. Few sub- systems of HRD (impacting a developed country) like population control, per capita income, literacy, ICT, health, language proficiency, trainers’ training, skill development, competency in job market and few socio-politico-economic imperatives like governance, drugs, corruption, patriotism, extremism, untapped blue economy, vibrant tourism sector, production of raw material, capital investment, “Produce in Bangladesh including TOT” - Produce in Bangladesh-Produced by Bangladesh, research based agricultural sector etcetera have been used for formulating the proposed HRD strategy. In doing so, the factors used by UNDP to ascertain the HDI were also kept in mind. In carrying out the

study, the researchers initially carried out an strategic environmental scan to find out the challenges in the existing HRD strategy of Bangladesh. Thereafter, Case Studies related to HRD strategy on China, India, Malaysia and Singapore were carried out to find out takeaways if any. Following the case studies, a HRD strategy including mainly the modifications/ adjustments needed in the existing strategy was proposed. Thereafter, procedures for implementation of the strategy have been enumerated. At the end, a monitoring and evaluation mechanism has also been outlined to implement the strategy.

Conduct of the Seminar (Events/programs)

- On Day-1, all course members of ND Course 2018 were divided into four groups namely A, B, C and D for the purpose of presenting Keynote Papers on the given topic.
- Four Keynote Papers were presented by the designated groups (Group A, B, C and D) on 08 April 2018.
- After the presentation of four groups on 08 April 2018, a new group namely ‘Group X’ was formed to present the main theme on Day-2 (12 April 2018). Group X was to consider the observations, critiques, expert opinions and suggestions/ recommendations which came up during the interactive sessions, comments of the Resource Person and the reports of the Rapporteurs designated for all the groups.
- Accordingly, Group X prepared the final Keynote Paper titled “Human Resource Development (HRD) Strategy of Bangladesh: A developed Nation by 2041”. The seminar covered the topic in following sequence:
 - Introduction and Conceptual Framework for Framing the Proposed Strategy.
 - Evaluation of the Existing HRD Strategy of Bangladesh-Challenges (Strategic Scan).
 - Proposed HRD Strategy to make Bangladesh a Developed Nation by 2041.

- Implementation of the Proposed Strategy.
- Monitoring and Evaluation of the Proposed Strategy.
- The seminar commenced at 0900 hours on 12 April and terminated at 1000 hours on the same day. It was followed by a Question and Answer session (Open Forum) of approximately 45 minutes. Thereafter, the resource person Professor Mamun Rashid delivered his remarks on the presentation. Sponsor Senior Directing Staff Air Commodore M Mortuza Kamal then made his remarks. Finally Senior Directing Staff (Navy) Rear Admiral M Anwarul Islam delivered his concluding remarks.
- Basing on the Rapporteurs' report and the observations made by the Resource Person, Faculty Members, the keynote paper containing the proposed HRD strategy alongwith its implementation, monitoring and evaluation has been modified. The final modified proposed HRD strategy alongwith its implementation, monitoring and evaluation is enclosed herewith.

Summary of the Findings of the Proposed HRD Strategy and Its Implementation, Monitoring and Evaluation. The summary of the edited final proposed HRD strategy based on the reports of the Rapporteurs and observations made by the Resource Person, Faculty Members and the ND Course Members is appended below:

- In addition to the factors like planning population and generating human capital, promoting and sustaining health, improving nutrition, education, vision for education, training and skill development, promoting education, and promoting science and technology, few other aspects like provisions for making Bangladesh a high income country, ICT and other socio-politico-economic imperatives are to be included in the next Perspective Plan (2021-2041) for building a developed human resource to turn Bangladesh into a Developed Nation by 2041.
- A HRD council (NHC) to be chaired by Honourable PM, need to be formed to formulate HRD strategy/policy and coordinate all activities of the concerned like Ministries, implementing agencies and other stakeholders.

There should be representatives from the Ministry of Finance, Ministry of Education, Ministry of Labour and Employment, Bureau of Manpower, Employment and Training (BMET) and other stakeholders.

- A HRD Ministry has to be formed to coordinate and tackle HR issues in a more harmonized way.
- On formation of the NHC, a detailed HRD strategy will be formulated.
- Having formulated the HRD strategy, a detailed HRD Action Plan along with the Monitoring and Evaluation will be developed.
- A culture of Research Based Decision Making to be implemented in all HRD related issues and its governance. Decision should not be taken whimsically out of gut feeling.
- A HRD fund will be created to facilitate the HRD action plan.
- Population of Bangladesh needs to be stabilized with a zero growth by 2030, when an estimated annual two million child births will be replaced by an equal number of deaths in the country. Some of the recommended measures are as follows:
 - Decreasing the birth rate.
 - All possible measures to be taken to bring the Total Fertility Rate (TFR) target no higher than 1.7, if a rapid arrest of population growth is to be made.
 - Increaseing female education.
 - Empowering women to make their own reproductive choices.
 - Further attention with promotion of male sterilization and permanent methods.
 - Poverty alleviation and removal of the need for large families
- Though it would be quite challenging to become a high income nation having per capita GNI above \$ 12235, yet following few stunning efforts can help bring this target closer to reality:

- Self sufficiency in food production.
- Housing for all.
- Finding another two or three magic economic factors in addition to RMG. Leather goods, rethinking agriculture-research and technology based agricultural sector, pharmaceuticals and ICT sectors could be our target areas.
- Strengthening labour intensive manufacturing.
- Exploration of sea resources (Blue Water Economy).
- Building and developing Seaports/Airports connecting Nepal, India, Bhutan and China.
- Service Sector to be developed as a matter of priority.
- Enhancing research and development to add value to GDP.
- As Bangladesh offers to be one of the most liberal FDI regimes in South Asia, allowing 100% foreign equity with unrestricted exit policy, remittance of royalty and repatriation of equity and dividend, therefore FDI can boost our economy thereby per capita income significantly.
- Promoting SME to build self depended citizen.
- Export oriented industrial sector with gradual automation as complete automation in a country like Bangladesh may cut jobs.
- Desalinization of the south and south-western part of Bangladesh and bring the southern Bangladesh under scientific agriculture program.
- Vibrant tourism sector.
- Decreasing corruption that may add additional 2% in the GDP growth each year.
- Political stability.
- Government driven enabling infrastructures where entrepreneurs will find opportunities to flourish.
- Inclusive growth.

- Expertise in E-commerce.
- Enforcing green economy.
- Beside the increase of budget, efforts to be taken on appropriate utilization of the allotted budget.
- Containing river/canal pollution and enhancing water flow through an integrated river management program. It would facilitate agriculture and help build an eco-friendly environment.
- Measures to prevent and cope up with the effects of climate change.
- To establish a knowledge based Human Resource with high standard of moral and cultural values, following important measures to be taken:
 - Improving the quality of general and technical education.
 - Improving teachers' quality.
 - Regulating student politics.
 - Promoting research based education in public and private universities.
 - More emphasis on value based education at primary level.
 - English to be taught right from primary level.
 - TVET must be market driven.
 - Closer links between TVET and the employment sector are necessary, as well as concerted actions to promote TVET for women.
 - Increasing the budget for education.
- To develop requisite skills for employment at domestic and international market including self entrepreneurship. We need to take sincere efforts in building managerial capacities as there is a great dependency on foreign experts especially in service sector.
- To create and explore job/ employment both at home and abroad.

- Developing ICT for enhancing HRD which should include developing appropriate infrastructure including power, and regulatory framework for effective adoption and use of ICTs throughout the country.
- Developing a healthy and high standard of sportive nation with developed infrastructures.
- Harmonizing socio-politico-economic imperatives for sustainable HRD. Followings to be included:
 - Good governance in general and governance of HRD related issues in particular. It should call for strengthening Public Private Partnerships (PPP), reforming planning and budgetary processes, better service delivery to citizens, improved services to business, transparency and accountability, empowerment through information, innovative government.
 - Ensuring food security and nutrition which should include diversified agriculture sector and an enhanced social protection system that leaves no one behind, empowering women is key to achieving sustainable food security and nutrition, increasing budget for research in agricultural sector, digitization of land, water-centric integrated landscape management, carrying forward the knowledge gained through research in agricultural sector.
 - Removing the menace of drugs by strong social fabrics, dedicated stakeholders' intervention and engagement of youth in education and development activities.
 - Countering extremism by instilling moral values during early childhood, social bondage and education leading to productivity.
 - Developing skills for managing nuclear power energy.
 - Foreign remittance to be efficiently used for enhancing domestic market flow.
 - Quota system in job market should be reviewed as promised by Honourable PM in the parliament on 10 April 2018.

- Steps to be taken for producing raw materials for industry in order to add momentum to industrialization.
 - A well articulated environment and disaster management plan and preparedness.
 - Promoting green economy.
 - Implementing the program-“Produce in Bangladesh including TOT -Produce in Bangladesh-Produced by Bangladesh.”
 - Gender parity.
- Before we can achieve the Vision 2041, HRD strategy has to be implemented within following three sequential time frames with specified benchmarks to be achieved:
 - First time period will be upto 2021. Within this time period, the benchmarks to be achieved are synergy, formation of National HRD Council (NHC), survey of working population, determining status of present skill, target research, formation of HRD strategy/policy, formation of HRD action plan, continuation of efforts to attain SDG goals.
 - Second time period will be from 2022 to 2030. It would be called a ‘Boost Up Period’. Within this time period, the benchmarks to be achieved are attainment of SDG goals, stabilization of population by 2030, reaching HDI index of high medium, marketability of HR as per HRD policy, education for all up to secondary level, gradual increase of education budget, globally trendy ICT, creating all efficient power generation including nuclear technology personnel by 2026.
 - Third term period will be from 2031 to 2041. It would be called ‘Take Off Period’. Within this time period, the benchmarks to be achieved are high income, healthy and high standard sportive nation, literacy, knowledge based society, health and sportive citizen, low unemployment with desired skills for employment or self employment, competitiveness in the global market through improved skills, knowledge and qualifications that are recognized for quality across the

globe, increased education budget, high level of ICT education with export oriented ICT infrastructures, efficient and effective service sector with skilled domestic workforce, industrialization with gradual (controlled) automation, socio-politico-economically vibrant, adept in fine arts and culture and finally gender parity. A comprehensive evaluation of the achievements and failures to be made in 2035 to add/modify the planned strategy so that we can attain all the benchmarks by 2041.

- For monitoring and evaluation, the Prime Minister's Office (PMO) should be that overarching body which would carry out the task of monitoring and directing the future course. As there is a Chief Coordinator for Sustainable Development Goals (SDG) affairs in the PMO, therefore there is a requirement to establish a similar high powered coordinating body for Vision 2041 under the umbrella of PMO.

Recommendations

- In addition to the factors like planning population and generating human capital, promoting and sustaining health, improving nutrition, education, vision for education, training and skill development, promoting education, and promoting science and technology, few other aspects like provisions for making Bangladesh a high income country, ICT and other related socio-politico-economic imperatives to be included in the next Perspective Plan (2021-2041) for building a developed human resource to turn Bangladesh into a Developed Nation by 2041.
- A HRD Council (NHC) to be chaired by Honourable PM, need to be formed to formulate HRD policy and coordinate all activities of the concerned line Ministries, implementing agencies and other stakeholders. There should be representatives from the Ministry of Finance, Ministry of Education, Ministry of Labour and Employment, Bureau of Manpower, Employment and Training (BMET) and other stakeholders.
- A HRD Ministry has to be formed to coordinate and tackle HR issues in a more harmonized way.

- On formation of the NHC, a detailed HRD strategy will be formulated.
- Having formulated the HRD strategy, a detailed HRD Action Plan along with the Monitoring and Evaluation will have to be developed.
- A culture of Research Based Decision Making to be implemented in all HRD related issues and its governance. Decision not to be made whimsically out of gut feeling.
- A HRD fund will be created to facilitate the HRD action plan.
- Increased allocation of budget in Education Sector.
- Making public and private universities accountable for research based knowledge.
- Increase of labour attache in countries where the potential job market for Bangladeshi workers is high.
- Modification of existing quota system immediately.
- For monitoring and evaluation, the PMO should be that overarching body which would carry out the task of monitoring and directing the future course. As there is a Chief Coordinator for Sustainable Development Goals (SDG) Affairs in the Prime Minister's Office, therefore there is a requirement to establish a similar high powered coordinating body for Vision 2041 under the umbrella of PMO.

Keynote Paper Presenters



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CONSOLIDATED KEYNOTE PAPER ON HUMAN RESOURCE DEVELOPMENT (HRD) STRATEGY OF BANGLADESH - A DEVELOPED NATION BY 2041

Introduction

In pursuance of the aspiration of the people of Bangladesh, Honourable Prime Minister Sheikh Hasina declared her Vision 2041 on 5th February 2014, in the national parliament stating, “In implementing the Vision 2041, Bangladesh will be a peaceful, prosperous, happy and developed nation comparable with the developed world.” An attempt will be made in this paper to formulate a strategy to develop human resources of Bangladesh to realize the “Vision 2041”.

Bangladesh has recently fulfilled the eligibility requirements to graduate from ‘Least Developed Country’ to ‘Developing Country’ status. Government of Bangladesh in its Perspective Plan 2021, plans to make Bangladesh a middle income country by 2021. Bangladesh has already incorporated the SDG goals to be achieved by 2030 in the strategy and action plans in related sectors. According to 2016 HDR report UNDP, Bangladesh still lacks far behind in all the HDI index though it has made significant progress in some sectors like life expectancy and female education. Therefore HRD remains as a daunting challenge for Bangladesh to become a developed country by 2041.

Conceptual Framework for Formulating the HRD Strategy

Conceptual Framework for Formulating the HRD Strategy: In conceptualizing and operationalizing the concept and definitions, a need to outline the Strategic Environment, Imperatives, define HRD and Developed Country and find their correlation was felt. Details are as follows:

Strategic Environment

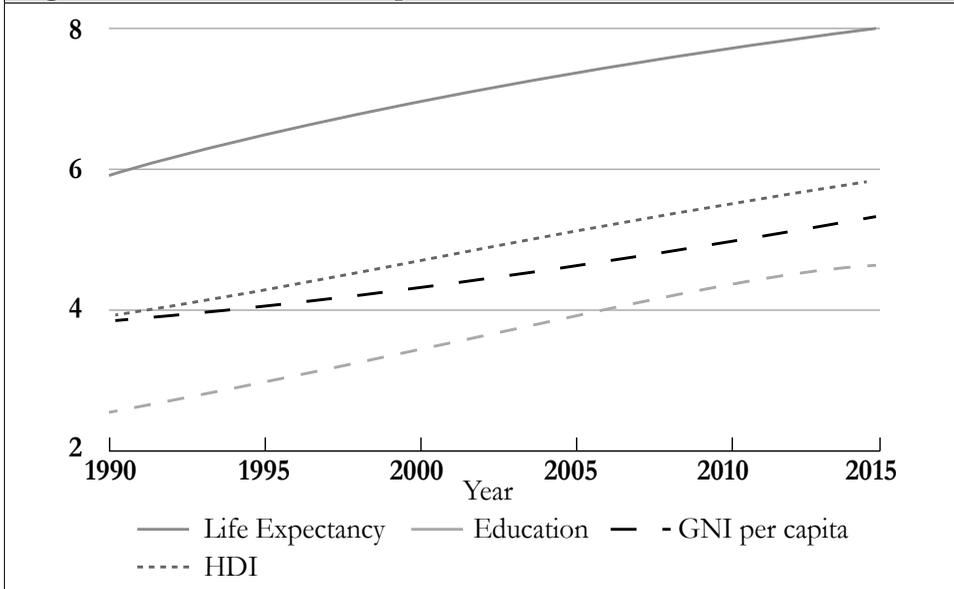
- Human Development is also Human Rights according to our constitution.

- The UN Committee for Development Policy (CPD) gave a letter announcing Bangladesh's eligibility for graduation to Developing Country from Least Developed Country (LDC) in March 2018.
- Bangladesh's HDI value for 2015 is 0.579 which puts the country in the medium human development category - positioning it at 139 out of 188 countries and territories. The rank is shared with Ghana and Zambia. Between 1990 and 2015, Bangladesh's HDI value increased from 0.386 to 0.579, an increase of 50.0 percent. Table 1 reviews Bangladesh's progress in each of the HDI indicators. Between 1990 and 2015, Bangladesh's life expectancy at birth increased by 13.6 years, mean years of schooling increased by 2.4 years and expected years of schooling increased by 4.5 years. Bangladesh's GNI per capita increased by about 159.8 percent between 1990 and 2015.

Table 1: Bangladesh's HDI trends based on consistent time series data

	Life expectancy at birth	Expected years of schooling	Mean years of schooling	GNI per capita (2011 PPP\$)	HDI value
1990	58.4	5.7	2.8	1,286	0.386
1995	61.9	6.6	3.3	1,435	0.423
2000	65.3	7.5	4.1	1,679	0.468
2005	68.0	8.4	4.5	2,036	0.506
2010	70.1	9.4	4.9	2,652	0.545
2011	70.5	9.9	5.1	2,784	0.557
2012	70.8	10.0	5.2	2,943	0.565
2013	71.2	10.0	5.2	3,071	0.570
2014	71.6	10.2	5.2	3,179	0.575
2015	72.0	10.2	5.2	3,341	0.579

Figure 1: HDI Trends of Bangladesh



Bangladesh advanced three steps, thus, jointly ranking 139th with Ghana and Zambia out of 188 countries in the Human Development Index (HDI), according to the Human Development Report (HDR) 2016. With the HDI value standing at 0.579 in 2015, Bangladesh ranked fifth in South Asia, lagging behind Sri Lanka (73rd), the Maldives (105th), India (131st) and Bhutan (132nd) on the overall list topped by Norway (with 0.949 HDI value).

From the above data, it is found that Bangladesh has progressed in human resource development in comparison to past few decades but human development situation of Bangladesh is not so impressive at all in terms of literacy, income, poverty, health etc.

Imperatives

PM's Vision: "In implementing the Vision 2041, Bangladesh will be a peaceful, prosperous, happy and developed nation comparable with the developed world." She also said that the government will prepare the second Perspective Plan to attain the Vision 2041 with the core philosophy to establish a developed Bangladesh by 2041.

Millennium Development Goals: Bangladesh has already met several targets of the MDGs derived from the eight stated goals like reducing poverty gap ratio, attaining gender parity at primary and secondary education, under-five mortality rate reduction, containing HIV infection with access to antiretroviral drugs, children under five sleeping under insecticide treated bed nets, detection and cure rate of tuberculosis under directly observed treatment short course and others. In addition, Bangladesh has made remarkable progress in the areas of poverty reduction, reducing the prevalence of underweight children, increasing enrolment at primary schools, lowering the infant mortality rate and maternal mortality ratio, improving immunization coverage and reducing the incidence of communicable diseases. According to End-period Stocktaking and Final Evaluation Report (2000-2015) by General Economic Division (GED), Planning Commission, Bangladesh has done well in poverty reduction from 56.7% in 1991-92 to 24.8% in 2015. The enrollment rate was 97.7% and completion rate of 81.3% at primary level in 2015. Most of other indicators are also positive except the environmental sustainability and developing global partnership for development.

Sustainable Development Goals

The Sustainable Development Goals (SDGs) are a collection of 17 global goals (appended at Annex A) set by the United Nations. The broad goals are interrelated though each has its own targets to achieve. The total number of targets is 169. The SDGs cover a broad range of social and economic development issues. These include poverty, hunger, health, education, climate change, gender equality, water, sanitation, energy, environment and social justice. The SDGs are known as “Transforming our World: the 2030 Agenda for Sustainable Development” or ‘Agenda 2030’ in short. The goals were developed to replace the Millennium Development Goals (MDGs) which ended in 2015. Unlike the MDGs, the SDG framework does not distinguish between “developed” and “developing” nations. Instead, the goals apply to all countries. The SDGs build on the principles agreed upon in Resolution A/RES/66/288, entitled “The Future We Want”. This was a non-binding document released as a result of Rio+20 Conference held in 2012. Paragraph 54 United Nations Resolution A/RES/70/1 of 25 September 2015 contains

the goals and targets. Almost all the goals relate to the human development.

If we look at the sustainable development goals we find that it sets objectives to achieve sustainable development in mainly three sectors like social, economic and environment. Development in all these pillars centres around Human and Human Resource Development. As per UNDP, environmental sustainability indicators represent a mix of level and change indicators related to renewable energy consumption, carbon-dioxide emissions, change in forest area and fresh water withdrawals. Forest area as percentage of the total land area is given in the table but is not used for comparison, instead, the total change in forest area between 1990 and 2015 is used. Economic sustainability indicators look at adjusted net savings, external debt stock, natural resources depletion, diversity of economy and government's spending on research and development. Social sustainability is captured by changes in income and gender inequality, multidimensional poverty and the projected old age dependency ratio. In traditional perspective, HRD also encompasses broadly three main domains i.e training and development, organizational development and career development.

Perspective Plan 2010-2021: This “Perspective Plan of Bangladesh (2010-2021): Making Vision 2021 a Reality” is a strategic articulation of the development vision, mission, and goals of the government in achieving a prosperous Bangladesh grounded in political and economic freedoms a reality in 2021. The Perspective Plan provides the road map for accelerated growth and lays down broad approaches for eradication of poverty, inequality, and human deprivation. Specific strategies and the task of implementation has been articulated through the two five year plans: Sixth Five Year Plan (2011-2015) and the Seventh Five Year Plan (2016-2020). The expectation is that by 2021, the war against poverty will have been won, the country will have crossed the middle income threshold, with the basic needs of the population ensured, their basic rights respected, when everyone is adequately fed, clothed and housed, and has access to health care.

Conceptualizing HRD and Developed Nation (Equitable Development)

HRD

The term 'Human Resource Development (HRD)' considers humans as a resource and resource can be defined as "the total means available or an available supply that can be drawn on when needed. Resources, quite simply, can be drawn on until exhausted. The meaning of HRD is vast and diverse. It is more complicated when we talk about international and cross national HRD.

Generally Human Resources Development (HRD) would entail creation of competent human beings imbued with right kind of education, values, training, life expectancy, standard of living, and in an implied way, positive and critical thinking ability.

Harbison and Myers are the first to use the term "Human Resource Development" in 1964, in their book. "Education Manpower and Economic Growth: Strategies of Human Resource Development". Three core principles underline their concept of HRD. First, HRD is described in a societal context. Second, HRD is viewed from three dimensions- political, economic and socio-cultural. Third, Education forms the crux of human resource development.

HRD concept was first introduced by Leonard Nadler in 1969 in a conference in US. Nadler has defined HRD as a learning experience which is organized, in a specific time and designed to bring out the behavioral change. Nadler opined that if any organization wants to be dynamic, it has to develop its human resource. He stated that the human resources have unlimited capabilities. Some of the common activities he identified within HRD are training, education and development. The American Society for Training and Development defines HRD as - 'Human Resource Development is the process of increasing the capacity of the human resource through development. Thus, it is the process of adding value to individuals, teams or an organization as a human system. National HRD deals with "government skill formation and employment policy (HRD), institutional development, partnership development with international agencies.'" (Metcalf & Reese, 2005, p. 456).

2016 HDR definition by UNDP says- ‘Human development is a process of enlarging people’s choices. But human development is also the objective, so it is both a process and an outcome. Human development implies that people must influence the processes that shape their lives. In all this, economic growth is an important means to human development, but not the end. Human development is the development of the people through building human capabilities, by the people through active participation in the processes that shape their lives and for the people by improving their lives. It is broader than other approaches, such as the human resource approach, the basic needs approach and the human welfare approach.

In Bangladesh, we would consider HRD and the Human Development Concept as propounded by UN synonymous. Human Development Index would include factors as life expectancy at birth, Schooling statistics (Expected and mean years), GNI per Capita and finally HDI value. The issues needed to be addressed for HRD as conceived in the Perspective Plan 2010-2021 of Bangladesh are planning population and generating human capital, promoting and sustaining health, improving nutrition, education, vision for education, training and skill development, promoting education, and promoting science and technology.

Developed Country: According to the UN Statistics Division, there are no universally agreed upon criteria for what makes a country developing versus developed and which countries fit these two categories. The designations “Developed” and “Developing” are intended for statistical convenience and do not necessarily express a judgment about the stage reached by a particular country or area in the development process. A developed country is a state that has a highly developed economy and advanced technological infrastructure. Most commonly, the criteria for evaluating the degree of economic development are Gross Domestic Product (GDP), Gross National Product (GNP), per capita income, level of industrialization, amount of widespread infrastructure and general standard of living. For the 2018 fiscal year, low-income economies are defined as those with a GNI per capita calculated using the World Bank Atlas method, of \$1,005 or less in 2016; lower middle-income economies are those with a GNI per capita between \$1,006 and \$3,955; upper

middle-income economies are those with a GNI per capita between \$3,956 and \$12,235; high-income economies are those with a GNI per capita of \$12,236 or more. So, Bangladesh has to develop her infrastructure and economy to cross this threshold of Upper Middle Income level of \$12,235 per capita and step into the elite club of developed country. Developed countries have post-industrial economies, meaning the service sector provides more wealth than the industrial sector. Currently the Human Development Index (HDI) as propounded by UN provides a good framework to identify if a country is developed, developing or under developed (Wikipedia 2017). The HDI is described as “standard measure of overall well being. It includes economic and social factors such as life expectancy, literacy, education and standard of living. For developing our HRD strategy, a developed country’s well being is analyzed with six variables like GDP per capita, social support, healthy life expectancy, freedom to make life choices, generosity and perceptions of corruption. Happiness Index in World Happiness Report produced by UN Sustainable Development Solutions Network should also be consulted in ascertaining own standing of development.

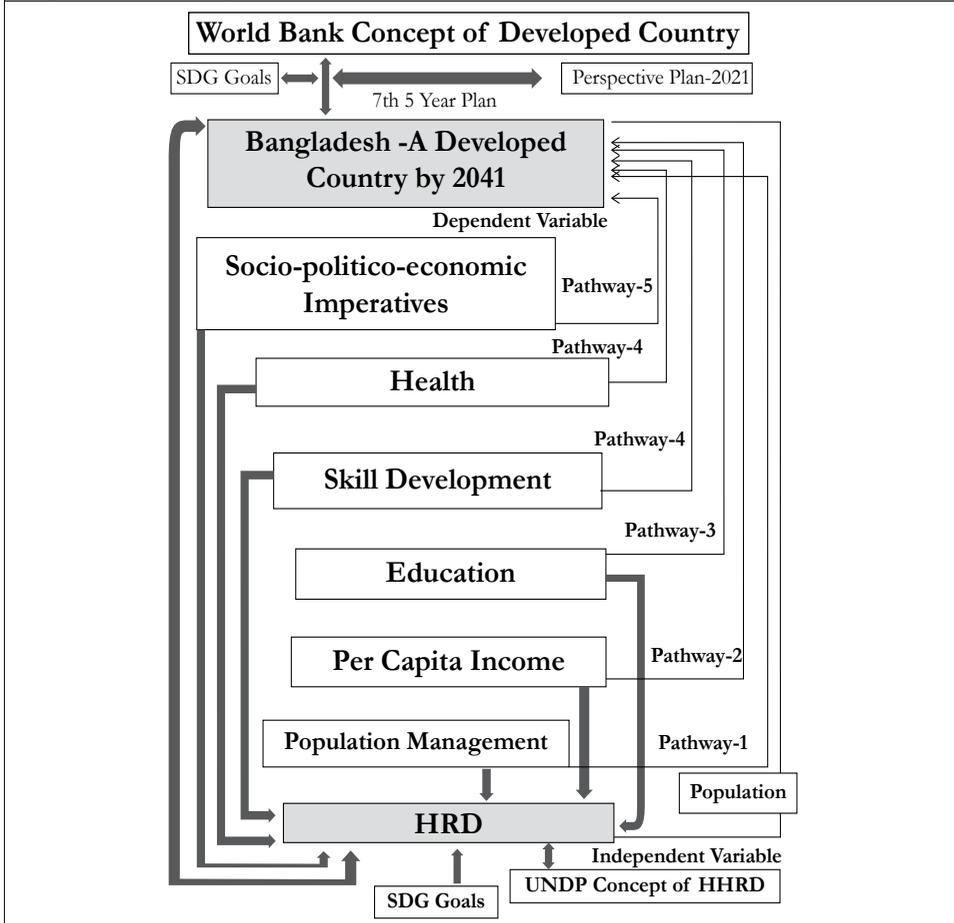
Correlation between HRD and the Developed Nation (how HRD impacts the concept of developed nation. Human Resources Development (HRD) would entail creation of competent human beings imbued with right kind of education, values, training, life expectancy, standard of living, and in an implied way, positive and critical thinking ability. Human resource constitutes the ultimate basis for wealth of the nation. Capital and natural resources are passive factors of production; human beings are the ones who accumulate capital, exploit natural resources, build social, economic and political organization, and carry forward national development. Clearly a country which is unable to develop the skills and knowledge of its people and utilize them effectively in the national economy will be unable to develop anything else (Harbinson, 1973, p.3). The human capital becomes a component without which the national wealth has no meaning, and investing in human capital can have positive effects for both present and future. As HRD encompasses training, organizational development or career development and sustainable development goals are integrated in the national development policies of Bangladesh; therefore literacy, ICT, nursing, health, language proficiency, trainers’ training, skill

development and exploration of national and international job market beside others will be vital for any viable strategy for making Bangladesh a developed nation by 2041. To relate HRD with the concept of developed country, it is essential to operationalize the concept of 'Developed Country' too. In this paper 'A Developed Country' would mean a highly developed economy (with per capita income more than US\$12,235 as per World Bank), high level of industrialization, infrastructure and standard of living. In this research paper, few sub- systems of HRD like population control, per capita income, literacy, ICT, health, language proficiency, trainers' training, skill development and competency in job market and few socio-politico-economic imperatives like Governance, Drugs, Corruption, Patriotism, Extremism, Untapped Blue Economy, Vibrant Tourism Sector, Production of Raw Material, Capital Investment, "Produce in Bangladesh including TOT" - Produce in Bangladesh-Produced by Bangladesh, Research based Agricultural Sector will be used for formulating the HRD strategy. In doing so, the factors used by UNDP to ascertain the Human Development Index (HDI) for different countries would be also kept in mind.

It has to be remembered that while the term "high-income" is often used interchangeably with "First World" and "developed country" according to the United Nations, for example, some high-income countries may also be developing countries. The GCC countries, for example, are classified as developing high-income countries. Thus, a high-income country may be classified as either developed or developing.

The Diagrammatic Layout of the Conceptual Framework of HRD Strategy for a Developed Bangladesh by 2041 is as follows:

Figure 2: Conceptual Framework



Here we can see how HRD impacts a developed country. Five sub-factors/variable of HRD like Population Management, Per capita Income, Education, Skill Development, Health and Socio-politico-economic Imperatives constituting the 5 pathways have been used to formulate the proposed HRD strategy.

Finally we can say that our HRD strategy envisions a human resource with following parameters:

- Education for all with no dropouts and with high cultural and moral values.
- Stabilization of population.

- Good health.
- High income (above \$12235 GNI per Capita).
- Low unemployment with desired skills for employment or self employment.
- Competitiveness in the global market through improved skills, knowledge and qualifications that are recognized for quality across the globe.
- High level of ICT education with export oriented ICT infrastructures.
- Skilled domestic workforce with efficient service sector personnel.
- Politically active and socially tolerant.
- Adept in fine arts and culture.
- Equality of women's participation in political, social, economic, legal and environmental sector.

Analysis of Existing Policies and HRD Environment (Environment Scan)

General: An analysis of the existing policies and HRD environment impacting HRD in Bangladesh will be made in this part to calibrate our proposed HRD strategy. In doing so, mainly the challenges and gaps would be identified to address them in strategy formulation and implementation.

6th 5 Year Plan - HRD

- **Target**
 - Ensuring quality education.
 - Gender parity at all levels of education.
 - Improvement in health and nutrition indicators.
 - Reduction in the rate of population growth.
 - Better equity in health and education.

- **Outcomes**
 - 100 percent net enrolment in primary education and progress in secondary education.
 - The adult literacy rate is on the rise from 57.9 % in 2010 to 72.3 % in 2016.
 - In tertiary education, although there was no quantitative target, there has been a big expansion based on both public and private institutions.
 - Bangladesh has been a leader among developing countries in eliminating gender gap at primary and secondary level
 - Significant progress in reducing dropouts and increasing completion rates for both male and female.

- **Future Concerns**
 - Education quality remains a serious concern in terms of learning and relevance to markets.
 - Technical and scientific education continues to lag behind demand.
 - Stronger efforts are needed to implement the Sixth Plan's recommendation to devolve service.
 - Local governments' responsibility towards health and education and coordination within the Government (between ministries, directorates and other levels) need to be improved.
 - A re-examination of budgetary priorities. The target should be to allocate at least 3.8% of GDP to these activities by the end of the Plan period.

- **7th 5 Year Plan (FY 2016 - FY 2020) - HRD:** The 7th 5 year plan specifically focuses on human resource development to cater to the fast paced economic growth. It attempts to address constraints to growth acceleration. In doing so, it points out the skill mismatch between training and job market, skill deficiency of migrant workers and the need to increase labour productivity. It focuses on the following related to HRD:

- Acceleration of economic growth and employment.
 - Benefiting from higher labour force growth (the demographic dividend) and ensuring labour quality.
 - Improving factor productivity through quality education information technology.
 - Reducing the growth of population and income inequality.
 - Ensuring social protection and safety nets for the under-privileged population and gender parity.
 - Improving governance and enhancing administrative capacity.
 - Establishing a results-based Monitoring and Evaluation (M&E) system.
 - Additionally improving vocational training platform in country and including private sector in training manpower.
- **Population Policy and Realities**
 - The country is a large domestic market with more than estimated 164 mn (was 142.3 million as per 2011 Census) people with a rapidly growing middle and affluent class (7% in FY 2015 according to BCG).
 - The following table shows a comparison of the population growth rate of Bangladesh with India and China. Some drastic steps are necessary in this regard, if the vision is to be realized.

Table 2: Yearly population growth rate			
Year	Bangladesh	India	China
1999	2.04	1.83	0.63
2003	1.77	1.67	0.59
2007	1.22	1.52	0.57
2011	1.16	1.32	0.57
2015	1.13	1.17	0.5
2017	1.05	1.13	0.43
2030 (Projected)	0.81	0.83	0.03

- The Population Policy –2010 aims at the following:
 - Lower the Total Fertility Rate (TFR) to 2.1 by increasing the rate of prevalence of contraceptive users to 72%, and achieve Net Reproduction Rate (NRR) = 1 by the year 2015.
 - Improved health and education.
 - Reduced infant, child, and maternal mortality.
 - Increasing the socio-economic status of women.
 - Changing the outlook of the rural population through personal contact and the use of mass media.
 - Delivering contraceptive services to people at or near home.
 - Enlisting community support for population planning.
 - Involving all ministries concerned with development in population planning and control.
 - Encouraging and supporting non-governmental organizations in family planning.
 - Adopting a system of incentives and legal and social measures.

There is a rising trend in the population between the age groups of 15-64. About 57% of the population is under 25 years with a literacy rate of 72%.

The total population has increased from 71 million to 164 million since independence. The Total Fertility Rate (TFR) remained stagnant for almost a decade and the recent decline is very slow. Fertility is still playing major role in population growth. With the current rates of fertility and mortality, the population size is expected to be about 280 million before it stabilizes.

The population aged over 60 years will reach staggering proportions by 2051. By 2021, there are expected to be around 14 million people aged over 60 - and that figure will reach nearly 30 million by the end of 2051. This indicates that Bangladesh is entering a new phase of rapid growth of elderly population, with all its associated challenges. Projections show that even after reaching replacement level fertility, the population will continue to get older.

In a young population characterized by illiteracy, low status of women, malnutrition, unemployment and limited access to social and health services, there is every chance that inequality in the distribution of income will increase, which will bring a higher level of poverty.

The TFR target should be no higher than 1.7 if a rapid arrest of population growth is to be achieved.

Demographic Dividend; A Missed Opportunity: In Bangladesh, the phenomenon of demographic dividend has been occurring since the 1970s. However, the country has been unable to exploit full potential of this dividend. Its economy has been doing well but currently its job growth is the slowest in last two decades. Some economists term this phenomenon as “jobless growth”.

Education: National Education Policy 2010 envisions a society with people having acquired quality education and modern and updated knowledge of science and technology, its people transformed into skilled human resource so that they may contribute to eradicate illiteracy and poverty. While analyzing the education policy, the gaps found relating to fitting in the education policy into the overall HRD strategy in Bangladesh are as follows:

Table 3: Comparative Achievement in Education 2015								
Country	Adult Literacy rate %	Youth Literacy rate %	Gross Enrollment %			Dropout %	Pupil to Teacher Ratio	Gov-ernment Expend-iture % of GDP (2014)
			Primary	Secondary	Tertiary			
Bangladesh	61.5	80.6	112	58	13	33.8	40	2.0
Sri Lanka	92.6	98.4	101	100	21	1.8	24	1.6
Indonesia	93.9	98.9	106	82	31	18.1	17	3.3
India	72.1	91.8	111	69	24	-	32	3.8
Pakistan	58.7	81.5	94	42	10	20.4	47	2.5
Nepal	64.7	92.6	135	67	16	29.9	23	4.7
Malaysia	94.6	98.3	107	79	30	5.8	11	6.1

Source: UNDP Human Development Report, 2016

Challenges in General Education: Having consulted the National Education Policy and other factors, following significant/major impediments have been found:

- Poor education quality (Knowledge-wisdom gap and demand-supply gap).
 - Secondary school and college level education are still inaccessible to many.
 - Inadequate budget priority and allocation for education is much below the requirement resulting in poor infrastructures and poor teaching environment.
 - Teacher to pupil ratio is relatively high.
 - Teachers without required quality i.e. requirement of trainers training.
 - Students' intense involvement in party politics barring them from acquiring creative knowledge.
 - Uninteresting and crowded syllabus.
 - Lack of balance between technical and non technical education.
 - Poor curriculum to enable students to skilled labour in global HRD market.
 - Lack of research in public and private universities.
 - English is taught as a compulsory subject only at the degree level of all colleges and universities.
 - Less education budget.
- **Challenges in Technical and Vocational Education Training**
 - There is no comprehensive need assessment survey to assess the detailed training requirement.
 - TVET system is not adequately responding to market demand.

- Small industrial base and slow growth to accommodate the skilled workforce comfortably.
- Access to the formal TVET is limited to ‘Grade VIII Barrier’. It debar a vast population to enter the formal TVET. The NTVQF at Pre-vocational basic level and RPL may be a solution to this entrance which also need long time for implementation in full swing.
- Female students have limited access to TVET enrolment and to employment due to social stigma and lack of gender friendly environment in TVET institutions and employment.
- TVET providers are far behind the international standards, certification and quality assurance.
- Low connection to international labour employment market.
- Weak governance of TVET.
- Participation of private sector and employers with TVET providers is inadequate. Effective ISC may be a solution to this issue but the development of ISCs in different sectors will take considerable time.
- Poor monitoring and no performance evaluation of TVET.
- Lack of PPP framework in TVET system. Recently BSEP project has introduced a few PPP programs on pilot basis which needs to be encouraged;
- Insufficient creation of job opportunities for the TVET graduates.
- Inadequate orientation to labour market regarding TVET.
- TVET institutions, particularly private ones, lack workshop, lab equipment and physical facilities.
- Majority of the teachers of private TVET institutions are not properly qualified and trained.
- Large number of teaching positions vacant in the most of the TVET institutions particularly in public TVET.

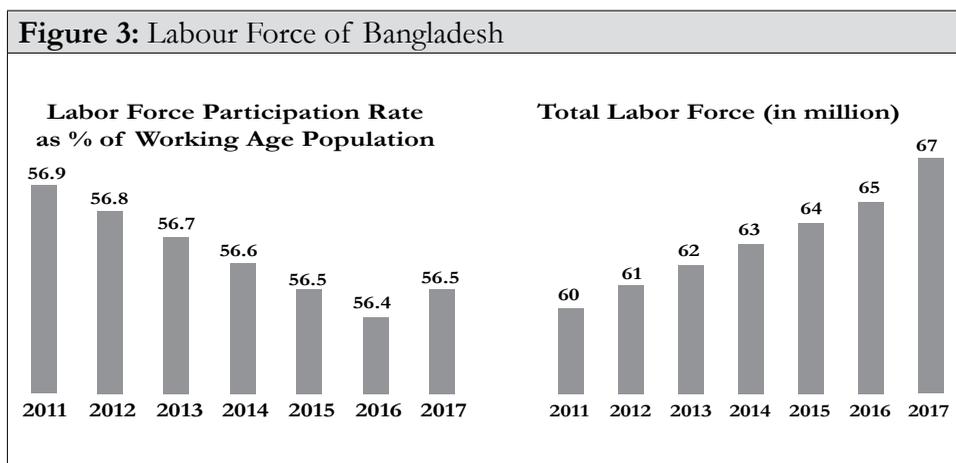
- Lack of sufficient teacher's training facility to face the challenges of the TVET system and identify the basic concepts of improving the quality of TVET delivery.

Skill Development

- **Technical Manpower - Skilled Workers and Technicians:** There are 77 Polytechnic Institutes in the country with annual intake capacity of 9062 students, 64 Vocational Training Institutes (VTI's) and 13 Technical Training Centres.
- **Medical Manpower:** 31 Government and 68 Private Medical Colleges produces 1743 medical graduates and 150 dental surgeons every year.
- **Engineering Manpower:** 5,494 Graduate Engineers and 9,062 Diploma-level engineers annually.
- **Industrial Manpower:** 1.5 million workers of different categories (Professional, managerial, administrative, technical, skilled, semiskilled and unskilled workers including experienced garments workers, both male and female).
- **Agricultural, Animal Husbandry, Fisheries, Livestock, Horticulture Experts, Technicians and Farmers:** There are 4 Agricultural Universities and 37 Agricultural Colleges and several training institutes.
- **University/College/School Teachers:** There are 40 public and 92 private universities in the country.

In addition, there are IT and Computer Personnel; Power Station, Petroleum and Fertilizer Manpower; Road and Transport Workers; Administrative and Defense Personnel; Manpower for financial Institutions, Insurance, Audit and Accounts; Port and Water Transport Workers; Marine Crew; Hotel Management, Tourism and Catering Service.

The total labour force of Bangladesh is as follows:



Despite huge achievements, following significant/major impediments have been identified while studying the Skill Development Policy 2011 and other related factors:

- Lack of expert trainers, irrelevancy of teaching, inadequacy of training, lack of motivation of the trainers for low salary structure and relative low prestige.
- Skill mismatch is a limiting factor towards the absorption of 2 million domestic labour each year. (7th five year plan, p 546)
- Presently about 5 million Bangladeshi workers are working worldwide of which 33.44% are skilled, 15.22% are semi-skilled, 2.03% are professional, others 1.17% and 48.15% are less-skilled. Besides, there exists a considerable mismatch between the technical capacity of domestic labour and quality required in the overseas job market. (7th five year plan, p 546). Emigrant population is often devoid of the free flow of information and access to simple information technology. There are frequent victims of human rights violation in terms of living and working condition. Women in particular face gender discrimination. They are prone to health problems, including actual hygiene, and lack of proper diet.
- Lack of high end training and necessary standard certification of international acceptance.

- Limited inter-agency coordination between employers and training institutions.
- Lack of linkages with industry and the labour market.
- Lack of good governance of overseas employment recruitment.
- Low wages of labour (1,500 taka per month for all economic sectors not covered by industry-specific wages and in the garment industry the minimum wage is 5,300 taka per month).
- Lack of qualified managers especially in RMG, textile, power, pharmaceuticals, ICT, construction and consultancy sectors have created a window for influx of foreign professionals. In 2015-16, Bangladesh had only 1.8% managers, 3.8% professionals and 1.9% technical experts out of total 59.5 million workforce.
- Huge gap between conventional education and industry requirement when it comes to creating leaders.

Bangladesh needs competent managers in the industrial sector to become the 30th largest economy by 2030 from the current 46th position while attaining double-digit growth.

Health Development: The Bangladesh health policy document was published in 2011 and adheres to the following principles: Health is defined as “A state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. “Though remarkable achievements especially in the areas of child nutrition, maternal mortality and reduction in population growth have been gained, yet following health related challenges remain in place:

- Child marriage and teenage pregnancy has still been difficult to contain.
- Overall state of malnutrition among children and women remains challenging.
- There is a shortage of 60,000 doctors, 280,000 nurses, and 483,000 technologists. As opposed to WHO estimate required to fulfill MDG targets of medical professionals (23 per 10,000 populations), Bangladesh has about 6.02 per 10,000 medical professionals (7th 5 year Plan).

- Lack of capacity in developing and provisioning skilled attendance for the healthcare particularly in the rural areas.
- Lack of adequate regulation, monitoring, and accountability of the private sector healthcare service providers.

ICT Challenges: There are over 800 registered software and IT Enabled Service companies in Bangladesh. Few hundred more unregistered small and home-based entities are also doing business. In a market of 250 million dollar, approximately 30,000 professionals are working today. Manufacturing and service sectors have opened huge space for ICT. From the ICT perspective, following HRD concerns have to be addressed:

- By one study, only approximately 2% of the job seekers today have right kind of soft skills. This reflects still low prevalence of ICT at the grass root level.
- Only a handful of large industries have established ICT practices for HRD.
- Beside the IT literacy, proficiency in English is a multiplier in the ICT Sector.
- Lack of ICT infrastructures in rural areas.
- Lack of electricity limiting the use of ICT by individual.

Food Security and Nutrition: Sustainable Development Goal 2 is “to end hunger, achieve food security and improved nutrition, and promote sustainable agriculture” by 2030 is in consonance with the theme which provides us a shared understanding. There are still substantial challenges to achieving zero hunger in Bangladesh. Some of them are as follows:

- An alarmingly large number of people still remain food insecure and hungry, and most people do not have a sufficiently nutritious and diverse diet.
- More than 1 in 3 children are still afflicted by stunted growth, and acute malnutrition has not decreased significantly over many years.
- There are emerging concerns with food security and nutrition as a result of socioeconomic and climate change

Critical Analysis on Implementation Mechanism: Presently there is no central coordinating body/council for coordinating issues related to HRD. There is a National Skill Development Council (NSDC) chaired by Honourable PM which is the apex body on skills policy in Bangladesh. It is responsible for setting the national skills development agenda. The NSDC provides an important tripartite forum where representatives of government, employers, workers and civil society can work together to provide leadership and clear direction to skills development in Bangladesh. Now several Ministries/ Councils/Commissions are implementing related HRD policies. But there is no such coordination mechanism as a Council or Ministry for formulating, implementing and monitoring and evaluation of the strategy.

Existing Quota System

The quota system (cadre and non-cadre) is applicable everywhere from first grade to fourth grade jobs. There is a provision to reserve 55 percent government jobs for quotas (Hussain Sadat, 2013). Table below shows latest quota system of Bangladesh:

Table 4: Quota Reservations for Recruitment in Bangladesh		
Categories	Percentage	Proposed Quota System after 2021
Merit	45	75-80%
Freedom Fighters	30	5-7%
Women	10	5-8%
Tribal	5	5%
Other General candidate	10	5%
	100	100%

Source: Yasmin, 2013

It is evident from the table that quota system is creating an obstacle in merit based recruitments in job markets. If this system is not reformed appropriately and aligned properly to the current and future Human Resource Development initiatives, domestic job market may experience merit shortage in future and market would be captured by foreign skilled managers.

Analysis of Current and Future Job Market in Bangladesh

Current Job Market in Bangladesh: Bangladesh Bureau of Statistics (BBS) officials launched a survey report on current Job Market in Bangladesh on 28 May 2017. According to the survey, the majority of manufacturing jobs came from the garment industry, which has created 52% of all manufacturing jobs, while textile companies accounted for 23.7%. In 2015-16, Bangladesh had only 1.8% managers, 3.8% professionals and 1.9% technical experts out of total 59.5 million workforces. Currently, there are about 0.2 million foreign professional working in different industrial sectors in the country. According to Bangladesh Bank report, these 0.2 million foreign workers are taking away around USD 5 billion in salaries and allowance every year whereas 11 million Bangladeshis working abroad send home approximate USD 15 billion foreign currencies in a year as remittance.

Future Job Market in Bangladesh: Euro Monitor International identifies Bangladesh as one of the 20 markets of the future that will offer the most opportunities for consumer goods companies globally. The garment industry will likely remain as the backbone of Bangladesh's economy. However, electronics, frozen foods, light engineering and power industries will create new job markets in the country. Although modern retail constitutes only around 10% of total, however, it is anticipated that the turnover of modern retailing will increase 4-fold by 2020.

Overseas Employment Opportunities and Challenges

Opportunities: Overseas employment of Bangladeshi workers is a major source of remittance. Based on the trend of the last 40 years, it can be predicted that the migration of workers from Bangladesh will continue in the foreseeable future. A projected estimate of migrant worker demand is about 590,000 in 2020. However, due to technological and societal advances there is a growing demand for skills, particularly specialized skills. The table below shows labour market needs and potential opportunities for Bangladeshi migrant workers in key destination countries.

Table 5: Prospective Future Demand of Labour Force in Global Market

Destination Country	Skill Type Supplied by BD in 2005-2012	Growth Trends and Labour Market Needs/ Considerations in Destination Country	Potential Opportunities or Bottlenecks for Migrant workers
Saudi Arabia	Labour (Unspecified), agricultural workers, cooks and farmers (unspecified), construction workers, drivers, cleaners, tailor	Manufacturing, trade, and services & sectors that have higher growth potential Employers appear to have a high degree of confidence in training programs in the Philippines and hence, more likely to recruit workers with high level skill for trade and service sector but without such perception about the construction sector	Skills and occupation on greater demand and technician and higher-level skills for manufacturing, qualified professionals in education, health, retail trade, construction workers
United Arab Emirates	Labour (unspecified), worker (unspecified), private service, construction workers, cook, drivers, cleaners, Machine operator, tailor, salespersons, agricultural workers	Construction, real state, tourism, and hospitality, manufacturing and logistics, education and health, care are among the sectors likely to grow rapidly, with significant rise in expected demand for qualified personnel	No new visas have been issued for workers from Bangladesh since August 2012
Kuwait	Labour (unspecified), cook, Houseboy, Technician (unspecified), welder, drivers, cleaners, salespersons	Growth sectors include oil capacity, utilities, infrastructure (including residential), and services especially health care and education.	No recruitment of BD workers in past five years

Qatar	Labour (unspecified), construction worker, private service, cook, drivers, fitter, foreman, engineer	In preparation for hosting of the 2022 Soccer World Cup, sectors likely to grow at high rates include construction, hotel & restaurants, and services	More workers to deliver these services and run the newly constructed facilities effectively are expected
Jordan	Garment workers	Construction sector and garments industry are considered growth sector	More construction and garment workers
Source: Tabulated from Chapter 4 of ADB. 2016. Bangladesh: Looking beyond Garments, Employment Diagnostic Study. Manila			

The World Economic Forum’s 2016 report estimates that 5 million jobs will be lost globally to automation by 2020 and that the number will keep growing. Bureau of Labor Statistics (BLS) of USA predicts few high end skill areas which may have demand in future. These are as follows:

“Computational thinking” will be valued. Related jobs include: Software developer, computer systems analyst, Market research analyst and marketing specialist etc.

- As more people live longer, every aspect of the health care sector is poised for growth. And while telemedicine, robotic surgical equipment, and other forms of automation are changing, demand for caregivers is going to increase. Related jobs include medical technicians, physical therapists, workplace ergonomics experts, veterinarians and medical assistants.
- Due to perceived virtual collaboration, soft skills like social and emotional intelligence and cross-cultural competency will have their demand. In addition, experts in understanding various media platforms and their best interpretation will be useful. Related jobs include: Marketing specialist, customer service representatives etc.
- With opportunities in innovation and entrepreneurship, analytical acumen will be valued. Related jobs are: management analyst, accountants, auditors etc.

- In the field of ICT, it has been found that there is a lack of availability of modern ICT tools, lack of adequate skills on ICT tools and lack of awareness impacting contemporary learning particularly in the rural areas.

Challenges Related to Overseas Employment: Following are few significant challenges:

- Migrant workers from Bangladesh do not receive recognition in the international market due to lack of competitive skills.
- In many cases of contract signing overseas, in local language, the workers' rights, remunerations and privileges are curtailed to minimum possible level. The lack of education and the nature of low level jobs contribute to the malpractices perpetuated by some of the unscrupulous employers in collaboration with the recruiting agencies.
- In general, Bangladeshi skilled or high level workers seems to face difficulties to compete in the global job markets for a lack in language efficiency in a major language like English, French or Arabic. Besides, our low-skilled workers also face lot of troubles in their different overseas workplace because of language barrier.
- Job destinations for Bangladeshi human resources are typically limited to the Middle Eastern Countries, Malaysia and USA mainly in low skilled grade.
- Accommodating and creating job opportunities for returning migrants under the current economic realities in Bangladesh is difficult even for workers who possess updated skills through their overseas job experience.
- There is a lack of orientation on cultural, demographic and political aspects of the focus nations.

Other Factors

Governance: Challenges are as follows:

- Flawed perception on education-failure to establish merit based bureaucracy

- Corruption.
- Dysfunctional local Government.
- Weak institution.
- Lack of political institution.
- Incompetent bureaucracy.
- Power sharing culture rather than partnership among bureaucracy, military and politician.
- Weakness in e-governance.

Economy (Per Capita Income Scenario)

In FY16-17, Bangladesh had a GDP of USD 245+ bn, growing at a rate of 7.3% which was one of the highest in the world. The country plans to achieve a growth rate of 7.4% consistently till 2021 which is a part of its planned objectives under the 7th 5 year plan.

Bangladesh offers one of the most liberal FDI regime in South Asia, allowing 100% foreign equity with unrestricted exit policy, remittance of royalty and repatriation of equity and dividend. Businesses exporting at least 80% of goods or services qualify for duty free import of machineries, spares and bonded warehouse facility and foreign investment is protected from expropriation and nationalization by the ‘Foreign Private Investment Act 1980’.

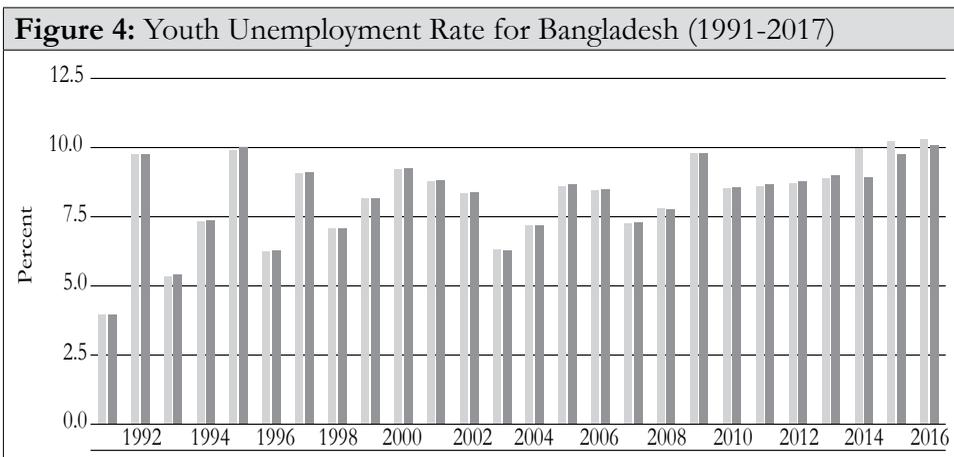
To mitigate land crisis for industrial use and to create fully serviced industrial zone, the government has taken measures to build Economic Zones in the country. 22 zones have been selected comprising 17,000 acres of land in which 19 zones are in the public sector and 3 zones are in the private sector.

Income Inequality: While the country’s economy shows a positive pace of 6 to 7% GDP growth, a persistent stark fact is the income inequality. The 5% top cohort of the elites (comprising industry / business owners) continue to get the lion’s share of the \$1600 per capita income, while the actual work-force remains deprived of any rise in salaries.

Poverty: Poverty is no longer a problem of developing regions only; it is also on the rise in developed countries. The International Labour Organization estimates that in 2012 more than 300 million people in developed countries lived in poverty. Bangladesh is one of the world’s most densely populated countries with 150 million people, 31% of whom live below the national poverty line of US\$2 per day. But Bangladesh’s extreme poverty rate dropped to 12.9 percent in 2016, as mentioned by the World Bank.

Unemployment

Growing Unemployment of Youth: The youth constitutes one third of the total labour force in the age group of 15-29 years is 20.8 mn with an all-time high unemployment rate of only 10.1% (Figure 4). Thus frustration is growing and the potential benefits of youth entrepreneurship as a means of improving their livelihood remain unreached.



Educated Unemployment: The percentage of educated unemployment is on the rise. It is one of the most unwanted trends for any developing economy.

Unemployment with Intermediate Education

Table 6: Unemployment with Intermediate Education			
Ser	Year	Value (%age of the Working Population)	Remarks
1.	2006	13.20	
2.	2013	14.20	
3.	2016	16.20	Negative Trend

Unemployment with Advanced Education

Table 7: Unemployment with Advanced Education			
Ser	Year	Value (% of the Working Population)	Remarks
1.	2006	10.40	
2.	2013	15.30	
3.	2016	16.80	Negative Trend

Diplomacy: There is a lack of vibrant diplomacy abroad in securing appropriate job in job market and ensuring the rights and privileges of migrant workers.

Drug Menace Due to Employment: Drug abuse is another issue that has severe adverse impact on HRD. Over the past two decades, it has spread at an unprecedented rate. According to a conservative statistics by ‘Family Health International’, about 50 lac people of Bangladesh were drug addicted in 2011. It was also found that a great majority of the addicts were unemployed, 25% were students, and 10% are female with highest incidence of addiction occurred between 23-26 years old. Abuse of drugs has extensive threats on personal and social health both physically and morally. (Drug Addiction in Urban Life of Bangladesh, Md. Abul Hasam & Md. Mushahid, 2017).

Environmental Issue: Human values related to material possessions and the relation of humanity and nature are often considered to be at the root of environmental degradation. Economic growth has carried with it a heavy burden on the environment.

Energy Sector (Nuclear Power): As per power sector master plan, Bangladesh need to produce 24000 MW, 40000 MW and 60000 MW electricity by 2021, 2030 and 2040 respectively. Out of which 10% power would be generated from nuclear power. Bangladesh is already in the process of constructing nuclear power plant with 2 X VVER reactor having a total capacity of 2400 MW with the assistance of Russia. First power reactor will come into operation in year 2024. Nuclear power plant needs highly skilled multidiscipline technical professionals to maintain, operate till decommissioning of the plant after expiry of life. Non availability of appropriate level of skilled manpower will pose serious threat to the safety, security of the country and its people as well as environment.

Women in Labour Market and Empowerment: As a result of the government's policy for recruiting 60 percent female teachers in the government primary schools, the number of female teachers has increased from 21 percent in 1991 to current 62.67 percent (Bangladesh Economic Review 2015-2016). Women's participation in the labour market has immensely increased, with the RMG industry employing around 80% women. However, at an average age of 19 and with little education, women are prone to exploitation, sexual harassment and gender discrimination. Salient barriers to fuller participation of women in the labour market include:

- Women's withdrawal from the labour force after a certain age and early marriage.
- Absence of infrastructure to facilitate women's employment, such as child care facilities etc.
- Violence against women, both in places of work and outside.

Food Security and Nutrition: Food security and nutrition situation need to be improved to build a healthy life.

Housing: Housing for all is still a far cry in our society.

National/Regional Economic Attractiveness: Economic opportunities at national and regional level would facilitate HRD situation.

Takeaways from the HRD Scenario of Different Countries

China: China, with the increased demand of skilled labour force, is offering vocational training at secondary and post-secondary levels. At post-secondary levels this education is highly employment oriented and graduates normally enter the workforce. All the vocational higher education institutions are currently administered at the provincial level.

India

- India renamed its Ministry of Education as Ministry of HRD in 1985.
- The HRD policy of India harness the vast capital by providing them education and skills, through sustained and long term policy and its implementation. In 2005, the National Knowledge Commission was established to guide the government into a Knowledge Based Economy (KBE). The government has been working towards harnessing the demographic dividend in a sustained manner.
- India has a critical mass of highly educated, skilled, English-speaking workers with good IT and technical skills. It has a more relevant educational system, focusing on learning and creativity, ensure the development of future knowledge workers. In 2001, the national program for universal elementary education, ‘Sarva Shiksha Abhiyan’ or ‘Education for All’ was initiated and in 2002 to elementary education was made a fundamental right of every child. The National Policy on Education formulated in 2016, recognizes Education as the most important vehicle for social, economic and political transformation. It seeks to create conditions to improve the quality of teaching, learning and assessment, and promote transparency in the management of education. There is also a huge impetus in improving the quality of tertiary education, align the curriculum to market needs, and provide

opportunities for lifelong learning to workers. As such, quality higher education system such as Indian Institutes of Technology, Indian Institutes of Management, Indian Institute of Science, and the Regional Engineering Colleges, have been established and recognized as learning centres.

Malaysia: The administrative system of HRD in Malaysia is governed by a separate Ministry of Human Resources. Their HRD focuses on knowledge-based economy through optimizing the national brain power. They have a separate HRD fund raised from the HRD levies collected from the employers in the business sectors and solely utilized for developing quality human capital through life-long learning for skill enhancement.

Singapore

Singapore has become one of the most developed countries in Asia primarily due to its strong emphasis and significant investments in Human Capital Development (HCD). There is a unique combination of factors leading to Singapore's success—a committed government, a network of agencies, and a commitment to Tripartitism. To improve the efficiency of the human resource, Singapore follows three basic strategies: First- Educate each individual to his or her maximum potential; Second- Develop skills that meet the needs of industry and business; Third- Promote continuous training and re-training.

- The tripartite system is based on cooperation among employers, unions, and government. One of the important tripartite institution is the Skills Development Fund (SDF). All employers contribute 1% of the total wages of employees who earn S\$1,500 or less a month or S\$2 per employee (whichever is greater) a month to the SDF. Employers can use this fund by claiming about 90% of the training subsidy for their employees' skills development. Thus, employers are motivated to send their employees for these training programs, workers are also benefited and motivated.

- The Multi Departmental Approach-** Multi departmental approach involves all relevant government agencies in Singapore. Prior to 1998, the Ministry of Trade and Industry ascertained information about future human resource needs. The information is collected by the Ministry and translated by the Economic Development Board (EDB) into targets for the specific skills required by the nation, then forwarded to the Council for Professional and Technical Education (CPTe) for its deliberation. The council determined the specific numbers of different skills to be developed by the universities, polytechnics, schools, and Institutes of Technical Education (ITE). This council was superseded by the National Manpower Council (NMC), a ministerial council headed by the minister for manpower to lead in human capital planning. It identifies the nation's human capital needs in the medium (3-5 years) to long (5-10 years) term and maps out the strategies to meet these needs. The report contained in national policy on HCD in Singapore outlines the human capital agenda for Singapore.

Table 8: SWOT Analysis	
Overall SWOT Analysis for HRD Environment: In addition to the above assessment and the analysis on the existing HRD strategy, SWOT analysis is also carried out for formulating the proposed HRD strategy.	
SWOT Analysis by the Researchers	
Strength	Weakness
<ul style="list-style-type: none"> Active People Developing Country Youth Bulge High Potentiality of Bangladeshi Students Adaptability Quick Learning Ability Population 	<ul style="list-style-type: none"> Language skill Trainers' Training Quota System Review & Evaluation Co-ordination Implementation of policies ICT Infrastructures Low Literacy Unskilled Workers

Table 8: SWOT Analysis	
	<ul style="list-style-type: none"> • Low GNI per Capita • Health • Nutrition • Lack of Qualified Managers • Poverty • Poor governance • Income inequality • TVET lacking job orientation
Opportunity	Threats
<ul style="list-style-type: none"> • Expanding World Job Market • High Wages for the Domestic Workers in their Own Country the World • Diaspora all over the World 	<ul style="list-style-type: none"> • Foreign Managers' Occupation • Skilled Human resource of Neighbouring country • Growth of Artificial Intelligence in Developed Countries

Proposed HRD Strategy

General: Having scanned the HRD environment, an attempt will be made in this chapter to delineate a HRD Strategy. However, only the salient aspects of the strategy which need attention in addition to the existing strategy will be included. Hounarable PM also said on 05 Feb 2014 that her government will revise Perspective Plan 2021 and turn it into Long Term Perspective Plan to attain Vision 2041. Therefore, the formulation of a revised HRD strategy to achieve Vision 2041 is a requirement of the day. Bangladesh has already made commendable progress in achieving the Millennium Development Goals (MDGs). Our unrelenting pursuit of Sustainable Development Goals (SDGs), Perspective Plan 2021 and Perspective Plan 2030 will help us in making significant way forward. Therefore, our proposed HRD strategy does not seek to replace the existing vision and strategies rather aims at complementing those by exploring the untapped areas. Our proposed HRD strategy is an extension of the ongoing initiatives. Nonetheless, while reinforcing the ongoing initiatives,

our strategy proposes necessary reforms in some specific sectors and opening new initiatives in others with the ultimate goal of turning Bangladesh into a developed nation by the year 2041.

Identification of the Focal Area: Among the estimated 160 million population of Bangladesh, only 78.6 million constitute the workforce which is less than 50%. A large majority of the workforce is involved in low-skilled and unskilled jobs. For instance, RMG sector, fish production and animal farming account for 4.4 million, 17.1 million and 6.5 million people respectively. Besides, 87% of rural people earn their living from various farming and non-farming agricultural activities (The World Bank, 2016: 9). This concentration of workforce in the lower tier of job market essentially points at two realities: First- people lack the requisite knowledge and skills to find better employment; and Second- the economy is not adequately geared to enable employment in high-end jobs. While foreign remittance constitutes the third largest sector of our economy, those who contribute remittance are again unskilled and low-skilled laborers. Besides, our manpower export remains confined within few specific geographic regions only. We need to explore other countries and regions with high potential, existing and emerging, for exporting our manpower. Therefore, our proposed HRD strategy emphasizes five core issues: administrative reform, quality education, skill development, ensuring appropriate employment and good health.

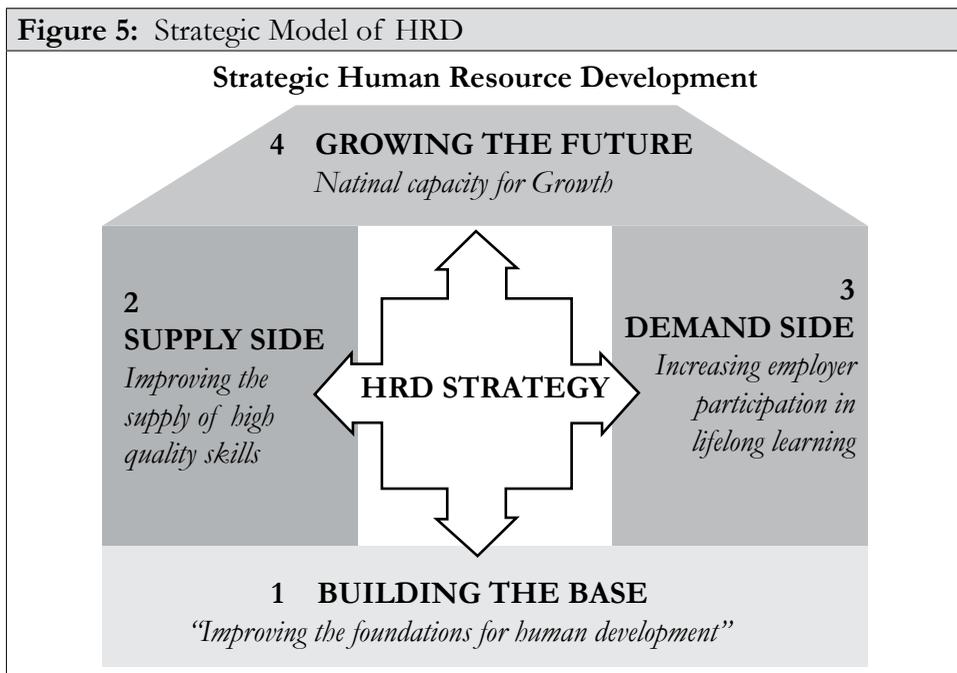
Vision: A well developed human resource base meeting both domestic and international requirements will enable Bangladesh to be a peaceful, prosperous and developed country by 2041.

Objectives

- To stabilize the population growth.
- To increase the GNI per capita for turning Bangladesh into a high income economy (GNI per capita above \$12235).
- To establish a knowledge based Human Resource with high standard of moral and cultural values.

- To develop requisite skills for employment at domestic and international market including self entrepreneurship.
- To create and explore job/ employment both at home and abroad.
- To develop ICT for enhancing HRD.
- To develop a healthy HR with developed infrastructures.
- To harmonize socio-politico-economic imperatives for sustainable HRD.

Strategic Model: The following model has been used in outlining the strategy for HRD:



The model first emphasizes on building the base of human development, then improving the supply of high quality skills to meet the demand side by increasing employer participation in lifelong learning which ultimately will build the national capacity for growth

Setting Priorities: Though inter related, yet pathways following the challenges being faced by the HRD of our country can be enlisted as per following priorities:

- Broadening the base, share and quality of technical education.
- Controlling the ongoing population growth rate.
- Building a healthy HR base.
- Ensuring inclusive economic development: Addressing income inequality.
- Thinking beyond RMG: Diversification of labor intensive industries.
- Bringing relevance to job market demands: Eradicating skills mismatch.
- Developing skilled service sector personnel.
- Enhancing skill/certification to facilitate migrant workers.
- Addressing barriers of women in labour market.
- Ensuring across the board compliance to labour laws.
- Improving quality and relevance of tertiary level education

Roadmap

Administrative Reform and Process Re-Engineering

National HRD Council (NHC): A HRD council (NHC) to be chaired by Honourable PM, need to be formed to formulate HRD strategy/policy and coordinate all activities of the concerned line Ministries, implementing agencies and other stakeholders. There should be representatives from the Ministry of Finance, Ministry of Education, Ministry of Labour and Employment, Bureau of Manpower , Employment and Training (BMET) and other stakeholders.

Formation of HRD Ministry: A HRD Ministry has to be formed to coordinate and tackle HR issues in a more harmonized way.

HRD Strategy/Policy: On formation of the NHC, a detailed HRD strategy/policy will be formulated.

HRD Action Plan: Having formulated the HRD strategy, a detailed HRD Action Plan along with the Monitoring and Evaluation will be developed.

Decision Making: A culture of research based decision making to be implemented in all HRD related issues and its governance. Decision should not be made whimsically out of gut feeling.

HRD Fund: A HRD fund will be created to facilitate the HRD action plan.

To Stabilize the Population Growth

As per demographic definition, by population stabilization we mean constant birth rates and constant death rates in the specific age structure of a population over a period of time. Currently the population growth of Bangladesh is 1.03 %. According to BBS, the population of Bangladesh is likely to be 171684 in 2021, 190735 in 2031 and 201314 in 2041. “The population size of Bangladesh is likely to stabilize with a zero growth by 2030, when an estimated annual two million child births will be replaced by an equal number of deaths in the country,” Ubaidur Rob, a Dhaka University visiting professor and the country director of Population Council, told BSS on the sidelines of an international conference on population and development. Rob said, Bangladesh has almost achieved replacement level of fertility of 2.1, down from 6.6 in early seventies, while four administrative divisions are already below the replacement level fertility.

There is only one morally accepted way to limit the population growth (population size) – that is to decrease the birth rate, which means in practice promoting the importance of medical care, family planning, and the use of contraceptives. Reproductive rights and the right for abortion are very sensitive, and emotionally charged issues. The question of practicing birth control is complex, since it often is not supported by the ruling religion or the culture.

The strategy for population stabilization should put emphasis on the following:

- Decreasing the birth rate.

- All possible measures to be taken to bring the TFR target no higher than 1.7 if a rapid arrest of population growth is to be achieved.
- Increasing female education.
- Empowering women to make their own reproductive choices.
- Further attention with promotion of male sterilization and permanent methods.
- Poverty alleviation and removal of the need for large families.
- Strong political will and advocacy at the highest level, especially in districts with high fertility rates.

To Increase the GNI Per Capita for Turning Bangladesh into a High Income Economy (GNI per capita above \$12235)

In FY16-17, Bangladesh had a GDP of USD 245+ bn, growing at a rate of 7.3% which was one of the highest in the world. Bangladesh's current GNI per capita is \$1,610, according to the Bangladesh Bureau of Statistics or BBS. However, according to the UN, Bangladesh's GNI per capita is \$1,274 (Atlas Method). Bangladesh will have to sustain a high economic growth by which it can produce GNI per capita above \$ 12235 to become a high income category by 2041. If we consider the population of Bangladesh in 2041 to be approximately 200 mn, then we have to have a GNI of approximately 2447+ bn. That would necessitate almost a sustained GDP growth of about 13-14% (reference: Tele Conversation between Brig Gen Kamrul and Dr. Debapriya Bhattacharya, Senior Research Fellow at CPD on 09 April 2018). Efforts to be taken to maximize the GDP growth as much as possible each year. At this juncture, it's not feasible to forecast as to how much increase should be planned in each fiscal year for which a separate research may be carried out by eminent economists of the country. It would be quite challenging to achieve our targeted aim by 2041, but few stunning efforts can help bring this target closer to reality as follows:

- Self sufficiency in food production.
- Housing for all.

Finding another two or three magic economic factors in addition to RMG. Re-thinking agriculture-research and technology based agricultural sector, leather goods, pharmaceuticals, ICT sectors and tourism sector could be our target areas.

- Investing/reinforcing in labour intensive manufacturing.
- Exploration of sea resources (Blue Water Economy).
- Building and developing Sea ports/ Airports connecting Nepal, Bhutan and China.
- Service Sector to be developed as a matter of priority.
- Enhancing research and development to add value to GDP.
- As Bangladesh offers to be one of the most liberal FDI regimes in South Asia, allowing 100% foreign equity with unrestricted exit policy, remittance of royalty and repatriation of equity and dividend, therefore FDI can boost our economy thereby per capita income significantly.
- Promoting SME to build self depended citizen.
- Export oriented industrial sector with controlled automation as complete automation in a country like Bangladesh may cut jobs.
- Desalinization of the south and south-western part of Bangladesh and bring it under scientific agriculture program
- Vibrant tourism sector.
- Finance Minister AMA Muhith has said on 09 July 2015 that corruption eats up 2 to 3 percent of Bangladesh's GDP each year and another 1 percent of it is lost due to political instability. Therefore decreasing corruption can add to our existing GDP.
- Political stability can add approximately add 1% more to GDP.
- Government driven enabling infrastructures where entrepreneurs will find opportunities to flourish.
- Inclusive growth.

- Expertise in e-commerce.
- Enforcing green economy.
- Beside the increase of budget, efforts to be taken on appropriate utilization of the allotted budget.
- Checking river pollution and enhancing water flow through an integrated river management program. It would facilitate agriculture and help build an eco-friendly environment.
- Measures to prevent and cope up with the effects of climate change.

To Establish a Knowledge Based Human Resource with High standard of Moral and Cultural Values

Quality education requires effective reforms in the education sector. Existing system of general education does not have much job orientation. On the other hand, the vocational education is often misperceived as inferior and assigned a lower value in the society. While educational qualification is the essential pre-requisite to find a job, a generalized format of education with no job focus will only add to the list of unemployed graduates. Therefore, in order to harmonize the demand and supply side of the issue, we need to make sure that the knowledge acquired through education does not become wasteful. The system should aim at producing appropriate scholars that the market needs. Besides, any education system devoid of value orientation creates self-seeking individuals who do not care much about the societal and national interests. Therefore, the education system should not only be job oriented but also value oriented. Efforts to be taken to provide stipend and other financial support to the poor and especially to the female students to encourage enrolment, retention and completion. Party politics by students to be kept under control. The education budget must be increased. In FY 2017-18, allocation for the education sector was 2.7% of GDP and 15.5% of the total budget. UNESCO's recommendation is 3.8% of GDP and 20% of total budget. The EFA Global Monitoring Report estimates that providing quality education in the areas of pre-primary, primary and secondary education in low and low-middle-income countries will require a total of USD 340 billion per year (6.6% of GDP) over 2015–2030. We have to align 7FYP and sectoral education-related targets with

SDG4. All including the students should be encouraged in e-reading. Focus has to be made for revision and modification of syllabus to match with current national and global requirements. The TVET strategy on the basis of National Skills Development Policy-2011 should aim at the following:

- TVET should be made more market driven in nature.
- Quality Assurance of the TVET should be maintained in a planned way.
- Enterprise and Training Provider Partnerships should be encouraged.
- Increased funding for TVET will be a good investment towards human resources development.
- Appropriate research and study should be conducted to design proper TVET system.
- Acquisition of up-to-date equipment and tools should be ascertained both for the public and private TVET institutions.
- More engagement of industrial organizations to participate in the formulation of the curricula, provide On-the-Job Training (OJT) programmes and certify the competencies.
- Governments should encourage industrial organizations to participate in TVET through providing incentives, subsidizing apprenticeship wages and assisting the stipend program;
- It is important to ensure harmonized national TVET policies, provision of adequate funds and developing positive social attitudes.
- TVET should be recognized as an investment not a cost, with significant returns including the well-being of workers, enhanced productivity, international competitiveness and economic growth in the long run.
- More arrangement of counseling and guidance to vocational training.
- Systematic professional development of TVET trainers and assessors.
- A TVET System should keep pace with technological advancements and use appropriate technology.

- Continuing TVET and lifelong learning should be encouraged.
- Assurance management system (CAMS) is to be established.
- Change the Mindset of parents, the community and stakeholders about vocational education.
- Closer links between TVET and the employment sector are necessary, as well as concerted actions to promote TVET for women. Introduction of stipends and other financial benefits may be made to encourage girls' participation. Gender friendly environment is also a requirement.

To Develop Requisite Skills for Employment at Domestic and International Market including Self Entrepreneurship

Our skill development efforts should aim at producing enough skilled manpower to meet the demands at home and abroad across the entire range of professions. The large industries should collaborate with the relevant training institutions to produce the type of skills they need. Skill development for the foreign markets should involve pragmatic analysis of the emerging demands. So far, our job search in the global market remained confined within the low and high end only. Opportunities in the middle ranking professions have not been adequately explored. Consequently, our skill development measures also followed the trend. Now, we need to devote a part of our efforts to produce mid-level skills. Training may include, but not limited to, producing paramedics, lab assistants, care-givers, event managers, computer programmers, web designers etc.

Our skill development efforts need to keep pace with the global trend. In a world featured by connectivity and digitization, the demand for manual labour jobs is declining. Our previously preferred destinations for exporting manual labourers are also embracing the change. The ever reducing size of the global market for manual jobs will lead to more competitions among the developing and populous countries to capture the market. Given the shrinking market and intensified competition, mere reinforcing our existing manual skills will not give us any significant edge over the others in securing job markets abroad. We need to develop more digital and technological skills to survive the competition. Recent initiatives to develop the ICT sector have set the pace. We

need now to vigorously push it forward by expanding the infrastructure and training the trainers.

We need to take sincere efforts in building managerial capacities as there is a great dependency on foreign experts especially in service sector. Following measures might help in this regard:

- Developing a study curriculum of educational institutions based on the industry.
- Higher studies should put more emphasis on case study, role play, demonstration, project work and assignment.
- Ensuring teachers' orientation on industries.
- Designing short term training programs on specific managerial skills.
- Taking initiatives to bring back professionally skilled expatriates working around the world in various key positions.
- Providing incentive such as tax-free income for at least 3-5 years and other non-fiscal benefits to the interested expatriates who want to come back to the country

To Create and Explore Job/ Employment Both at Home and Abroad

The rising trend of overseas employment over the last few years underscores the need for continued research on the emerging global markets to ensure the most profitable future employment of our human resources. The search for future global market should go hand in hand with our efforts to expand and enrich our domestic market. The ongoing trend of exporting only unskilled and low-skilled laborers to the global market needs revision. Nonetheless, the domestic market should have priority over the external markets in employing highly skilled manpower lest we have to import the executives to fill in the domestic vacancies. Our efforts to analyze and forecast of the global markets should be diversified focusing on individual countries and regions to identify the specific demands. Our skill development efforts targeting particular regions should be augmented through the appropriate language learning. Efforts of our economists and business communities should be matched by vibrant diplomatic maneuvers and education sector reforms.

The policies should encourage private sector participation in several key sectors like agricultural processing, manufacturing, infrastructure including transportation, telecommunication, power, port, and in the production of high value added products in order to ensure better and more efficient services. These will create job markets in many folds.

Improving the Investment Climate and Jobs-creation Potential

To develop ICT for enhancing HRD. Bangladesh must develop her ICT infrastructure and a time bound target to be set to achieve certain ICT goals. All towns and villages should be under an IT backbone, so that farmers and SMEs can be benefited by market access and getting genuine price of their products. The indigenous/ traditional technology of Bangladesh can be married up with modern technology. All education institutes should have broadband access, while in the tertiary education, a variety of e-learning institutions should be made available to the students. Followings to be pursued:

- Developing appropriate infrastructure including power, and regulatory framework for effective adoption and use of ICTs throughout the country.
- Providing computers to make the students competent with the modern world of ICT and to make them fit for the present and future job market.
- Promoting ICT of the national economy.
- Popularizing e-governance.
- Establishing an advanced internet culture.
- Strengthening the ICT infrastructure.
- Exploiting information resources more efficientl.
- Improving competitiveness of the information industry.
- Strengthening ICT security.
- Improving skills set.

To Develop a Healthy and High Standard Sportive Nation with Developed Infrastructures

HRD and HDI are two separate issues, yet complementary notions of development. Human, as a resource, cannot be developed meaningfully without raising the HDI. While access to quality education, general and vocational, forms the basis of HRD, a malnourished and ailing mass cannot constitute an effective resource. Therefore, our efforts to enhance human skills should be intimately supported by our efforts to ensure access to basic healthcare and nutrition. Efforts should also be taken for shaping the mind of each individual. Efforts to be taken to raise our standard of sports with skilled human resource in that discipline which will in turn enhance the soft power of the country.

To Harmonize Socio-politico-economic Imperatives for Sustainable HRD

Governance: A long term program should be taken for re-building the government and semi-government services. It would entail capacity development in public sector. The basic features of the reform strategy for civil service should include merit-based recruitment and promotion; strong training; ensuring a proper incentive and work environment; establishing and enforcing clear rules of business and codes of conduct; and seeking feedback on performance through a citizen's charter. Followings to be done:

- Action should be taken to institute strong elected local governments that are vested with adequate financial autonomy and accountability for results
- Strengthening Public Private Partnerships (PPP).
- Reforming planning and budgetary processes.
- Better service delivery to citizens.
- Improved services to business.
- Transparency and accountability.
- Empowerment through information.
- Innovative government.
- Reducing corruption.

Food Security and Nutrition: Food security encompasses three elements: availability, accessibility and utilization (USAID, 1996). Food availability refers to the physical presence of food at various levels from household to national level, be that from own production or through markets (FANTA, 2006). Food access refers to the ability to obtain an appropriate and nutritious diet and is in particular linked to resources at the household level. Food utilization refers to the proper use of food, which includes the existence of proper food processing and storage practices, adequate knowledge and application of nutrition and child care, and adequate health and sanitation services (FANTA, 2006). It would also entail the followings:

- Diversified agriculture sector and an enhanced social protection system that leaves no one behind.
- Empowering women is key to achieving sustainable food security and nutrition.
- Increasing budget for research in agricultural sector.
- Digitization of land.
- Water centric integrated landscape management.
- Carrying forward the knowledge gained through research in agricultural sector.

Drugs: Following measures to be taken:

- Strong social fabrics.
- Dedicated stakeholders intervention.
- Engagement of youth in education and development activities.

Extremism: Following measures to be taken:

- Instilling moral values during early childhood.
- Social bondage.
- Education lead to productivity.

Skill Development for Managing Nuclear Energy: Bangladesh is in the right perspective to develop its human resources to take up the challenge of operation and maintenance of its 1st Nuclear Power plant. Government issued directives on 04 June 2012 to develop infrastructure for higher education and training in Nuclear technology. Dhaka University and MIST have opened Nuclear Engineering Department and every year, total 100 students are being enrolled. Total 1424 key personnel will be trained in Russia under procurement contract, 55 Atomic Energy Commission personnel have got training in India and 50 students are taking undergraduate and graduate level nuclear education in Russian federation. Nuclear power will elevate the status of Bangladesh through entering the elite club of nuclear power generation countries.

Foreign Remittance: To be used for enhancing domestic market flow.

Quota Based Job

- Quota based job recruitment should be reviewed to enhance merit based system.
- A well articulated environment and disaster management plan.
- Promoting green economy.
- Production of raw materials for industries.
- “Produce in Bangladesh including TOT” - Produce in Bangladesh-Produced by Bangladesh.

Implementation of the Proposed Strategy

General: In order to realize the government’s Vision-2041, an efficient implementation plan for the proposed strategy is of utmost importance. A well thought out implementation plan would be able to overcome the enormous challenges and difficulties that our nation is facing.

Focal Point During Implementation: Following areas will be focused:

- Awareness of the political, social, and cultural factors that shape strategy implementation.
- Investing in human capital.
- Building competitive workforce.
- Intensive survey and analysis of the human resource strategies, strengths and weaknesses of the existing managements practices and loopholes; and then process re-engineering accordingly.
- Examines innovations of progressive and environmentally sustainable businesses including processes, market infrastructure development including inter-organizational partnership both inter-governmental and tripartite.

Roadmap: A Time-bound Paradigm. Basing on the priority and challenges, an elaborate albeit pragmatic roadmap need to be set. Before we can achieve the Vision-2041, we plan to implement our HRD strategy within following three sequential time frames.

First Time Period-upto 2021: As this is the timeline for achieving the goals of our 7th 5 year plan and Perspective Plan FY 2016-2021 and Bangladesh wants to become a middle income country by 2021. The SDG goals also being incorporated within this period. Therefore this timeline has been selected.

Second Time Period-From 2022 to 2030: As we are expected to attain all the SDG goals by 2030 and this time period also includes two 8th 5 year plans like FY 2021- 2025 and 9th 5 year plan FY 2026-2030, we are planning to take it as a capital investment towards 2041 to actualize our Vision 2041. We are going to call this 'Boost Up Period'

Third Time Period- From 2031-2041: This will be called a 'Take Off Period'. It would also be overarching along with the goals of 10th 5 year plan and 11th 5 year plan. Within this time period , we want have an exhaustive evaluation of the policy direction, meeting goals and loopholes therein in the year 2035 and then incorporate it in 11th 5 year plan (2036-2041).

Upto 2021: Practical steps required to accelerate a meaningful skill development program (Skill Bangladesh) should commence without any delay. However, the foremost requirement of setting guidelines and orchestrating an integrated work plan will take major portion of this period. The efforts for achieving the set objectives will continue side by side.

Benchmarks to be Achieved: Synergy, Formation of National HRD Council, (NHC), Formation of HRD Ministry, Survey of Working Population, Status of Present Skill, Target Research, Formation of HRD Policy, Formation of HRD Action Plan, Continuation of SDG Goals Attainment Program, Capacity Development in Public Sectors including Strengthening Government and Semi Government Services, Strengthening Public Private Partnership (PPP).

Other Progress Indicators

- Physical access to education ensured through improved communication network.
- Value based lessons and health education introduced in every primary school.
- English introduced as the second language in all primary schools.
- Primary and Junior Secondary level board exams discontinued.
- Dignified salary of teachers ensured.
- All private coaching banned.
- An appropriate academic accreditation agency is in place.

How to Implement

Planning to Achieve Synergy at National Level: All sectors of Bangladesh should formulate future-looking HRD strategy as the prime requirement. Therefore, after re-articulating concerned ministries, the principal action committee (NHC as proposed in the preceding paragraphs) should undertake the said task.

Formation of National HRD Council: A National HRD Council (NHC) will be raised, directly under the Prime Minister. The focus of this body should be to empower the workforce with required skills, knowledge and qualifications to make it globally competitive. The NHC should be the nodal agency, which would make policies, coordinate and take feedback to enhance the skill of people. It should have a Secretariat.

Formation of National HRD Ministry: A National HRD Ministry will be formed to harmonize the HRD issues.

Survey of Working Population and Status of Present Skill: Workers employed in the informal sector needs to be quantified through a field survey at the national level. Consequently, other connected laws can be enforced for their protection. The skill development status of the country also need to be reviewed within this time period.

Target Research: Carryout target research to ascertain following:

- Job Market demands as per the employer.
- Occupational prospects of different markets in selected countries.
- Identifying adaptive labour industries outside RMG.

Formation of HRD Policy: An exhaustive HRD Policy to achieve vision 2041 to be formulated within this time period.

Formation of HRD Action Plan: HRD strategy/policy should be followed by an exhaustive HRD Action plan.

Mid Term Goals- Upto 2030 (Boost Up Period): We consider year 2021-2030 as a 'Boost Up Period', because during this period resources will be mobilized to elevate the global GDP to attain the SDG which is in fact will help in attaining our target of becoming a developed nation by 2041. The maximum load of implementing the strategy will be borne by this period.

Bench Mark to Be Achieved: Attainment of SDG Goals, Stabilization of Population by 2030, Reaching HDI of High Medium, Marketability of HR as per HRD Policy, Education for All up to Secondary Level, Gradual Increase

of Education Budget. Globally Trendy ICT, Creating all Efficient Power Generation including Nuclear Technology Personnel by 2026.

How To Implement

Attainment of SDG goals by 2030: It would be facilitated as all the SDG goals are conceived in the tasking of different line ministries and stakeholders.

Stabilization of Population by 2030: If the present fertility rate of 2.1% can be brought to 1.7 alongwith the other measures outlined in the strategy, then we will be able to stabilize the population by 2030.

Reaching HDI Index of High Medium (GNI per Capita 4035 USD) by 2030: All efforts to be made for reaching HDI Index of High Medium (GNI per Capita 4035 USD) by 2030.

Other Associated Progress Indicators

- Education sector reform.
- Intensifying SME along with other strategies.
- Attaining marketability of HR through skill development as per HRD policy.
- Education for all up to secondary level.
- Globally trendy ICT, internet in each school.
- Creating all efficient power generation including nuclear technology personnel by 2026.
- A school for the children with special needs in every Upazilla.
- Secondary and higher education institutions have proper library and laboratory facilities.
- Compulsory learning of a preferred third language introduced in all secondary schools.
- Career counseling program introduced in every secondary school.

- Large industrial sectors financing the vocational training in the schools and offering internship.
- Consulates with at least a labor attaché established in all countries demonstrating strong future employment potential.

Third Time Period- From 2031-2041: This period will be known as ‘Take off Period’. At the end of this period, we foresee Bangladesh as a Developed Country with social parity, minimization of income inequality. A comprehensive evaluation of the achievements and failures to be made in 2035 to add/ modify the planned strategy so that we can attain all the benchmarks by 2041.

Benchmark to be Achieved: High Income, Healthy and Sportive Nation, Literacy, Knowledge Based Society, Healthy and Sportive Citizen, Low Unemployment with Desired Skills for Employment or Self Employment, Competitiveness in the Global Market through Improved Skills, Knowledge and Qualifications that are Recognized for Quality across the Globe, Increased Education Budget, High Level of ICT Education with Export Oriented ICT Infrastructures, Efficient and Effective Service Sector with Skilled Domestic Workforce, Industrialization with Gradual/Controlled Automation, Socio-politico-economically Vibrant, adept in Fine Arts and Culture and finally Gender Parity.

Other Associated Progress Indicators

- Embassies with full component established in all countries demonstrating strong future potential for employment.
- Universities have remote access to digital libraries worldwide.
- Each industrial sector has its own functional training institutions.

Overall Implementation Mechanism

Education Sector Reforms

The strategy of introducing a value-oriented and job-oriented education system should be implemented in phases. The primary level of education should focus on developing the basic literary and numeracy skills along with

value-based lessons and basic health education. As the students move up the education ladder, the curricula should be refined to match the demands of job market. While doing so, the individual skills and motivation should be duly aligned with chosen curricula through career counseling. The lack of such counseling and alignment often lead people to seek and find jobs in sectors irrelevant to their prior academic knowledge.

Considering the enormous prospect of overseas employment, language learning should form an essential part of our education. Learning English as the second language should be mandatory right from the primary level while learning an appropriate third language, basing on the target job markets abroad, should be mandatory from the secondary level. Initially, there could be a scarcity of qualified language teachers given the vast geographic area the potential future job market would cover. Nonetheless, the expertise of large pool of expatriates can be utilized to serve the purpose.

Access to the tertiary education should be very competitive; limiting access to only those who have the requisite aptitude. Unrestricted access to tertiary education will produce many so-called certified graduates who otherwise lack the desired level of academic skills. This in turn, will undermine the credibility of our examination and certification system to a global audience. While the private universities should take a share of responsibility in imparting higher education, their curricula should be strictly scrutinized and validated by an appropriate accreditation agency. The curricula of tertiary education should be predominately research-based rather than mere teaching courses. The higher education institutions should harmonize their research works with those deemed necessary by the relevant ministries. This will maximize the benefits of academic research.

Efforts should be taken to obtain due recognition of our national accreditation by the international organizations. An effective way of doing this could be arranging exchange program with foreign education institutions. Theme and issue based international workshops, seminars, conferences, research and publications can also be arranged in joint collaboration with foreign universities.

The ongoing test-centric education system and excessive grading consciousness have led to the inevitable commercialization of education in Bangladesh. Premature leakage of question papers and the mushrooming private coaching centers help the students to obtain good grades but not quality education. Reduced number of board examinations, effective teachers' training, better compensation for teachers in the schools and a strict ban on private coaching will help reverse the unhealthy process of commercializing the education.

In order to ensure easy access to education centers, the remote areas should be connected with the nearest upazilla headquarters through adequate communication networks. Slowly and gradually, all the education centers should be brought under internet coverage to provide the students access to global sources of learning. Particular attention should be given to providing education to the children with special needs. The ongoing initiative of the armed forces to educate the children with special needs should be replicated by the civil administration with the ultimate target of establishing at least one school in every upazilla for them. Besides, schools providing secondary and higher education must have a proper library and appropriate laboratories for science faculty. Gradually, the all universities should create remote access to the global network of digital libraries to facilitate research. Government and private sector initiative to provide formal education should be further compounded through community involvement in non-formal education.

Education Budget must be Gradually Increased

Skill Development

In order to overcome the negative perception about vocational education, this can be embedded in the system of general education. Besides enhancing future job opportunities, embedded vocational training will enable the learners to explore how their academic knowledge relates to specific jobs. Large industrial sectors can add further momentum to the vocational education through a well-developed public-private partnership in the form of training financing, providing internship and subsequent employment. Such partnership

will enable relevant industries to propose modifications in the vocational curricula to align the qualifications with their specific needs. Alternatively, we may consider introducing a screening process- basing on the attitude, aptitude and performance records of individual students at primary level to group them into general and vocational education system to minimize irrelevancy of academic knowledge. Many European countries, most notably Germany, have benefited from such system of education.

The large industrial sectors and their apex organizations like FBCCI, BGMEA, BKMEA and BEPZA should be encouraged to run their own technical schools with a curriculum that meets the specific needs of their respective industries. This will reduce the need for subsequent on-the-job training. Accredited NGOs may also be encouraged to take a share of the responsibility. NGOs can train the people at grass-root levels on entrepreneurship skills. We may bring all the aforementioned measures for skill development under one concept/action plan namely 'Skill Development Scheme (SDS)' which should be one of the top priorities of proposed HRD Ministry.

Creating Employment

The most effective way to ensure maximum employment is to encourage entrepreneurship. Small entrepreneurs should be offered soft loans on easy terms to establish their own little private business and industries. Importing machines and equipment for small firms should be subject to absolute minimum tax burden. At national level, more number of EPZ and industrial parks should be established to create favorable environment for domestic and foreign investors. Many of our talented young learners study abroad and get settled in advanced countries with dignified jobs. Any self-driven modernization process pre-supposes that we stop this 'brain drain'. We can effectively transform this 'brain drain' into 'brain gain' by offering these young scholars good jobs at home with appropriate compensations. This will enable our young generation to dedicate their knowledge and skills for their homeland and at the same time reduce our dependence on foreign 'white collars' who siphon out a large part of remittances earned by our unskilled laborers.

A very unproductive phenomenon in our job sector has been the notable mismatch between the academic qualifications and practical skills needed for specific jobs. For instance, it is not very uncommon in our country to find someone with a PhD in microbiology serving as a police inspector, a medical graduate serving as a customs inspector or a graduate from the agricultural university serving in a cement factory. This is certainly a waste of academic knowledge. Our Public Service Commission should be more concerned about this domestic brain drain.

Exporting skilled manpower abroad depends to a large extent on our ability to secure international job markets through vibrant diplomacy. The Foreign Ministry should expand its network of activities by opening embassies and consulates in the countries with strong employment prospects. Each embassy and consulate should have highly qualified labour attaches to research and connect the markets with our workforce. The embassy staffs must try every means to create a very positive image of our country abroad. Our recent economic gains as manifested through our ascension from LDC to developing country should be widely circulated to the global audience. Such country branding would be crucial to dispel the negative images that have persisted for long and discouraged the destination countries to open labor markets for Bangladesh.

Health Sector

Bangladesh's Universal Health Coverage principles must be based on quality, efficiency and equitability with special attention to improving the health status of the disadvantaged and the underserved poor, women, children, elderly, marginalized and physically and psychologically challenged. In line with SDG 3 health goal to "Ensure healthy lives and promote well-being for all at all ages", and its 'six line of actions', the Strategic Objective of BD is to ensure quality and equitable health care for all citizens by improving access to and utilization of health, population and nutrition related services. Health care must strengthened systems to support service delivery; and effective stewardship and governance.

The challenges of health sector in Bangladesh can be identified primarily as inadequate finances, inequity in health financing and utilization; and inefficient use of existing resources. To address the health financing issues for the next 20 years, resourcing from funds from tax-based budgets, existing community based and other pre-payment schemes and donor funding need to be started to ensure financial protection against health expenditures for all segments of the population, starting with the poorest through a gradual process by 2041.

Generate more resources for effective health services. Improve equity and increase healthcare access, especially for the poor and the vulnerable; and enhance efficiency in resource allocation and utilization. It proposed three strategic interventions and supportive actions, such as design and implement a social health protection scheme; strengthen financing and provision of public healthcare services; and strengthen national capacity. By the end of 2030, Bangladesh health sector infrastructure and qualitative health facilities should be developed to international standards, so that the population is able to reap the benefits internally, within the country. This will save huge currency outflow abroad, with a massive positive impact on Bangladesh economy. Huge population of Bangladesh will receive good health care to play positive role on the overall development of human resources and keep Bangladeshi people and society physically and mentally fit allowing huge work force to be employed efficiently and effectively resulting positive output for the nation.

Educated and trained physicians, nurses and midwives to meet the huge employment opportunities of development of health sector of Bangladesh and also export of health care professionals abroad is a goal that must drive the health sector to bring a substantial boost to the economy. At this point, developed Bangladeshi health sector will attract huge health tourist from throughout the world and earned huge foreign currency. This will further contribute to improve Bangladesh economy index to make Bangladesh a developed country by the year 2041.

Additional Support Measures

Our strategy will not succeed unless we intimately engage the bureaucracy. A sense of policy ownership should be instilled among the bureaucracy by intimately involving them in articulating of 'Action Plan' pursuant to this strategy. They are the ultimate executors and overseers of any strategy implementation. Unless they are taken aboard, the plans may encounter undesirable red-tapism.

Our efforts to develop human resources will not succeed unless will focus on the health and nutrition of grass-root people. The ongoing revolution in providing access to basic healthcare through community level health clinics must continue. Besides, the relevant ministries should now concentrate on better resourcing and management of the health clinic operating at community, union and upazilla levels ensuring optimum availability and accountability of the doctors, paramedics, medicine and equipment.

“Produce in Bangladesh including TOT” - Produce in Bangladesh-Produced by Bangladesh. To become an indigenous manufacturing giant, “Produce in Bangladesh” initiative should be launched based on pillars to boost entrepreneurship, create backward linkage industry, create jobs in all promising sectors. Complete change of the government’s and entrepreneurs mindset - a shift from “government’ approach to PPP, a need for job-full growth. It entails a whole new approach.

New Mindset: Complete change of the government’s and entrepreneurs mindset - a shift from “government’ approach to PPP, a need for job-full and inclusive growth.

Monitoring and Evaluaton of the Proposed Strategy

“Along with sound development strategy, good programs and good policies, the ability to implement the plan and evaluate the results of the plan are critical determinants of the success of the planning effort. Proper implementation of the plan requires attention to good governance, public administration capacity and monitoring and evaluation. The challenge of ensuring good governance in Bangladesh is well known. Low public administration capacity,

occasional weaknesses in economic management and corruption lie at the heart of the overall shortcoming in national governance. As a result, the public sector has not been able to play as effective a role as could have been the case in providing services and creating an environment for growth.” 6th five year plan report by government of Bangladesh.

Monitoring and Evaluation Strategy: The success of the strategy will only depend on the proper implementation of its programmes and projects, implementation monitoring and post implementation evaluation. This is particularly important in view of the fact that it is a flexible plan and plan projections will be revised based on evaluation of actual performance. It is also extremely important to have a realistic assessment from time to time and give a course correction if needed. The Government’s Implementation, Monitoring and Evaluation Division (IMED) is the apex body that tracks the public sector development program. There is a requirement to have a body which is proactive, has an authority to make changes and directs the government to make changes in the allotment of resources.

Present Monitoring Arrangements

Planning Wings in Administrative Ministries: Planning wings of the administrative ministries were created to strengthen their project planning and monitoring capabilities. Monitoring is carried out mainly through obtaining progress reports from the project management, field inspections and monthly review meetings in the ministries.

Economic Relations Division of Finance Ministry: ERD is responsible for aid mobilisation and also for programming of external resources for projects. They undertake quarterly and annual reviews of fund utilization, especially foreign aid. A cell to keep track of the issues related to aid line-up and utilization is functioning in the ERD. The information collected and collated by this cell provide important inputs for the policy makers.

Finance Division: With the assistance from UNDP, the System for Autonomous Bodies Reporting and Evaluation (SABRE), as a computerized database is in operation at the Autonomous Bodies Wing of the Finance Division. SABRE envisages to cover all autonomous and semi-autonomous

bodies as well as their units or enterprises falling under the budgetary control of the Finance Ministry.

Development Partners: Most of the development partners have developed their own system of progress monitoring, namely Tri-partite Review Meetings (Partner Agency, Respective Ministry/Division and ERD), Review Meetings, Review Mission Reports, Consultants' Progress Reports and Local Mission Reports, etc.

There is a supervising and monitoring entity (principal coordinator of SDGs) which oversees the implementation of SDG programs and projects.

Monitoring and Evaluation (M&E): An effective monitoring and evaluation strategy calls for a combination of institutions, quantitative targets and benchmark, data and political commitment. In Bangladesh, the government has already provided political support and interest in developing an effective results-based M&E as articulated in the 6th plan. We plan to monitor and evaluate the progress and effectiveness of our proposed strategy against three clearly defined benchmarks. Practical steps required to accelerate a meaningful human resource policy should commence without any bureaucratic delays. The foremost requirement of setting guidelines and orchestrating an integrated work plan is the first step towards implementation of the strategy. For monitoring and evaluation focusing HRD through creation of a learning environment and structural design that promotes learning and development for marketability, performance improvement and entanglement of core competencies. It is imperative that the country's developmental needs and specific requirements/shortages to be indicative to skill/resources development/gathering efforts. This will, in fact, ensure that problem areas and other deficiencies are identified proactively, and accordingly solutions are attached/imparted/implemented. Having a proactive monitoring and evaluating mechanism to evaluate whether subscribed (technology, knowledge transfer etc.) or acquired skills are harnessing productivity mentioned in the development strategy will go a long way in achieving the stated goals.

Challenges in Monitoring and Evaluation: Apart from the governance issues of lack of economic management, corruption, delays in feedback mechanism and inertia in the system, other challenges are given below:-

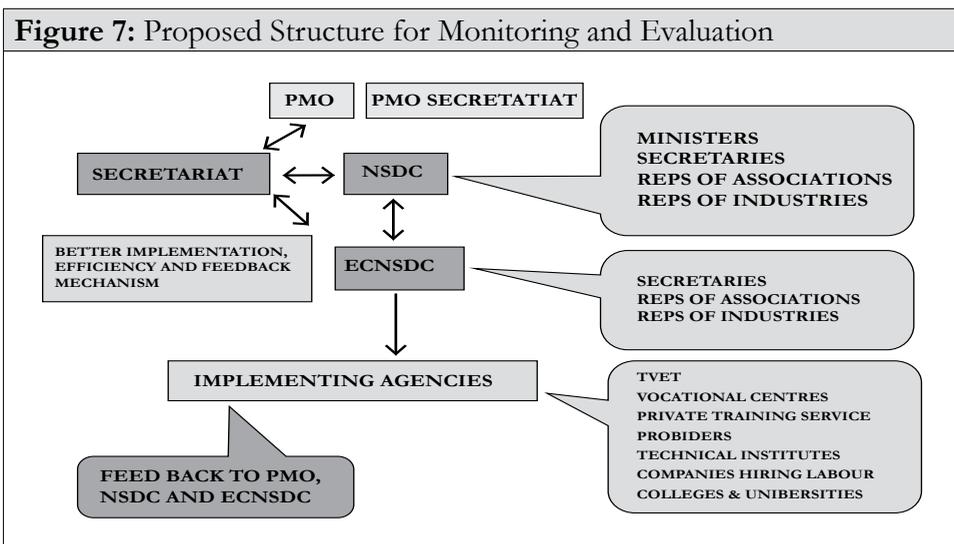
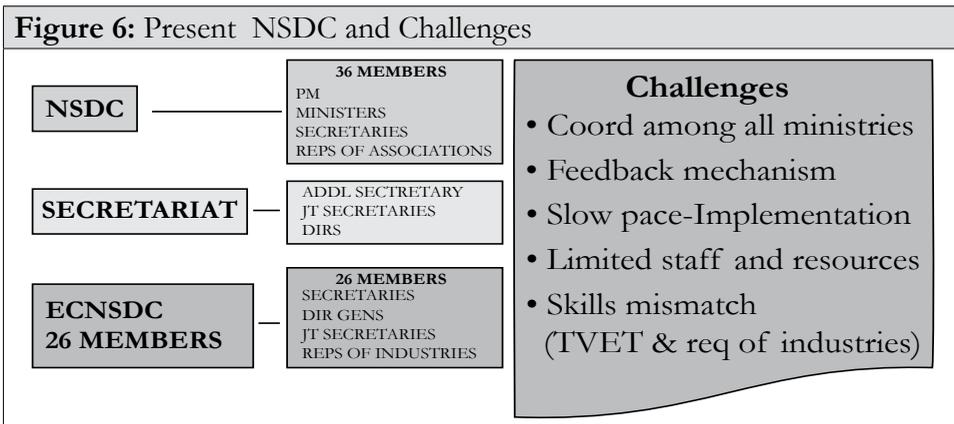
- Planning wings in Ministries are understaffed and ill-equipped to carry out the planning, monitoring and evaluation functions effectively.
- Inspection of projects by the concerned administrative Ministries and the executing agencies is also reported to be inadequate.
- Challenges in monitoring progress of Inter-Ministerial projects (programs/projects cross cutting ministries) due to lack of an ‘umbrella’ org.
- Lack of professionals and technocrats in the monitoring bodies.
- Delay in prioritization of programs and projects.

Proposed Way Forward to Streamline Effective Monitoring and Evaluation: Without a strong monitoring and evaluation agency, there is a risk that resources might get locked in over the medium-term into programs that are not working or relevant in the changing economic environment. Integration in governance to streamline inter ministerial programs/projects to address cross cutting issues and avoid overlapping so it is. It will not only promote accountability and transparency in public spending and also ensure that resources are adequately used to achieve development results. It is proposed to establish an overarching body which oversees, monitors and directs the future course/course correction to align the goals to SDGs and Vision 2041. The proposed body could be as follows:

PMO: The PMO should be that overarching body which carries out the task of monitoring and directing the future course. As there is a Chief Coordinator for Sustainable Development Goals (SDG) Affairs in the Prime Minister’s Office, there is a requirement to establish a similar high powered coordinating body for Vision 2041 under the umbrella of PMO.

HRD Council to HRD Ministry: The economic progress of the country in the last decade has empowered each ministry related to Human Resource and has thrown a number of new challenges and issues. The HRD Council may not be futuristically aligned to undertake the tasks and activities of unleashing Vision 2041. This will require a full fledged ministry to tackle HRD issues in a more harmonized way.

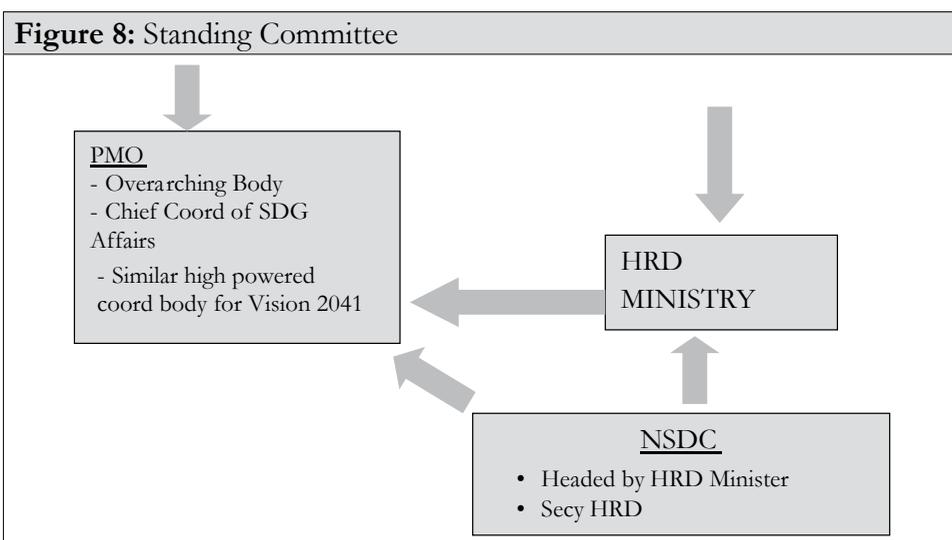
Overhaul of National Skill Development Council: To harness the demographic dividend a ‘Skill Bangladesh’ programme needs to be better sharpened with the future demands of the SDGs and Vision 2041 strategies. Skills need to be acquired through both formal and informal channels. There are numerous skill development eco systems evolved over the period in different contemporary countries. Bangladesh, the 36 member National Skill Development Council was set up in 2011, where PM is the chairman. In the last six years a number of challenges have come to light which the organization faces towards accomplishment of the task of skill development. The Prime Minister’s Office (PMO) needs to be delinked and be an agency which monitors and directs the council. The proposed changes in the ecosystem have been illustrated below:



Standing Committees: The Parliamentary Committees formed exclusively of Members of the Parliament for such purposes as to evaluate legislative proposals and to scrutinize activities of the executive government. In effect, these committees in most democracies provide a means of let the parliamentarians remaining watchful on the policy-management processes. However it is seen that the parliamentary committees work in isolation with the concerned Ministry only. Hence the larger picture may not be available especially when the government is unfolding a long term strategy concerning various ministries. It is, therefore proposed that the PMO should receive the reports/feedback from the Ministry as well as the Standing Committee and is empowered to take a decision. The following Standing Committees responses/ feedback/suggestions/recommendations should be aligned and disseminated to HRD Ministry as and when it is formed through the concerned ministries/divisions:

- Standing Committee on Ministry of Finance
- Standing Committee on Ministry of Planning
- Standing Committee on Ministry of Local Government, Rural Development and Co-operatives
- Standing Committee on Ministry of Industry
- Standing Committee on Ministry of Expatriates Welfare and Overseas Employment
- Standing Committee on Ministry of Education
- Standing Committee on Ministry of Health and Family Planning
- Standing Committee on Ministry of Post, Tele Communication and Information Technology
- Standing Committee on Ministry of Labour and Employment
- Standing Committee on Ministry of Power, Energy and Mineral Resources

- Standing Committee on Ministry of Women and Children Affairs
- Standing Committee on Ministry of Agriculture
- Standing Committee on Ministry of Social Welfare
- Standing Committee on Ministry of Primary and Mass Education
- Standing Committee on Ministry of Youth and Sports



Result Based Monitoring and Evaluation: The mandate for establishing result based monitoring and evaluation would consist of following and would be a way forward in achieving monitoring and evaluation of a huge order:

- Cooperate with other stakeholders across government in developing and finalizing a Results Framework, against which can track achievement of the Government of Bangladesh in terms of economic and social policies and strategic priorities.
- Work with the Bangladesh Bureau of Statistics and other data providers to develop and ensure adequate and timely flows of data from the National Statistical System that will allow meaningful monitoring of the indicators included in the Results Framework.

- Coordinate with line Ministries and other service providers to ensure the availability of supplementary quantitative and qualitative information to facilitate the monitoring of sectoral performance relevant to the indicators in the Results Framework.
- Regular reports to the Prime Minister, the Cabinet, the National Economic Council and the ECNEC on an annual basis, supplemented by ad hoc policy briefs on matters requiring the attention of and action by the Government, and to ensure that its regular reports are both published and drawn to the attention of the media and the relevant committees of Parliament.

Recommendations

- In addition to the factors like planning population and generating human capital, promoting and sustaining health, improving nutrition, education, vision for education, training and skill development, promoting education, and promoting science and technology, few other aspects like provisions for making Bangladesh a high income country, ICT and other related socio-politico-economic imperatives to be included in the next Perspective Plan (2021-2041) for building a developed human resource to turn Bangladesh into a Developed Nation by 2041.
- A HRD Council (NHC) to be chaired by Honourable PM, need to be formed to formulate HRD policy and coordinate all activities of the concerned line Ministries, implementing agencies and other stakeholders. There should be representatives from the Ministry of Finance, Ministry of Education, Ministry of Labour and Employment, Bureau of Manpower, Employment and Training (BMET) and other stakeholders.
- A HRD Ministry has to be formed to coordinate and tackle HR issues in a more harmonized way.
- On formation of the NHC, a detailed HRD strategy will be formulated. Having formulated the HRD strategy, a detailed HRD Action Plan along with the monitoring and evaluation will have to be developed.

- A culture of Research Based Decision Making to be implemented in all HRD related issues and its governance. Decision not to be made whimsically out of gut feeling.
- A HRD fund will be created to facilitate the HRD action plan.
- Increased allocation of budget in education sector.
- Making public and private universities accountable for research based knowledge.
- Increase of Labour Attache in countries where the potential job market for Bangladeshi workers is high.
- Modification of existing quota system immediately.
- For monitoring and evaluation, the PMO should be that overarching body which would carry out the task of monitoring and directing the future course. As there is a Chief Coordinator for Sustainable Development Goals (SDG) Affairs in the Prime Minister's Office, therefore there is a requirement to establish a similar high powered coordinating body for Vision 2041 under the umbrella of PMO.

Conclusion

The study was aimed at evaluating HRD strategy of Bangladesh and propose a future HRD strategy in achieving the vision of a developed country by the year 2041. During the study, the researchers found that Bangladesh in its SDG goals, aspires to be a middle income country by 2021 (Per Capita Income \$1005-\$12235). To become a developed country, Bangladesh needs to have per capita income above \$12235 along with other infrastructure development. Though Bangladesh is doing well economically by fulfilling the requirements of becoming a developing country by the UN recently, yet it has to go a long way to become a developed country by 2041. The global commitment of Bangladesh of implementing the SDGs by 2030 has been actually acting as catalytic facilitator for implementing its vision 2041.

As most of the SDGs are related to Human Development and the concept of a developed country also pre-supposes a highly skilled and developed Human Resource, therefore a well-defined HRD strategy can help turning our aspiration into reality.

While examining the existing HRD policies in Bangladesh, we found that the aspects of HRD are addressed by different ministries. The research included a detailed study of the National Education Policy 2010, 7th 5 year plan, Skill Development Policy 2011, National Healthcare Policy 2011 focusing on literacy, skill development, health, ICT education, trainers' training, domestic and international job markets. Case studies related to HRD on India, Malaysia, Singapore and China were also made to find out takeaways if any. In the research, in education sector it was found that the literacy rate though improved, yet it is only 72.3% (2016). Technical education needs quality improvement, number of teachers are less and they need more training and finally the budget allocation needs to be increased. The process of calculating the literacy rate also need to be more objective. In skill development, it was found that there is a lack of expert trainers, irrelevancy of teaching, inadequacy of training, limited inter-agency coordination between employers and training institutions. The Skill mismatch is a limiting factor towards the absorption of 2 million domestic labour each year (7th five year plan, p 546). Women enrollment in technical and vocational training is relatively low limiting employment opportunities at home and abroad. In the field of ICT, it has been found that there is a lack of availability of modern ICT tools, lack of adequate skills on ICT tools and lack of awareness impacting contemporary learning particularly in the rural areas. In health sector, there is a shortage of 60,000 doctors, 280,000 nurses, and 483,000 technologists in Bangladesh. As opposed to WHO estimate required to fulfill MDG targets of medical professionals (23 per 10,000 populations), Bangladesh has about 6.02 per 10,000 medical professionals (7th 5 year plan). On the service delivery, there are serious concern about quality of health care, inappropriate treatment by health care providers, long waiting time, poor communication with patients by doctors, high cost of healthcare, lack of privacy, illegal charges etc. There are also problems related to child marriage and teen age pregnancy. While looking at the job market, it was

found that Bangladesh has good potential in the world job market including Middle East, but need to build a more skilled workforce to meet the demand in domestic and international arena. There has to be improvement in the language proficiency also to enable Bangladeshis to secure job internationally. Quota based education and job vacancies also need to be revised. Recently Honourable PM's assent in the Parliament on 10 April 2018 to remove the quota system is a timely and prudent decision which will have a tremendous positive effect in the domestic job market in future.

In its run for achieving the target of becoming a developed country, Bangladesh's present strategy is working satisfactorily. But it was deduced from the statistical and empirical evidences that Bangladesh need to add/modify some of the strategies along with the work plan for implementing the SDGs. For the implementation of the HRD strategy we chose three time bound periods as Upto 2021, then from 2022 to 2030 which we have termed as 'Boost Up Period' and finally from 2031 to 2041 which we have called 'Take Off Period'. In that, the requirement of establishing a separate HRD Council and a HRD Ministry or remodeling the Education Ministry into HRD Ministry should be a top priority. There has to be reform in our education sector which should include job oriented education, value- based education at primary level, prioritization of vocational education from secondary level. Learning English as the second language should be mandatory right from the primary level while learning an appropriate third language, basing on the target job markets abroad, should be mandatory from the secondary level. There should be reduced number of board examinations, effective teachers' training, better compensation for teachers in the schools and a strict ban on private coaching will help reverse the unhealthy process of commercializing the education. Research and development to be given much priority in order to use the acquired knowledge for human and social development. There should be skill development program suiting the job environment in international market matched by pragmatic diplomatic initiatives in different regions of the world. Most importantly the budget for education need to be increased. We need to vigorously push forward our ICT education drive undertaken by the concerned Ministry by expanding the infrastructure and training the trainers. While access to quality education, general and

vocational, forms the basis of HRD, a malnourished and ailing mass cannot constitute an effective resource. Therefore, our efforts to enhance human skills should be intimately supported by our efforts to ensure access to basic healthcare and nutrition. The most challenging part for us will be to cross the threshold of GNI per capita of \$12235. It would be a herculean task, but not impossible, even if we can reach close to it, our aspiration of becoming a developed nation by 2041 is likely to turn into a reality. From the study, it is evident that if we can execute our existing strategy with the aforementioned addition/modification, we are then expected to achieve the vision of becoming a developed country by 2041.

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Annex A To Paper on HRD Strategy

Millennium Development Goals (MDGs) and Sustainable Development Goals (SDGs)

MDGs

World leaders came together in September 2000, to adopt the MDGs, and set out a series of 8 time bound development targets, with a deadline of 2015. The 8 MDG goals include reduction of extreme poverty, improve primary education enrolment and completion, fight against HIV/Malaria/TB, reduce under five mortality rate, improve environmental sustainability, render global partnership etc.

SDGs

The Sustainable Development Goals (SDGs) are a collection of 17 global goals set by the United Nations. The broad goals are interrelated though each has its own targets to achieve. The total number of targets is 169. The SDGs cover a broad range of social and economic development issues. These include poverty, hunger, health, education, climate change, gender equality, water, sanitation, energy, environment and social justice. The SDGs are known as “Transforming our World: the 2030 Agenda for Sustainable Development” or Agenda 2030 in short. The goals were developed to replace the Millennium Development Goals (MDGs) which ended in 2015. Unlike the MDGs, the SDG framework does not distinguish between “developed” and “developing” nations. Instead, the goals apply to all countries. The SDGs build on the principles agreed upon in Resolution A/RES/66/288, entitled “The Future We Want”. This was a non-binding document released as a result of Rio+20 Conference held in 2012. Paragraph 54 United Nations Resolution A/RES/70/1 of 25 September 2015 contains the goals and targets. The stated sustainable goals are as follows:

- Goal 1: No Poverty-”End poverty in all its forms everywhere.”

- Goal 2: Zero Hunger-”End hunger, achieve food security and improved nutrition and promote sustainable agriculture”.
- Goal 3: Good Health and Well-being-Ensure healthy lives and promote well-being for all at all ages.”
- Goal 4: Quality Education-”Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.”
- Goal 5: Gender Equality-”Achieve gender equality and empower all women and girls.”
- Goal 6: Clean Water and Sanitation-”Ensure availability and sustainable management of water and sanitation for all.”
- Goal 7: Affordable and Clean Energy-”Ensure access to affordable, reliable, sustainable and modern energy for all.”
- Goal 8: Decent Work and Economic Growth-”Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.”
- Goal 9: Industry, Innovation and Infrastructure - Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation”.
- Goal 10: Reduced Inequality-”Reduce income inequality within and among countries.”
- Goal 11: Sustainable Cities and Communities-”Make cities and human settlements inclusive, safe, resilient and sustainable.”
- Goal 12: Responsible Consumption and Production-”Ensure sustainable consumption and production patterns.”

- Goal 13: Climate Action-”Take urgent action to combat climate change and its impacts by regulating emissions and promoting developments in renewable energy”.
- Goal 14: Life Below Water-”Conserve and sustainably use the oceans, seas and marine resources for sustainable development.”
- Goal 15: Life on Land-”Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.”
- Goal 16: Peace and Justice Strong Institutions-”Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.”
- Goal 17: Partnerships to achieve the Goal-”Strengthen the means of implementation and revitalize the global partnership for sustainable development”.

Development in all these pillars centres around Human and Human Resource Development. HRD encompasses broadly three main domains i.e training and development, organizational development and career development. As per UNDP, environmental sustainability indicators represent a mix of level and change indicators related to renewable energy consumption, carbon-dioxide emissions, change in forest area and fresh water withdrawals. Forest area as percentage of the total land area is given in the table but is not used for comparison, instead, the total change in forest area between 1990 and 2015 is used. Economic sustainability indicators look at adjusted net savings, external debt stock, natural resources depletion, diversity of economy and government’s spending on research and development. Social sustainability is captured by changes in income and gender inequality, multidimensional poverty and the projected old age dependency ratio.

List of Abbreviations

Abbreviation	Description
CPD	The UN Committee for Development Policy
LDC	Least Developed Country
MDG	Millennium Development Goals
SDG	Sustainable Development Goals
GDP	Gross Domestic Product
GNI	Gross National Income
GNP	Gross National Product
BCG	Boston Consulting Group
TFR	Total Fertility Rate
TVET	Technical and Vocational Education Training
NTVQF	National Training and Vocational Qualification Framework
RPL	Recognition of Prior Learning
ISC	Industry Skills Council
PPP	Public Private Partnership
BSEP	Bangladesh Social Enterprise Project
NSDC	National Skill Development Council
BBS	Bangladesh Bureau of Statistics
BLS	Bureau of Labor Statistics
EFA	Education for All
SABRE	System for Autonomous Bodies Reporting and Evaluation

Human Resource Development (HRD) Strategy of Bangladesh - A Developed Nation by 2041

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4	Major General Mizanur Rahman Khan, ndc, afwc, psc	College Secretary
5	Brigadier General Abu Taher Muhammad Ibrahim, ndc	Senior Directing Staff (Army)
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8	Director General Shah Ahmed Shafi, ndc	Senior Directing Staff (FA)
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15	Air Commodore Javed Tanveer Khan, afwc, psc, GD (P)	Directing Staff (Air)
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17	Colonel	Khalfan Al Rawahi	Oman
18	Colonel	Saif Al Rahbi	Oman
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22	Air Vice Marshal	WLRP Rodrigo	Sri Lanka
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Bangladesh Army

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68	Joint Secretary	Md Shahidul Alam
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70	Joint Secretary	Md Rejaul Karim
71	Joint Secretary	Biswajit Bhattacharya Khokon
72	Joint Secretary	Md. Ismiel Hossain
73	Joint Secretary	Md Abdul Majid
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