



## Democratic People's Republic of Korea

---

### Education for All 2015 National Review

*This report was prepared by the relevant national authorities in view of the World Education Forum (Incheon, Republic of Korea, 19-22 May 2015). It was submitted in response to UNESCO's invitation to its Member States to assess progress made since 2000 towards achieving Education for All (EFA).*

*The views and opinions expressed in this document are those of the authors and do not commit UNESCO. The designations employed and the presentation of material do not imply the expression of any opinion whatsoever on the part of UNESCO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.*

*The paper can be cited with the following reference: "Education for All 2015 National Review Report: Democratic People's Republic of Korea". For further information, please contact: [efa2015reviews@unesco.org](mailto:efa2015reviews@unesco.org)*

**EDUCATION FOR ALL**  
**NATIONAL EFA 2015 REVIEW**  
**DPR Korea**

Education Commission, DPRK

2014

## Contents

acronyms.....	6
Introduction .....	7
Summary .....	9
Chapter 1 Background.....	11
1.1 Population size and its growth for the last 20 years (1993-2012).....	11
1.2 The structural change of population over the past 20 years(1993-2012) .....	12
1.3 Education .....	13
1.4 Economy.....	14
Chapter 2 Education system .....	15
2.1 Educational policy of the Government.....	15
2.2 Education system of the DPRK .....	16
2.3 Development of Universal Compulsory Education System .....	16
Chapter3 Activities for EFA goal .....	21
3.1 Preschool health care and education .....	21
3.2 Universal primary and secondary education.....	25
3.3 Literacy .....	34
3.4 Quality of education .....	39
Chapter 4 Education and socio-economic development .....	48
4.1 Education and labour.....	48
4.2 Education and women .....	52
4.3 Education and Youth.....	55
4.4 Education and Elderly Population.....	57
Chapter 5 Evaluation on the implementation of EFA strategy and prospect of beyond 2015.....	60
5.1 EFA-influenced Reform of education .....	60
5.2 Lessons drawn from the implementation of EFA strategy in 2005 and onward .....	62
5.3 Prospect of 2015 and onward.....	64
Appendix .....	66
1 Education level of population identified in the 2008 census .....	66
2 Population Projection .....	68

## Table

Table 1.1: Population size and growth rate in 1993, 2008 and 2012.....	11
Table 1.2: Number of population and its composition by age group (1993, 2008, 2012) .....	12
Table 3.1.1: Prevalence of global (H/A < -2 Z-scores), moderate (H/A ≥ -3 Z-s and < -2 Z-s), and severe (H/A < -3 Z-s) chronic malnutrition based on height for age z-score per sex .....	21
Table 3.1.2 : Prevalence of global (W/H < -2 Z-scores), moderate (W/H ≥ -3 Z-s and < -2 Z-s), and severe acute malnutrition (W/H < -3 Z-s) per sex .....	21
Table 3.1.3: Prevalence of global (W/A < -2 Z-scores), moderate (W/A ≥ -3 Z-s and < -2 Z-s), and severe (W/A < -3 Z-s) underweight based on weight for age z-score per sex.....	22
Table 3.1.4: Historical records of nutrition and health surveys in DPRK since 2000 .....	22
Table 3.1.5: Proportion of children aged 3-4 who grow normally in 4 areas and children growth in the early stage.....	23
Table 3.1.6: Proportion of 3~4-year-old children attending nurseries or kindergartens by area and sex (2009).....	24
Table 3.1.7: Number of kindergarteners by area and sex, and its distribution .....	24
Table 3.1.8: Proportion of children who had gone to kindergartens in 2009 .....	25
Table 3.2.1: Number of students by education level in compulsory education.....	25
Table 3.2.2: Number of students by age, education level and sex in 2008 .....	26
Table 3.2.5: Intake ratio in primary education .....	29
Table 3.2.6: Gross enrolment rate in primary education.....	30
Table 3.2.7: Actual net enrolment rate in primary education .....	30
Table 3.2.8: Promotion rate by school years .....	31
Table 3.2.9: Completion rate in primary education .....	32
Table 3.2.10: Intake ratio in secondary education .....	32
Table 3.2.11: Total enrolment rate in secondary education .....	32
Table 3.2.12: Net enrolment rate in secondary education.....	33
Table 3.2.13: Completion rate in secondary education.....	33
Table 3.2.14: School life expectancy in primary and secondary education .....	34
Table 3.3.1: Number of Literate persons and Literacy rate among 10+ and 15+ by Sex(2008)..	34
Table 3.3.2 : School attendance of people in the age group of 15 to 24 (2008).....	35

Table 3.3.3: Proportion of vocational school graduates in the working population by area (%) .	36
Table 3.3.4: Proportion of population graduates from vocational school by age groups and sex (%).....	38
Table 3,4,1: Rate of part-time course graduates by education level and areas(%).....	41
Table 3.4.2: Number of students per teacher by education level and areas .....	43
Table 3.4.3: Number of students per class by education level and areas .....	44
Table 3.4.4: Average school hour of a teacher by education level .....	45
Table 3.4.5: Rate of students who were supplied with textbooks in 2006, 2008 and 2010 (%)..	46
Table 3.4.6: Water supply for improvement of water and sanitary conditions in kindergartens and schools (%).....	46
Table 4.1.1: Proportion of Working Persons per Age Group by Sex(%).....	48
Table 4.1.2: Proportion of Working Persons aged over 16 by Area and Sex.....	49
Table 4.1.3: Proportion of Working Persons per Age Group by Highest Educational Attainment (%).....	49
Table 4.1.4: Proportion of Working Persons per Age group by Highest Educational Attainment and Sex (%).....	51
Table 4.1.5: Percent Distribution of Working Population by Economic Sector and Highest Educational Attainment .....	52
Table 4.2.1: Number and proportion of female population above 16 attending schools by area and educational level in 2008 (%) .....	53
Table 4.2.2: Total number of teachers, the number of female teachers and its proportion by school levels (%).....	55
Table 4.3.1 Percentages of students by educational levels and age groups .....	56
Table 4.3.2: Proportion of highest educational attainment by age groups (%) .....	56
Table 4.3.3: Educational levels by sexes and age groups (%).....	57
Table 4.4.1: Percentage distribution of the Elderly Population by Highest Educational Attainment by Age Group and by sex.....	58

## Figure

Figure 1.1: Population number (1 000).....	12
Figure 1.2: Composition of population by age and sex ( 2012).....	13
Figure 2.1: Regular education system .....	17
Figure 3.2.1: Proportion of students in each education level of compulsory education.....	26
Figure 3.2.2: Proportion of students in primary and secondary education by age .....	28
Figure 3.2.3: Ratio in primary and secondary education by school years .....	29
Figure 3.2.4: Intake ratio in primary education.....	30
Figure 3.2.5: Enrolment rate in primary education.....	31
Figure 3.2.6: Enrolment rate in secondary education.....	33
Figure 3.3.1: Proportion of vocational school graduates in the working population by age and areas(%).....	37
Figure 3.3.2 : Percentage of junior specialists in urban and rural areas (%).....	37
Figure 3.3.3: Proportion of population graduates from vocational school by age groups and sex.....	38
Figure 3.3.4: Rate of male and female junior specialists (%).....	39
Figure 3.4.1: Rate of teachers who have received normal education for primary education in comparison with other countries(%) .....	40
Figure 3.4.2: Rate of teachers with graduation certificates of teachers training colleges classified by education level and region (%) .....	40
Figure 3.4.3: Rate of re-educated teachers (%).....	42
Figure 3.4.4: Number of students per teacher in comparison with international by educational level.....	42
Figure 3.4.5: Number of students per teacher by education level and areas .....	43
Figure 3.4.6: Number of students per class in comparison with the world level by education level.....	43
Figure 3.4.7: Number of students per class by education level (2012) .....	44
Figure 3.4.8: School hours of students in comparison with the world level at each education level .....	45
Figure 3.4.9: Rate of students who were supplied with textbooks ( ) .....	45
Figure 3.4.10: Water supply for improvement of water and sanitary conditions in kindergartens and	

schools (%) .....	47
Figure 4.1.1: Proportion of Working Persons per Age Group by Highest Educational Attainment (%).....	50
Figure 4.2.1: Ratio of female population above 25 by urban and rural areas and level of final education (%).....	54
Figure 4.2.2: Composition of female working population classified by education level (%).....	54
Figure 4.4.1: Elderly Population by Highest Educational Attainment .....	57
Figure 4.4.2: Highest educational attainment of the elderly population by age group.....	58

## **acronyms**

<b>ANER</b>	Adjusted Net Enrolment Ratio
<b>ANIR</b>	Adjusted Net Intake Ratio
<b>CBS</b>	Central Bureau of Statistics
<b>DPRK</b>	Democratic People's Republic of Korea
<b>ECCE</b>	Early Childhood Care and Education
<b>ECDI</b>	Early Childhood Development Index
<b>EFA</b>	Education For All
<b>GCR</b>	Gross Completion Rate
<b>GDP</b>	Gross Domestic Product
<b>GER</b>	Gross Enrolment Ratio
<b>GIR</b>	Gross Intake Ratio
<b>GPI</b>	Gender Parity Index
<b>ISCED</b>	International Standard Classification of Education
<b>IT</b>	Information and Technology
<b>MDG</b>	Millennium Development Goals
<b>NAP</b>	National Action Plan
<b>NER</b>	Net Enrolment Ratio
<b>UNESCO</b>	United Nations Educational, Scientific, and Cultural Organization
<b>UNICEF</b>	United Nations Children's Fund
<b>WHO</b>	World Health Organization



## **Introduction**

DPRK is a country of learning and education. DPRK has established well-organized system of pre-school education, formal secondary general education and higher education, in-service education and social education, under which all people in the country can have free access to education of all levels.

Holding aloft the banner of making all people well-versed in science and technology, the DPRK has now started the introduction of universal 12-year compulsory education while further stepping up the building of a socialist civilized nation and an education power, in which all people enjoy life-long education to their hearts' content without paying even a penny.

In conformity with the requirement of the developing times, the DPRK Government is making sincere efforts to put the education on IT and modern basis, improve the contents and methods, conditions and environment of the education, and to bring about a fresh turn in education, including the secondary general education.

In addition, the Government makes strenuous efforts to improve the education up to the world level at the earliest date through closer cooperation with UNICEF, UNESCO and other international organizations, and to fulfill the Action Plan on EFA.

The 2nd EFA Conference held in Dakar, Senegal in April 2000 reviewed the efforts for EFA made from 1990 to 2000 just after Jomtien Conference and has mapped out a new action plan for 2001 to 2015.

Applying the lofty aim of Dakar Action Plan on EFA to the specific conditions of the country, DPRK, which gives priority to education, established the National Action Plan(NAP) for EFA up to 2015 and the national education development strategy for its implementation at the turn of the new century. Since then, DPRK has made tireless efforts to put it into reality.

Since the establishment of the NAP for EFA, DPRK has actively pushed ahead with its implementation with the nation-wide, public support, and under the guidance of the National Coordination Committee for EFA.

The purpose of this report is to review and analyze the achievements, experiences and lessons drawn from the implementation of the national action plan for EFA and identify the basic issues arising in the establishment of future national education policy and education development strategy.

This report is consisted of 5 chapters and appendix.

Chapters 1 and 2 – General background and education system of the DPRK

Chapter 3 – Health care for preschool children, secondary education, literacy level of the country, quality of education, and other activities to attain the goal of EFA

Chapter 4 – Education and economic development, education and youth, education and women, education and aged people, etc

## Chapter 5 – Evaluation of the implementation of EFA strategy and prospect of education beyond 2015

The appendix includes the result of the 2008 census about the final education level of the population above 5 years old and the population growth projection from 2015 to 2040.

The information described in this report is based on the data sources like 2008 population census, 2009 MICS, 2012 nutrition assessment and statistics of individual education institutions on M & E of education quality.

The data of 2008 population census was of great help in analyzing the overall education level of population aged 5 and above, evaluating the implementation of the national education strategy for EFA and establishing the national education development strategy.

We hope this report will make a substantial contribution to establishing correct education policy and education development strategy and improving the contents and methods, conditions and environment of education as required by the developing reality, and thereby, to raising the quality of the universal 12-year compulsory education and other forms of education.

## Summary

In the 21<sup>st</sup> century, the IT age, when science and technology develop at an unprecedented high speed, all the countries in the world regard educational as a key to their rise or fall, and thus channel national efforts toward it.

Under the wise leadership of the great leaders **Kim Il Sung** and **Kim Jong Il**, DPRK has long enforced the compulsory education system so that all people have access to education.

This report has made analysis focused on 6 EFA objectives to be realized in the world by 2015. Some indicators are shown here.

### Objective 1

- 97.8% of the children aged 3~4 go to nurseries or kindergartens, and the GER of the kindergarteners is reported to be 96.3% by the 2008 census.

### Objective 2

- The GIR and the GER of primary education are 101.4%, 101.7% respectively in 2008 and 100.4%, 100.6% in 2012.
- The NER and GCR of primary education are 96.2%, 101.8% respectively in 2008 and 95.4% and 100.5% in 2012.
- The GIR of the secondary education in 2008 and 2012 is the same at 100.3%. And the GER in 2008 rose from 100.2% to 101.0% in 2012, which is 0.8% increase.
- The NER of secondary education was 96.8% in 2008 and increased by 97.0% in 2012. The GCR in 2008 was the same at 100.4% in 2012.

### Objective 3

- According to the 2008 census, the population learning at school numbered 1 078 717 in the age group of 16 to 29. Among them, nearly 21% were students, of which 39.9% were senior middle school students, 11.5% were specialized school students and 48.6% were above college-level students.
- Among the total population aged from 15 to 29 excluding those who are now attending high schools, 73.4% were high school graduates. And the graduates of specialized schools and above amounted to 8%.

### Objective 4

- According to the 2008 census, the civilized rate of the youth aged from 15 to 24 was approximately 100%.

#### Objective 5

- The GIR of the primary education for girls was 101.4% and 100.4% respectively in 2008 and 2012. And the GER was 101.7% and 100.6%.
- The GIR of the secondary education for girls was 100.9% and 100.3% respectively in 2008 and 2012. And its GER was 100.5% and 101%.

#### Objective 6

- From 1998 to 2010, the ratio of the re-educated teachers among those of primary and secondary schools was 66~88%.
- The proportion of qualified teachers for secondary education and primary education was 93.9% and 98.2% respectively in 2012.
- The proportion of the students who were provided with all textbooks in 2010 was 68%.
- The proportion of those who utilize water taps at schools and kindergartens was still low at 56% and 49.2% respectively.

## Chapter 1 Background

DPRK is geographically situated in the east of Northeast Asia. The area of the northern half of Korea covers 123 188 square meters (approximately 55% of the Korean peninsula) and the 80% of its territory is mountainous. The DPRK is divided for the administrative purpose into provinces (cities under the direct control), cities (districts), *ris (up, gu, dong)*. The smallest administrative unit is *ri (up, gu, dong)*. As of 2014, DPRK has 9 provinces and 3 directly controlled cities. The capital city is Pyongyang.

### 1.1 Population size and its growth for the last 20 years (1993-2012)

What is most important for analyzing the present situation of EFA and establishing the education strategy, including how much and what to invest in education is to make an accurate analysis of the size, growth and structural characteristics of the population to be educated.

The table 1.1 shows the size and growth of population in 1993, 2008 and 2012 respectively.

**Table 1.1 Population size and growth rate in 1993, 2008 and 2012**

Year	Total Population (Number)	Population Increase (Number)	Growth Rate (%)	Average Annual Growth Rate (%)
1993	21 213 378	-	-	-
2008	24 052 231	2838853	113.4	0.9
2012	24 624 639	572 408	102.4	0.6

*Source: DPRK Population Census National Report, CBS, 2008*

As shown in Table 1.1, the total population of DPRK was 21 213 378 according to the 1<sup>st</sup> census held on December 31, 1993. And on October 1, 2008, 15 years after, there was the 2<sup>nd</sup> census. This census showed the total population of 24 052 231.

On the other hand, the total population registered through the recent life registration system was 24 624 639 in 2012. Table 1.2.1 compares the population growth in 3 different years. The number of population surveyed in the 2<sup>nd</sup> census increased by approximately 3 000 000 within 15 years after the 1993 census.

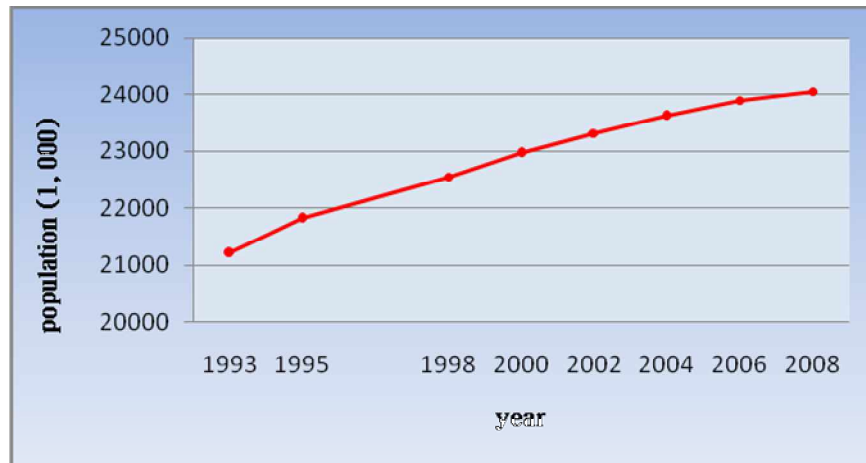
This indicates 13.4% increase during the last 15 years throughout the country with average annual increase of 0.86%. The male and female population increased by 13.5% and 13.3% respectively.

The comparison of population registered through the 2<sup>nd</sup> census with that of 2012 shows the increase of about 570 000 within 4 years. This is the 2.4% increase during the last 4 years with the average annual increase of 0.6%.

The speed of the average annual increase of population over the last 15 years decreased by more than

half from 0.86% to 0.4% within recent 4 years. This is attributable wholly to the drop of birth rate.

**Figure 1.1 Population number (1 000 persons)**



Source: DPRK Population Census National Report, CBS, 2008

## 1.2 The structural change of population over the past 20 years(1993-2012)

Table 1.2 shows the number of population and its spread recorded in the population surveys held in 1993, 2008 and 2012 based on the age division.

**Table1.2 Number of population and its composition by age group (1993, 2008, 2012)**

Index	Age	1993	2008	2012
Number of population	Total	21 213 378	24 052 231	24 624 639
	0-14	5 722 203	5 578 174	5 285 532
	15-59	13 602 375	15 319 146	16 045 835
	60+	1 888 800	3 154 911	3 293 272
Composition (%)	Total	100.0	100.0	100.0
	0-14	27.0	23.2	21.5
	15-59	64.1	63.7	65.1
	60+	8.9	13.1	13.4

Source: DPRK Population Census National Report, CBS, 1993, 2008

Data set of Population Registration Statistical System, 2012

Table 1.2 shows that there has been considerably apparent change in the structure of the population between the two rounds of census.

In 2008, the proportion of children under 15 among the population of DPRK accounted for 27% in

1993, but it fell by 23% in 2008.

The proportion of population aged from 15 to 59 also decreased but there was an increase of approximately 1 700 000 people in terms of number. The group of people belonging to this age accounts for 2/3 of the population in 2008, the same as in 1993.

As a result, the population structure changed from young people to old people. In another words, the proportion of population aged over 60 increased by 4% from 8.9% to 13.1%. This was completely due to the low birth rate between two rounds of census. In the meantime, the population structure witnessed a considerable change from 2008 to 2012.

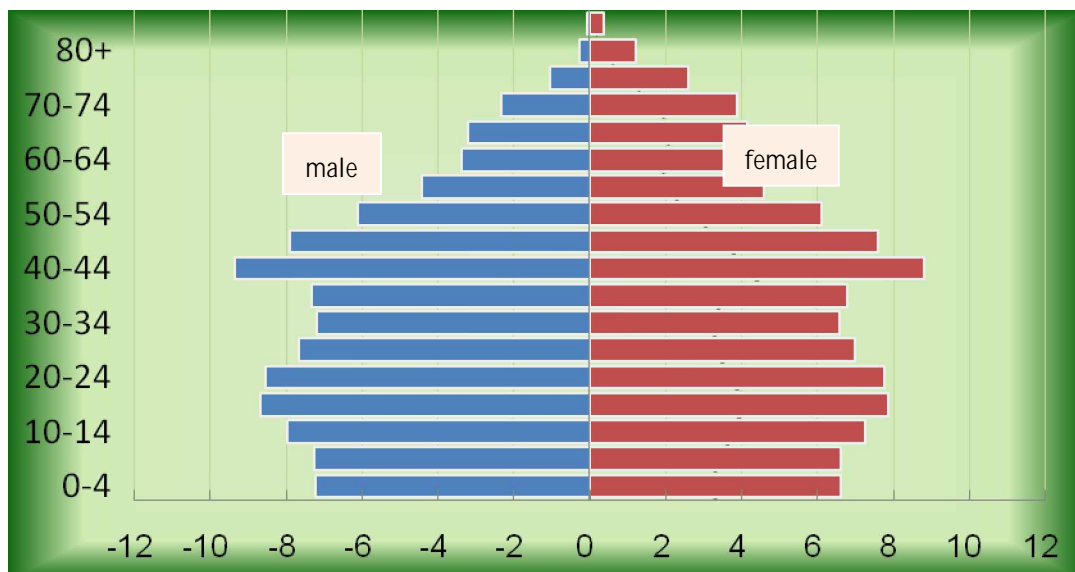
The ratio of children under 15 in 2008 dropped by 1.7% from 23.2% to 21.5% recorded in 2012. Consequently, the number of children aged 0-14 has continuously reduced over the last 20 years.

In contrast, the proportion of population aged 15-59 increased, and the absolute number has steadily increased over the 20 years.

The ratio of population aged above 60 went up by 0.4% from 13.1% to 13.4%, leading to the great increase of the aged people above 60.

Figure 1.2 shows the age and the gender structure of the population in 2012.

**Figure 1.2 Composition of population by age and sex ( 2012)**



### 1.3 Education

DPRK has introduced the universal 12-year compulsory education since 1st of April 2014 on the basis of the law adopted in the 6th Session of the 12th Supreme People's Assembly of DPRK held in September 25, 2012, following the introduction of universal 11-year compulsory education from 1975.

Everybody in DPRK has the right to learn in different educational forms after completing the compulsory secondary education irrespective of age and gender. And the level of their general

knowledge is above the secondary education.

According to the census in 2008, the literacy rate of the population aged above 5 is almost 100 %, the highest in the world.

#### **1.4 Economy**

DPRK is a socialist industrial state supported by the independent national economy.

In the DPRK socialist system, the popular masses are the masters of national sovereignty and the means of production. Thus, it is a supreme principle of the state activities to steadily improve the material and cultural standard of people.

The major industries in DPRK include power generation, coal mining, metal production, ore mining, machine-building, chemical industry, light industry, etc.

The industrial sectors have a large proportion in GDP( Gross Domestic Product ) - 46.4% in 2007.

Being one of the major two components of the national economy, agriculture plays the most important role in developing the national economy and improving the people's standard of living. The agricultural sector takes a significant part in GDP, 14.6%, in 2007.

Rice and maize constitute the main grain crops and the other crops include wheat, barley, sorghum, beans and potatoes.

Production and utilization of chemical fertilizer is one of the major ways to increase the grain product in agriculture.

In order to introduce the organic farming to the cultivation of crops through utilization of organic fertilizer and organic manure, DPRK promotes research, development and utilization of all sorts of microbial fertilizers and biological agrochemicals.

To cope with the world-wide food crisis and continuous natural disasters, DPRK Government dynamically pushes ahead with the large-scale land rezoning, tideland reclamation, reservoir construction and gravitational waterway projects. Meanwhile, the Government has put forward the policies of making revolution in seed improvement, double cropping, radical turn in potato farming and bean cultivation and other active measures for increasing the agricultural production through the introduction of new farming methods and techniques.



## **Chapter 2 Education system**

### **2.1 Educational policy of the Government**

With the great Juche idea and Songun idea as firm guiding principle, DPRK has put forward the appropriate educational idea, policy and strategy for the educational development and thoroughly realized it.

The implementation of the educational policy pursued by the DPRK Government is firmly guaranteed by laws, including the Socialist Constitution and the Educational Law.

The socialist constitution of the DPRK was adopted in the 1st Session of the 5th Supreme People's Assembly on December 27, 1972. Afterwards, it was revised and supplemented on five occasions to meet the requirement of the developing revolution.

On April 29, 1976 the Law on Nursing and Upbringing of Children was adopted in the 6th Session of the 5th Supreme People's Assembly. It was followed by the introduction of the Education Law, the General Education Law and the Higher Education Law by the decrees of the Supreme People's Assembly.

In the 6th session of the 12th Supreme People's Assembly held on September 25, 2012, the DPRK Supreme People's Assembly adopted the law "On the Introduction of the 12-year Compulsory Education System" as an important measure which embodies the Party's lofty outlook on the rising generations and future.

The educational policy of the state finds its concentrative expression in the DPRK Socialist Constitution, laws on different education forms and decrees.

Every citizen of the DPRK is obliged to receive comprehensive general secondary schooling and enjoys the right to free education.

DPRK Government is thoroughly embodying the main principles of socialist education in the educational work. At the same time, it definitely gives priority over all other work to the training of national cadres and closely combines the general education with technical education, education with production.

All the students have free education and students of universities, colleges and specialized schools are given scholarship.

The Government takes the responsibility for education and life conditions of helpless persons and disabled people.

Also pre-school children are brought up at nurseries and kindergartens at the expense of the state and society.

The state takes measures to produce and supply in good time the teaching facilities, school-things, equipment for educational practice, experimental instruments and materials. It sufficiently provides

textbooks for different grades and reference books and responsibly takes care of the life conditions of teachers and researchers involved in education and scientific research.

The state develops various forms of educational system, including formal and informal education, strengthens social education and provides all the working people with sufficient conditions for study.

The state established the well-regulated teacher training system, under which it trains teachers in a planned way. At the same time, it replenishes the rank of teachers with those with teaching career and qualified people and enhances the qualities of school and kindergarten teachers through intensive courses and re-education.

Central public health guidance authorities and other relevant establishments are taking measures to nurture and educate disabled preschool children, who are able to adapt to school life, in nurseries, kindergartens and special recovery centers, all at the expense of the state, organizations and cooperatives. Education guidance authorities and other educational institutions are registering disabled preschool children without exception and enrol them in schools. Besides, it organizes and operates special schools and vocational schools in accordance with the physical and mental characteristics of them.

## **2.2 Education system of the DPRK**

Popular education system has been constantly promoted in each period and step of the development of revolution in DPRK.

In-service education system has factory colleges (5years), farm colleges (5years), fishermen's colleges (5years), factory specialized schools (evening schools - 3,4years), day colleges (evening course - 6years) and so on.

The DPRK's education system is characterized by universal compulsory free education and education for all people.

In DPRK everyone receives education and nobody drops out of study. All forms of education, including school education, social education and adult education, are given all at the state's expense.

## **2.3 Development of Universal Compulsory Education System**

### **2.3.1 Realization of the pre-school education**

The "DPRK Law on Nursing and Upbringing of children" reads as follows:

"The DPRK brings up all children at nurseries and kindergartens at the expense of the state and society."

In the DPRK, we have nurseries and kindergartens as children's day-care institutions and orphanages and baby homes for parentless children.

The state has set the principle to build nurseries and kindergartens wherever there are children to bring them up at the cost of the state and society. Accordingly, the country has a close network of nurseries and kindergartens throughout the country, including remote countryside, fishing and

forestry villages.

**Figure 2.1 Regular education system**

24	Post-graduate course (3.5years)			Higher education				
23								
22								
21	University (4~5years)							
20								
19		Teacher-training college (3years)	Specialized school (3years)					
18								
17								
16	Universal 12-year compulsory education	Senior secondary school			Secondary education			
15								
14								
13								
12		Junior secondary school						
11								
10								
9			Primary education					
8	Primary school							
7								
6			Pre-school education					
5	Kindergarten							
4								
3	Nursery							
2								
1								

All children born in DPRK are cared at nurseries, and then, at 2-year kindergartens.

Kindergarten is divided into junior class (4-year-olds) and senior class (5-year-olds). In the senior class, all children are given compulsory one-year preschool education.

### **2.3.2 Realization of the universal primary and secondary compulsory education.**

In implementing the universal compulsory education system, the DPRK Government has adhered fast to the policy of giving precedence to education above all other work. After liberation, despite the difficult conditions of the country, it directed all its efforts to the preparation of compulsory education.

With thorough implementation of the policy to give precedence to education and energetic preparation for the introduction of compulsory education, the Government successfully enforced the universal compulsory education system (4 year primary school) in August 1956, as a result of which all school-age children without exception were enrolled in primary schools.

Afterwards, the DPRK Government made vigorous preparation for the introduction of compulsory secondary education from 1957, and in October 1958, the 4<sup>th</sup> Session of the 2<sup>nd</sup> Supreme People's Assembly proclaimed that the universal compulsory secondary education system (4-year primary school and 3-year junior middle school) would be effected from November 1, 1958.

It was from April 1959 that the DPRK proclaimed by law the universal free education and enforced it.

Thus, everyone were freed from the burden of school expenses forever and were able to study in all educational institutions ranging from preschool education to higher education at the expense of the state and society without having to pay at all.

### **2.3.3 Realization of the universal 9–year technical compulsory education system**

From 1961 to 1967, after the universal compulsory secondary education system was fully enforced, the Government made preparation for the universal 9-year technical education which would give people basic technical education to meet the requirement of the developing reality.

The 9-year technical compulsory education was an advanced education system, in which all the new generation of working age could be trained to become talents with wide general knowledge and more than one technique by combining general education with basic technical education and education with production.

In DPRK one vocational school as a new compulsory education school was first set up in each of the counties for experiment. In this process we set the period, school system, content and standard of the technical compulsory education.

Afterwards, 2-year vocational schools were established throughout the country to give basic technical knowledge of the economy and agriculture and other specific fields, and on the basis of these experiences and achievements, the overall popular education system was reformed in 1959. As a result, we eliminated aged people senior middle school education system that had been separated from real life and hardly given any technical education. Instead, we established vocational schools (2 years) and high vocational schools (2 years) which closely combined the general education with technical education and education with production.

The 2-year vocational school system, the succession to 3-year junior middle school, was an advanced

system which made it possible to complete the secondary general education and give modern basic technical knowledge in specific fields.

As the advantage of the new form of vocational schools had been confirmed through their management and all the rising generation had been able to get 9-year compulsory school education, the Government integrated the 3-year middle school education and 2-year vocational school education into 5-year middle school system with a view to ensuring the continuity of education content, and rationality and effectiveness of establishment and management of schools.

Later, this 5-year secondary school system developed into a streamlined compulsory education that mainly gives secondary general education in close combination with basic technical knowledge after the 4- year primary schooling.

At the 6<sup>th</sup> Session of the 3<sup>rd</sup> Supreme People's Assembly held in November, 1966, DPRK, on the basis of the achievements made in the preparation for compulsory education, proclaimed the law on enforcing the 9-year compulsory technical education (4- year primary school and 5-year secondary school) from April 1, 1967 in all parts of the country.

With the successful implementation of the universal 9-year compulsory technical education system, all the younger generations of working ages could receive compulsory school education and the overall cultural and technical level of the working masses reached a higher level.

#### **2.3.4 Realization of the 11-year compulsory education system**

From 1972 the DPRK successfully introduced the 11-year compulsory free education system.

The 11-year compulsory education system included one-year preschool compulsory education and 10-year compulsory school education (4-year primary school and 6-year secondary school). It was an advanced compulsory education system which gave preschool education and primary and secondary education free of charge to all younger generations from 5 to 16 years old.

4-year primary school gives elementary education on the basis of the preparatory education given at kindergartens, and 6- year secondary school completed secondary general education after the primary schooling.

In DPRK every student, whether he/she lives in a city or countryside and without any gender bias, was able to be enrolled in the compulsory free education and study with the same textbooks without distinction, irrespective of their parents' property status and knowledge standard .

Thus, all younger generation in DPRK could receive full secondary general education in the period of compulsory education and could enter universities or other higher education institutions as they wish after finishing compulsory education.

#### **2.3.5 Realization of the universal 12- year compulsory education system.**

Since April 1, 2014 the DPRK has been enforcing the universal 12-year compulsory education system.

The 12- year compulsory education system which forms the basic educational step in the DPRK

educational system is a completely free compulsory education which gives full secondary general education to all children and younger generations from the age of 5 to 17.

The 12-year compulsory education system has 1-year preschool education, 5-year primary school, 3-year junior middle school and 3-year senior middle school.

The universal 12-year compulsory education system helps them to equip themselves with the fundamentals of revolutionary world outlook and lay a reliable foundation for their life-long study by giving full secondary general knowledge which they can use at universities, in the military service or in their jobs.

## Chapter3 Activities for EFA goal

### 3.1 Early childhood health and education

#### 3.1.1 Early childhood health care and development

Nutritional improvement of early childhood is an important undertaking for their survival and development. Chronic malnourishment does great harm to children. Particularly, child development and learning ability and their activity in adulthood may exert influence on long-term development of the country.

Recently in 2009 and 2012 the DPRK Government had conducted nationwide nutrition survey for children under 5 for nutrition and health improvement of children and women.

In 2012 the nutrition of children under 5 witnessed some improvements throughout the country in comparison with the past. The result is shown in Table 3.1.1

**Table 3.1.1 Prevalence of global (H/A < -2 Z-scores), moderate (H/A ≥ -3 Z-s and < -2 Z-s), and severe (H/A < -3 Z-s) chronic malnutrition based on height for age z-score by sex**

		Global chronic malnutrition (95% CI)	Moderate chronic malnutrition (95% CI)	Severe chronic malnutrition (95% CI)
Total	Total	27.9 (26.3-29.4)	20.7 (19.5-21.9)	7.2 (6.4-7.9)
Sex	Boys	29.9 (28-31.8)	21.7 (20.1-23.2)	8.2 (7.2-9.3)
	Girls	25.8 (23.7-27.8)	19.7 (17.9-21.4)	6.1 (5.2-7)

Source: Final Report of National Nutrition Survey in DPRK 2012.

In the DPRK, the total chronic malnutrition i.e. immaturity is 27.9%, meaning it is in the middle class referring to the health standard of WHO. The total rate of acute malnutrition on the basis of weight by height all over the country is 4% and as in the table 3.1.1 it belongs to “Good” according to classification of health standard of the total chronic malnutrition.

**Table 3.1.2 Prevalence of global (W/H < -2 Z-scores), moderate (W/H ≥ -3 Z-s and < -2 Z-s), and severe acute malnutrition (W/H < -3 Z-s) by sex**

		Global acute malnutrition (95% CI)	Moderate acute malnutrition (95% CI)	Severe acute malnutrition (95% CI)
Total		4.0 (3.5-4.5)	3.4 (2.9-3.9)	0.6 (0.4-0.7)
Sex	Boys	4.1 (3.5-4.8)	3.6 (3-4.2)	0.6 (0.3-0.8)
	Girls	3.8 (3.1-4.5)	3.2 (2.6-3.9)	0.6 (0.3-0.8)

Source: Final Report of National Nutrition Survey in DPRK 2012.

**Table 3.1.3 Prevalence of global (W/A < -2 Z-scores), moderate (W/A ≥ -3 Z-s and < -2 Z-s), and severe (W/A < -3 Z-s) underweight based on weight for age z-score by sex**

		Global underweight (95% CI)	Moderate underweight (95% CI)	Severe underweight (95% CI)
Total	total	15.2 (14.2-16.3)	12.4 (11.5-13.3)	2.9 (2.4-3.3)
Sex	Boys	15.5 (14.1-16.9)	12.3 (11.1-13.6)	3.2 (2.6-3.7)
	Girls	15.0 (13.6-16.4)	12.4 (11.2-13.6)	2.6 (2-3.1)

Source: Final Report of National Nutrition Survey in DPRK 2012.

As shown in the table above, the children with acute malnutrition have danger of death much higher than others and if those be left themselves, it will affect their ability of learning and mental growth.

**Table 3.1.4 Historical records of nutrition and health surveys in DPRK since 2000**

Survey	Data collection (d/m/y)	Global Chronic Malnutrition	Global Acute Malnutrition	Global Underweight
Nutrition survey	Sep-Oct 2012	27.9%	4.0%	15.2%
MICS 4	Sep-Oct 2009	32.4%	5.2%	18.8%
Nutrition assessment*	Oct 2004	37.0%	7.0%	23.3
Nutrition assessment *	Oct 2002	39.2%	8.1%	20.1
MICS 2*	May 2000	45.2%	10.4%	27.9

Source: Final Report of National Nutrition Survey in DPRK 2012.

As shown in the above table, the nutrition of the children at the early stage for the last 10years has been bettered significantly due to the sincere efforts of the government to improve the health of women and children, in collaboration with UN.

The success in reducing the under-weight and chronic and acute dystrophy contributes to achieving Goal 1 of the MDG, i.e., eliminating various factors causing nutritional deficiency. However, nutritional deficiency still exists and it is important to decrease the rate of under-weight by sustainable activities related to the acute dystrophy, especially the chronic malnutrition, so children would be ensured of their ideal growth and ability of learning.

### 3.1.2 Early childhood development and education (3-4)

DPRK has established an advanced system of nursing and upbringing of children, under which all children are brought up in nurseries and kindergartens by the social expenditure from the government, long ago.



## Early childhood development

Early childhood development is defined as a process in which a child learns to move, think, speak, feel and control the more complicated relations with other people during the life.

4 aspects such as physical development, letter-number recognition ability, socio-emotional development and imitating are essential for its overall development and become the basis for overall human development.

10 items developed for MICS project were used to calculate ECDI. The index is based on some standards to which children will reach in case of developing simultaneously with the others at the same age group.

Each of 10 items is used in one of 4 aspects to decide whether 36~59-month-old children develop properly. ECDI is calculated in terms of the ratio of children whose development has reached at least 3 of the 4 aspects.

According to Table 3.1.5, 75% of 3-4-year-old children (36-59months) are growing properly in DPRK. ECDI is a little higher for boys (76%) than girls (74%). There are some differences in urban and rural areas: ECDI is higher in urban areas than in rural areas (79% and 70% respectively).

Analysis of child development in 4 aspects shows that 97% of children are developing properly in imitation but the development of letter-number recognition ability is low as 13%.

**Table 3.1.5 Proportion of children aged 3-4 developing normally in 4 aspects and ECDI**

	Ratio of 3~4-year-old children with proper development in 4 aspects and ECDI				ECDI
	L-N recognition	Physical ability	Social emotion	Imitation	
Sex					
Male	12.2	96.7	75.7	97.2	76.3
Female	13.4	93.0	76.2	96.5	74.3
Region					
Urban	14.0	95.8	78.7	97.8	79.3
Rural	11.2	93.6	72.2	95.5	69.9
Age					
3 year old (36-47month)	7.8	94.5	80.0	95.7	76.6
4years old (48-59month)	18.2	95.3	71.5	98.0	73.9
Total	12.8	94.8	75.9	96.8	75.3

Source: MICS Report in DPRK 2009, CBS

## Early childhood education

Giving necessary early education to children according to the education program has important significance to prepare them for school.

Giving priority to capacity-building of child nursing and education institutions and improvement of its quality, the Government puts it forward as an important national policy to establish a compulsory

system of bringing up and educating all children from birth to school age by its expenditure. It has also made strenuous efforts to realize the main objectives of Dakar Action Program.

In cooperation with UNICEF, the Government has completed Early Learning and Development Standard (3-6) consisting of 3 aspects: ideological, moral, cultural and emotional development; IQ development; and physical ability and health in conformity with the special features of their psychological and physical development.

Table 3.1.6 shows that 97.8% of 3~4-year-old children (36-59 months) go to nurseries or kindergartens. The rate of 3~4 years old children in nurseries or kindergartens is more or less the same.

**Table 3.1.6 Percentages of 3~4-years-old children attending nurseries or kindergartens by area and sex (2009)**

total	Age (%)		Area(%)		Sex(%)	
	3 yrs	4yrs	urban	rural	male	female
97.8	97.1	98.6	98.7	96.6	98.3	97.4

Source: MICS Report in DPRK 2009, CBS

### 3.1.3 Kindergarten education (5-6)

The DPRK Government provides all the children with enough preschool education at kindergartens. According to the result of 2008 census, the population of 5-6 age group eligible for kindergartens amounted to 662 854 and the total kindergarteners number 638 054, meaning GER is 96.3%. This is because some of 6-year-old children go to primary schools.

Table 3.1.7 shows the number of children with access to kindergarten education by area and sex, and its distribution.

**Table 3.1.7 Number of kindergarteners by area and sex, and its distribution**

region	Population number			Regional distribution(%)		Gender
	Total	male	female	male	female	Ratio(F/M)
total	638054	325218	312836	100.0	100.0	95.1
urban	371027	188865	182162	58.1	58.2	96.5
rural	267027	136353	130674	41.9	41.8	95.8

Source: DPRK Population Census National Report, CBS, 2008

Among kindergarteners, about 58% are in urban areas and about 42% are in rural areas. The gender ratio is 95.1, i.e., more boys than girls.

As shown in Table 3.1.8, according to MICS results in 2009, 99% of the 1st graders of primary

schools had graduated kindergartens in the previous year.

**Table 3.1.8 Proportion of children attending the 1st year of primary schools who had been in kindergartens, 2009**

Area(%)		Sex(%)	
Urban	Rural	Male	Female
98.9	98.8	98.1	99.7

*Source: MICS Report in DPRK 2009, CBS*

To meet the increasing demand for kindergarten teachers, the Government has strengthened the work of training teachers in teacher-training college in each province. In order to resolve the shortage of kindergarten teachers in rural areas, it also ensures the normal operation and enhances the roles of city/county teacher training centres which were set up in 2006.

The number of kindergarteners per teacher is 19 according to the 2008 census, and 18.3 according to the 2012 current statistics of the Education Commission.

### 3.2 Universal primary and secondary education

With the full embodiment of the DPRK Government's policy of giving primary importance to education, it can be said that international objective of implementing the universal primary education has long been attained in DPRK.

#### 3.2.1 Summary

Universal 11-year compulsory education system plays an important role in realizing EFA in DPRK. Compulsory school age is between 6 and 17. This includes 1-year preschool education (senior class of kindergarten), 4-year primary education (primary school) and 6-year secondary education (secondary school).

The number of students enrolled in each level of the universal 11-year preschool education as of 2008 is shown in Table 3.2.1.

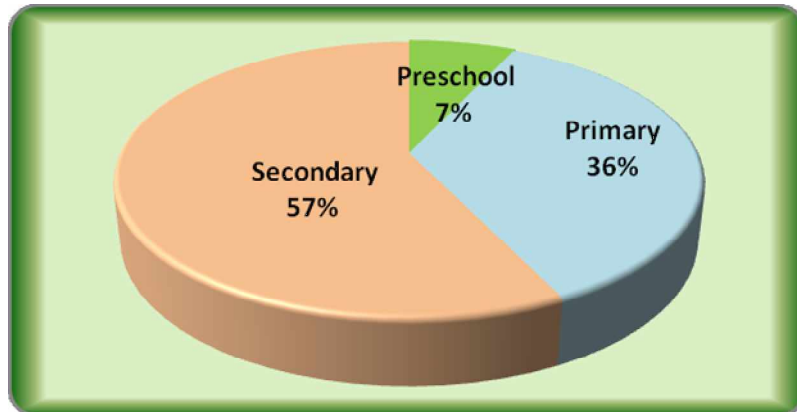
**Table 3.2.1: Number of students by education level of compulsory education**

Education level	Number of students	Rate(%)	female	rate(%)
total	4 325 315	100	2 113 936	48.9
Preschool	304 728	7.0	149 316	49.0
Primary	1 546 554	35.8	754 370	48.8
Secondary	2 474 033	57.2	1 210 250	48.9

*Source: DPRK Population Census National Report, CBS, 2008*

The rate of students by education level in universal compulsory education is as table 3.2.1. The differences in rate of students by education level refer to the different number of grade in each level.

**Figure 3.2.1 Proportion of students in each education level of compulsory education**



Number of students by age in universal primary and secondary education in 2008 and 2012 is almost the same as seen in Tables 3.2.2 and 3.2.3.

**Table 3.2.2 Number of students by age, education level and sex in 2008**

age	Total	Primary education			Secondary education		
		Total	Male	Female	Total	Male	Female
Total	4 020 587	1 546 554	792 184	754 370	2 474 033	1 263 783	1 210 250
6	43 034	43034	21 976	21 058			
7	355 054	355054	181 074	173 980			
8	378 690	378690	193 738	184 952			
9	387 676	387676	198 514	189 162			
10	381 487	341762	175 831	165 931	39 725	20 226	19 499
11	392 819	40316	21 040	19 276	3 52 503	180 280	172 223
12	419 023	22	11	11	419 001	214 334	204 667
13	417 718				417 718	213 711	204 007
14	410 079				410 079	209 741	200 338
15	404 868				404 868	207 174	197 694
16	384 525				384 525	193 966	190 559
17	42 775				42 775	22 859	19 916
18	2 818				2 818	1 479	1 339
19	21				21	13	8

Source: DPRK Population Census National Report, CBS, 2008

As shown in Table 3.2.2 total number of students involved in universal elementary and secondary education in 2008 are 4020587, of whom female accounts for 48.9%. Number of students in primary education is 1546554 - 38.5% of all students in universal primary and secondary education, of whom female accounts for 48.8%. Number of students in secondary education is 2474033 - 61.5% of all students in universal primary and secondary education, of whom female take up 48.9%.

**Table 3.2.3 Number of students in each education level in 2012 by age and sex**

Age	Total	Primary education			Secondary education		
		Total	Male	Female	Total	Male	Female
Total	3 743 513	1 394 397	710 871	683 526	2 349 116	1 202 027	1 147 089
6	40 685	40 685	20 790	19 895			
7	322 587	322 587	164 519	158 068			
8	342 348	342 348	174 461	167 887			
9	347 123	347 123	176 929	170 194			
10	357 412	310 586	158 337	152 249	46 826	23 879	22 947
11	372 215	31 068	15 835	15 233	341 147	173 902	167 245
12	377 336				377 336	192 957	184 379
13	386 558				386 558	197 903	188 655
14	380 266				380 266	195 408	184 858
15	391 392				391 392	200 500	190 892
16	379 455				379 455	193 902	185 553
17	43 307				43 307	22 130	21 177
18	2 829				2 829	1 446	1 383

*Source: Education Commission, DPRK (2012)*

As shown in Table 3.2.3 in 2012 total number of students in universal primary and secondary education is 3743513, of whom female accounts for 48.9%. Number of students in primary education is 1394397 - 37.2% of all students in universal primary and secondary education, of whom female takes up 49.0%. Number of students in secondary education is 2349116 - 62.8% of all students in universal primary and secondary education, of whom female accounts for 48.8%.

Change in the rates of students by age in the school-age population in 2008 and 2012 is shown in Table 3.2.2. At the age of 7, the starting age of primary education and at the age of 16, the age of graduating secondary education, proportion of students is dramatically falling. That's because some of the 7-year-old students still remain in lower education level (ISCED 0) and some of the 16-year-old students have gone on to higher level of education or have got jobs.

Both in 2008 and 2012 the proportion of students tends to decrease in general as ages decline. This is because of reduced birth rate. Due to this, total number of students in primary and secondary education in 2012 decreased by 6.9% as against 2008.

**Figure 3.2.2 Proportion of students in primary and secondary education by age**

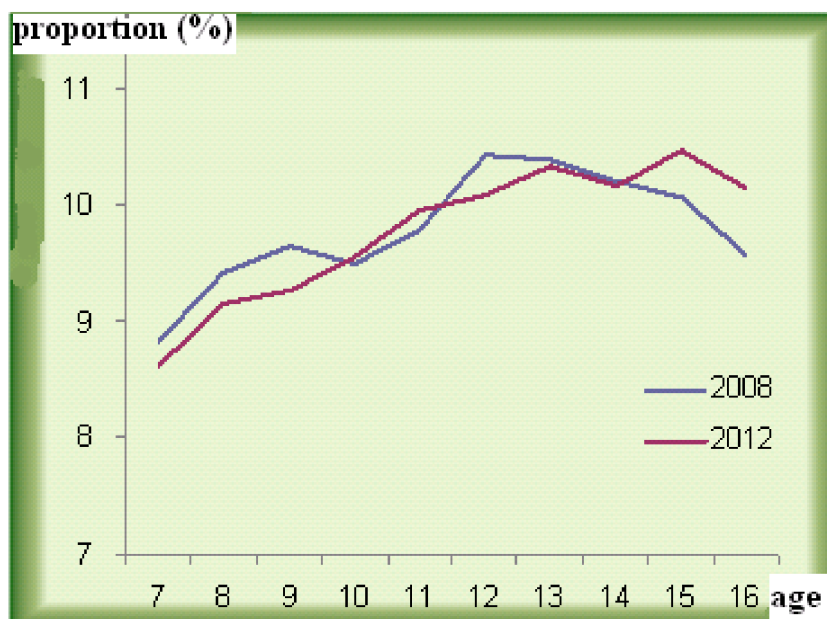


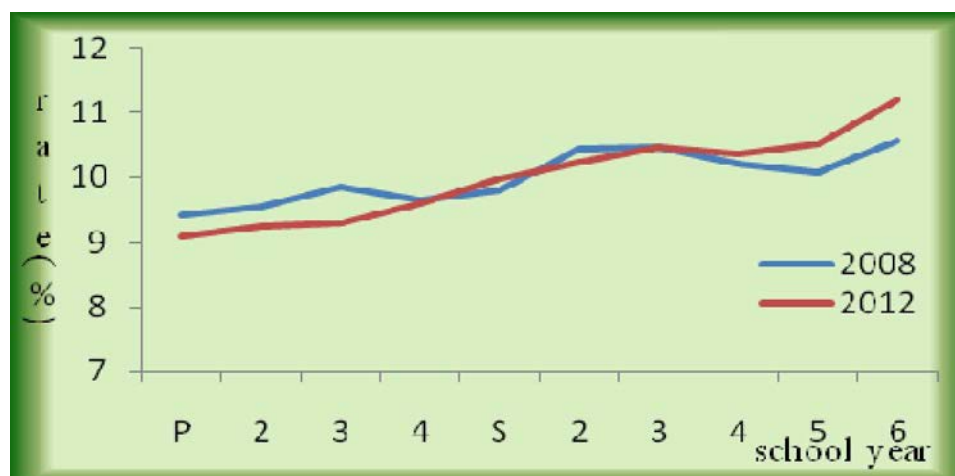
Table 3.2.4 and Figure 3.2.3 show the proportion of students in universal primary and secondary education in 2008 and 2012. There is the tendency of the lower grade the less number of students. This is the same as the change in the ratio of students classified by age.

**Table 3.2.4 Proportion of students by grade (%)**

Education level	2008	2012
number of students	4 020 587	3 743 513
total	100.0	100.0
primary	38.5	37.2
1	9.4	9.1
2	9.5	9.3
3	9.8	9.3
4	9.7	9.6
secondary	61.5	62.8
1	9.8	10.0
2	10.4	10.2
3	10.4	10.5
4	10.2	10.4
5	10.1	10.5
6	10.6	11.2

*Source: Education Commission, DPRK (2012)*

**Figure 3.2.3 Rates of students by grade in primary and secondary education**



### 3.2.2 Primary education

#### Intake ratio

Table 3.25 shows that the general intake ratio (GIR) in the primary education decreased by 1.0%, from 101.4% in 2008 to 100.4% in 2012, and the GIR of female students also decreased by the same percentage as seen above.

It also shows that the actual net intake ratio (ANIR) was the same in 2008 and 2012, which was 95.4% respectively and the ANIR of female students increased from 95.0% in 2008 to 95.1% in 2012, which was 0,1 % increase.

The ANIR in 2009 remarkably increased by 1.3% as comparing with 2008. It's because of some differences between the census and sample survey. 2008 and 2012 data were collected in a nationwide scale, while the 2009 data was made in some sample areas. As shown below, there's relative difference between data from the two different sources, but there is no absolute difference.

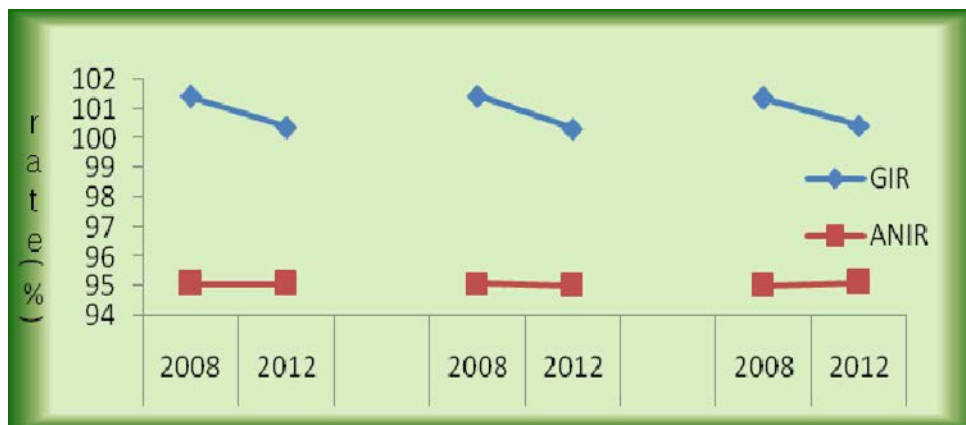
Index of new students shows that 99% of students enrolled in the 1<sup>st</sup> school year of primary education had received ECCE.

**Table 3.2.5 Intake ratio in primary education**

Year	GIR			1.00	ANIR			1.00	New entrance with ECCE		
	Total	Male	Female		Total	Male	Female		Total	Male	Female
2008	101.4	101.5	101.4	1.00	95.1	95.1	95.0	1.00			
2009					96.4	96.6	96.2	1.00	99.0	98.1	99.7
2012	100.4	100.3	100.4	1.00	95.1	95.0	95.1	1.00			

Figure 3.2.4 shows the change in the intake ratio from 2008 to 2012. There is a slight decrease in the GIR from 2008-2012 and there is almost no change in ANIR. In general, in primary education the GIR is 101% and the ANIR - 95% in average, which is quite high. There is no significant difference between 2008 and 2012. This shows that intake ratio of primary education is maintained in the high level and is stable. In the index of intake ratio of primary education, the GPI is 1.00 in general, which shows that there is no gender discrimination.

**Figure 3.2.4 Intake ratio in primary education**



### Enrolment ratio

Tables 3.2.6 and 3.2.7 show the enrolment ratio indicating the attendance of primary education. Table 3.2.6 shows that the GER in primary education decreased by 1.1% from 101.7% in 2008 to 100.6% in 2012, and that the GER of female students also decreased by the same percentage.

**Table 3.2.6 Gross enrolment ratio in primary education**

Year	%	GER		GPI
		male	female	
2008	101.7	101.7	101.6	1.00
2012	100.6	100.6	100.6	1.00

Table 3.2.7 shows that the NER in primary education decreased by 0.8% from 96.2% in 2008 to 95.4% in 2012, and that the NER of female students decreased by 1.2% from 96.1% to 94.9%.

It shows that the ANER is sustained as 98.8% from 2008 to 2012, and it was the same case with ANER of female students in 2008 and 2012. The ANER in 2009 increased a bit by 0.37% as compared with 2008 and 2012, of which the reason is that the data was from the sample survey.

**Table 3.2.7 Actual net enrolment ratio in primary education**

Year	Total	NER			GPI	Total	ANER		GPI
		Male	Female	Male			Female		
2008	96.2	96.2	96.1	1.00	98.8	98.8	98.8	1.00	
2009					99.1	99.2	99.1	1.00	
2012	95.4	94.8	94.9	1.00	98.8	98.8	98.8	1.00	



Figure 3.2.5 shows the change in enrolment ratio of primary education for 4 years from 2008 to 2013. The GER and NER in primary education decreased a bit and the ANER was stable at the level of 98.8% for 4 years. From this fact, we can see that 1.2 % of the children old enough to receive primary education are still at the preschool education level, and one of the reasons why GER decreased in primary education is related with the decrease in the NER, the rate of the students old enough to receive the primary education.

Considering the ER of the primary education in general, GIR, NER and ANER are 101%, 95.5% and 99% respectively, which is the high level. This shows that the ER of the primary education is maintained at the high and stable level. In the ER index of the primary education GPI is 1.00 in general with no difference by sex.

**Figure 3.2.5 Enrolment rate in primary education**



### Promotion rate

Table 3.2.8 shows the general promotion rate in primary education in 2008 and 2012 by grade.

**Table 3.2.8 Promotion rate by school years**

Grade	2008		
	MF	M	F
2	99.9	99.8	99.9
3	99.9	99.7	100.0
4	99.9	99.9	99.9
Average	99.9	99.8	99.9

*Source: Education Commission, DPRK (2012)*

### Completion rate

Table 3.2.9 shows the general completion rate (GCR) of primary education. The GCR of primary education decreased by 1.3% from 101.8% in 2008 to 100.5% in 2012. The CR in 2009 increased a little comparing to 2008 and 2012, the reason of which is the same as the previous one. According to completion rate of ISCED1, the GPI is 1.00, which shows that there is no difference in gender.

**Table 3.2.9 Completion rate in primary education**

Year	Total	Male	Female	GPI
2008	101.8	101.9	101.6	1.00
2009	104.3	105.5	103.5	0.98
2012	100.5	100.5	100.5	1.

**3.2.3 Secondary education****Intake ratio**

Table 3.2.10 shows the intake ratio index in secondary education. The GIR in secondary education is invariable as 100.3% both in 2008 and 2012, and GIR of female students decreased by 0.6% from 100.9% in 2008 to 100.3% in 2012.

The ANIR increased by 1.9% from 89.7% in 2008 to 91.6% in 2012, and the ANIR of female students increased by 1.7% from 89.9% to 91.6.

The ANIR noticeably increased (by 2 %), for comparably many students old enough to receive secondary education in the 2008/2009 school years were still at primary education level. GPI is 1.00-1.01, which shows that there's no gender difference in secondary education intake.

**Table 3.2.10 Intake ratio in secondary education**

Year	GIR				ANIR			
	Total	Male	Female	GPI	Total	Male	Female	GPI
2008	100.3	99.8	100.9	1.01	89.7	89.5	89.9	1.00
2012	100.3	100.3	100.3	1.00	91.6	91.6	91.6	1.00

**Enrolment rate**

Table 3.2.11 and Table 3.2.12 show the enrolment ratio indices of ISCED 2 and 3 in 2008 and 2012. Table 3.2.11 shows that the GER of ISCED 2 and 3 increased by 0.8% from 100.2% of 2008 to 101% in 2012 and the GRR of female students increased by 0.5% from 100.5% to 101.0%.

**Table 3.2.11 Total enrolment ratio in secondary education**

Year	GER			
	Total	Male	Female	GPI
2008	100.2	100.0	100.5	1.00
2012	101.0	101.0	101.0	1.00

Table 3.2.12 shows that the NER of ISCED 2 & 3 increased by 0.2% from 96.8% in 2008 to 97.0% in 2012 and the NER of female students decreased by 0.1% from 97.1% to 97.0%. Besides, the ANER increased by 0.2% from 97.3% in 2008 to 97.5% in 2012, and the ANER of female students was invariably 97.7% in both years.

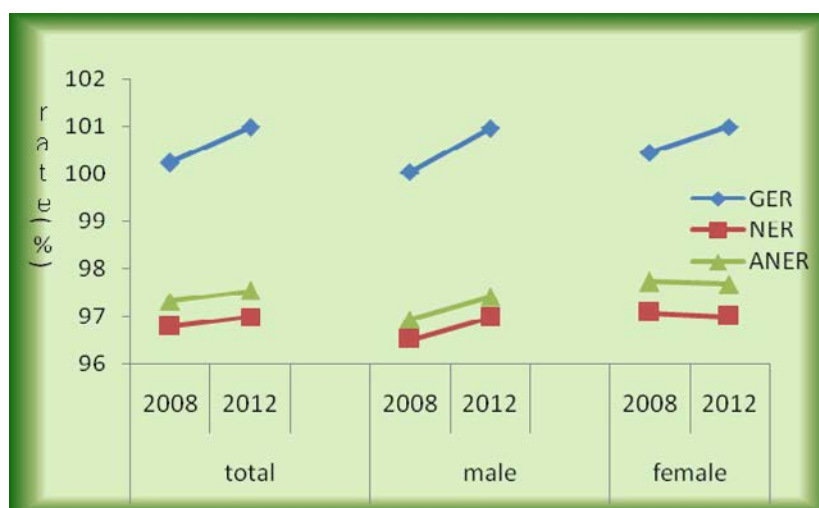
**Table 3.2.12 Net enrolment ratio in secondary education**

Year	NER				ANER			
	Total	Male	Female	GPI	Total	Male	Female	GPI
2008	96.8	96.5	97.1	1.01	97.3	96.9	97.7	1.01
2009					97.7	97.5	97.9	1.00
2012	97.0	97.0	97.0	1.00	97.5	97.4	97.7	1.00

Figure 3.2.6 shows the change in the enrolment of universal secondary education between 2008 and 2012. In universal secondary education, the 3 indexes of GER, NER and ANER all showed increasing tendency. GER increased remarkably comparing with NER and ANER. This is because the proportion of students who are at the age of secondary education (11-16) increased as well as that of students who are not among the total secondary education enrolment.

In all indexes, the absolute difference is less than 0.8%, and there aren't any remarkable differences. This shows that in universal secondary education, GER remains stable at about 100.5%, NER at about 97% and ANER at about 97.5%. In each index, GPI is 1.00-1.01, which shows that there's no gender difference in secondary education enrolment.

**Figure 3.2.6 Enrolment ratio in secondary education**



### Completion ratio

Table 3.2.13 shows that the total completion ratio of secondary education was 100.4% both in 2008 and 2012, and that of female students decreased from 100.7% in 2008 to 100.5% in 2012. This means the total completion ratio of secondary education remains stable at 100.4%. GPI was 1.00-1.01, which shows that there's no gender difference in the total completion ratio of secondary education.

**Table 3.2.13 Completion ratio in secondary education**

Year	Total	Male	Female	GPI
2008	100.4	100.1	100.7	1.01
2012	100.4	100.3	100.5	1.00

## School life expectancy

**Table 3.2.14 School life expectancy in primary and secondary education**

Year	Total	Male	Female	GPI
2008	10.08	10.07	10.09	1.00
2012	10.08	10.08	10.08	1.00

Table 3.2.14 shows that the school life expectancy of universal primary and secondary education was 10.08 years in both 2008 and 2012, and there's no gender difference. In DPRK, unlike other countries, there is no significant difference between the school life expectancy and the 10-year compulsory education for primary and secondary education. It's because the compulsory education is guaranteed by free education system, and there are few repeaters in universal primary and secondary education. The school life expectancy is 10.08 years both in 2008 and 2012, which shows that all the school-aged children can receive universal primary and secondary education for 10 years. Furthermore, it shows that DPRK has successfully attained the goal of providing everyone with access to universal primary and secondary education.

## 3.3 Literacy

### 3.3.1 Literacy of the total population

In the population census, the literacy was determined by asking the people whether they can write, read and understand a simple sentence.

The 2008 census based on this standard showed that most of people above 10 are literate. This is thanks to the free compulsory education system enforced long time ago. This policy has benefited by both of men and women.

The number of literate population above 10 or 15 among the total and the literacy rate are showed in table 3.3.1.

**Table 3.3.1 Number of Literate people and Literacy rate among 10+ and 15+ years old by Sex (2008)**

Age group	Total	Male	Female
Number of people			
above 10	20 495 081	9 906 523	10 588 558
above 15	18 473 736	8 871 243	9 602 493
Rate of literacy (%)			
above 10	99.998	99.999	99.998
above 15	99.998	99.999	99.998

*Source: DPRK Population Census National Report, CBS, 2008*

As seen in the table, the literacy rate of the adult above 15 is almost 100%, which is a very high level. The literacy of the youth aged between 15~24 is almost 100%.

This literacy is determined by the school attendance of people. 80% of the male and female population at the age of 5, the school-beginning age, attend to school. Most of the population aged from 5 to 16 study at primary or secondary schools and the ratio of the male and female is the same.

After secondary school, the majority of population enter universities or study at vocational schools or specialized schools at part-time.

The school attendance of the population in the age group of 15 to 24 is as showing in table 3.3.2.

**Table 3.3.2 School attendance of people in the age group of 15 to 24 by sex (2008)**

Age	Attendance rate (%)		
	Total	Male	Female
15	99.99	99.99	99.99
16	93.9	91.9	96.1
17	36.8	35.5	38.2
18	27.7	25.3	30.2
19	20.6	20.4	20.8
20	14.9	15.4	14.4
21	10.0	11.0	8.9
22	7.7	9.4	5.8
23	7.7	9.8	5.5
24	9.1	13.1	4.8

*Source: DPRK Population Census National Report, CBS, 2008*

As seen in the table, about one third of the population aged from 15 to 16 are still attending schools and at the age of 17, they receive vocational, specialized and higher education. The difference between the male and female becomes distinct at the age of 21 when they receive university and above education, so more men receive higher education than women.

### **3.3.2 Literacy of the adult**

Adult education plays an important role in improving literacy. The DPRK Government provides conditions and environment to all members of society for their life-long study after the universal 11-year compulsory education.

The Government tries to consolidate the study-while-working education system to make people study without leaving their jobs.

For example, about 100 factory colleges are located in major industrial areas and a number of farm colleges and fishermen's colleges are situated in major agricultural and fishing villages.

In addition, the Government puts great efforts on correspondence course and evening school education to ensure that workers and officials complete their university course.

Furthermore, the Government gives importance to social education. All the working people study more than 2 hours after work and have technical study regularly at factories, enterprises and co-operative farms. Various forms of activities are organized and conducted to raise the cultural and technical level of the working people through newspapers, magazines and other various periodicals, publications, mass media, including TV, educational network such as the Grand People's Study House.

The adult education varies according to regions. In DPRK, for example, the working people with low education level took a large proportion in rural areas. Therefore, the Government put effort on education through science and technology extension rooms and vocational schools. According to the 2008 census, the ratio of vocational school graduates by age among the working people in urban and rural areas is shown in Table 3.3.3 and Figure 3.3.1. This shows that the education level in rural areas is lower than in urban areas in all ages.

**Table 3.3.3 Proportion of vocational school graduates in the working population by area and age group (%)**

Age	Total	Urban	Rural
15-19	0.9	0.8	1.0
20-24	0.7	3.4	3.6
25-29	3	3.1	2.7
30-34	2.8	2.9	2.7
35-39	2.9	3.0	2.7
40-44	2.7	2.6	2.8
45-49	2.9	2.7	3.1
50-54	3.2	3.0	3.5
55-59	6.8	7.3	6.0
60-64	7.4	8.2	6.2
65-69	3.6	3.8	3.2
70-74	2.1	2.2	2.0
75-79	1.9	2.0	1.6
80-	1.1	1.2	1.0

*Source: DPRK Population Census National Report, CBS, 2008*

**Figure 3.3.1 Proportion of vocational school graduates in the working population by area and age group (%)**

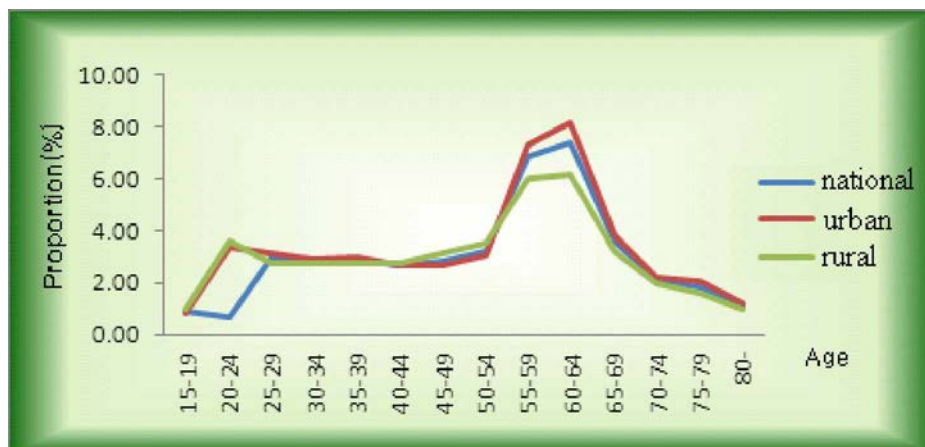


Figure 3.3.2 shows the proportion of population with the qualification of junior specialist increased to 17.10% thanks to the efforts put on adult education in rural areas but it is still lower than that of urban areas (18.83%).

**Figure 3.3.2 Percentage of junior specialists in urban and rural areas (%)**



*Source: DPRK Population Census National Report, CBS, 2008*

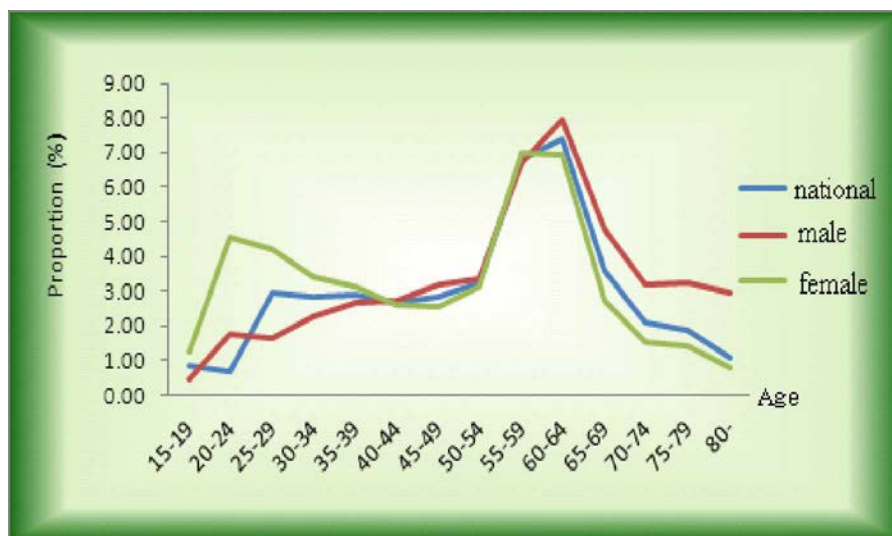
A great success has been made by putting efforts on educating the working women. Table 3.3.4 and Figure 3.3.3. shows the proportion of male and female graduates from vocational schools in the working population by age group.

**Table 3.3.4 Proportion of population graduates from vocational school by sex and age group (%)**

Age	Total	Male	Female
15-19	0.9	0.4	1.2
20-24	0.7	1.8	4.5
25-29	3.0	1.7	4.2
30-34	2.8	2.3	3.4
35-39	2.9	2.7	3.1
40-44	2.7	2.7	2.6
45-49	2.9	3.2	2.6
50-54	3.2	3.4	3.1
55-59	6.8	6.7	7.0
60-64	7.4	7.9	6.9
65-69	3.6	4.8	2.7
70-74	2.1	3.2	1.5
75-79	1.9	3.2	1.4
80-	1.1	3.0	0.8

Source: "National report on census in DPRK", Central Bureau of Statistics, 2008

**Figure 3.3.3 Proportion of population graduates from vocational school by sex and age group (%)**

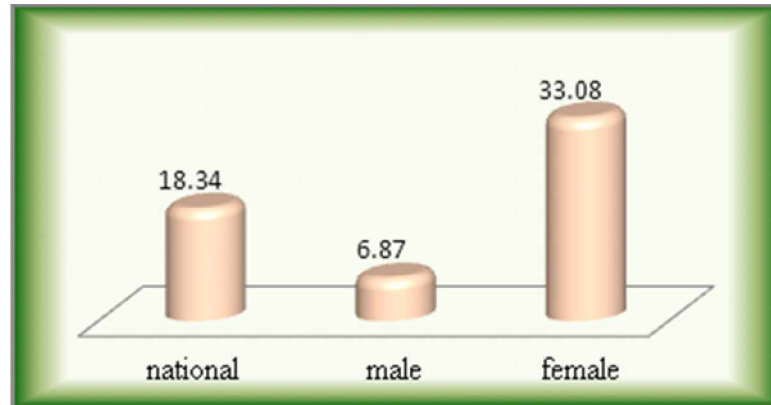


As seen in the table and figure above, 3.29% of the working population above 16 have graduated from vocational schools on a nation-wide scale and the proportion of male graduates is 3.35% and that of female graduates 3.23%.

As seen in Figure 3.3.4, among those with qualification of secondary specialist the ratio of the female (33.08%) is higher than that of the male (6.87%), which shows that women are raising their cultural and technical level through adult education.



**Figure 3.3.4 Rate of junior specialists by sex (%)**



But this shows that the ratio of male population entering the university is high and as a result, the education level of female population is generally lower than that of male population.

This report does not give full evaluation of adult education but national action plan on EFA clearly clarifies the objectives and strategies for its implementation and the Government tries to carry forward these objectives and strategies.

### **3.4 Quality of education**

The national action plan on EFA set it as a main objective of the education development plan up to the year of 2015 to improve the quality of overall education in keeping with the requirement of the new era by embodying the Jomtien Declaration and the Dakar Framework of Action to suit the specific situation of the country. The Government set it as one of the general tasks of EFA to consolidate the success achieved in the universal 11-year compulsory education, and on this basis, to raise the quality of universal 12-year compulsory education, and is now making efforts for its implementation.

#### **3.4.1 Qualification of teachers and re-education**

##### **Teachers who received normal education for primary education**

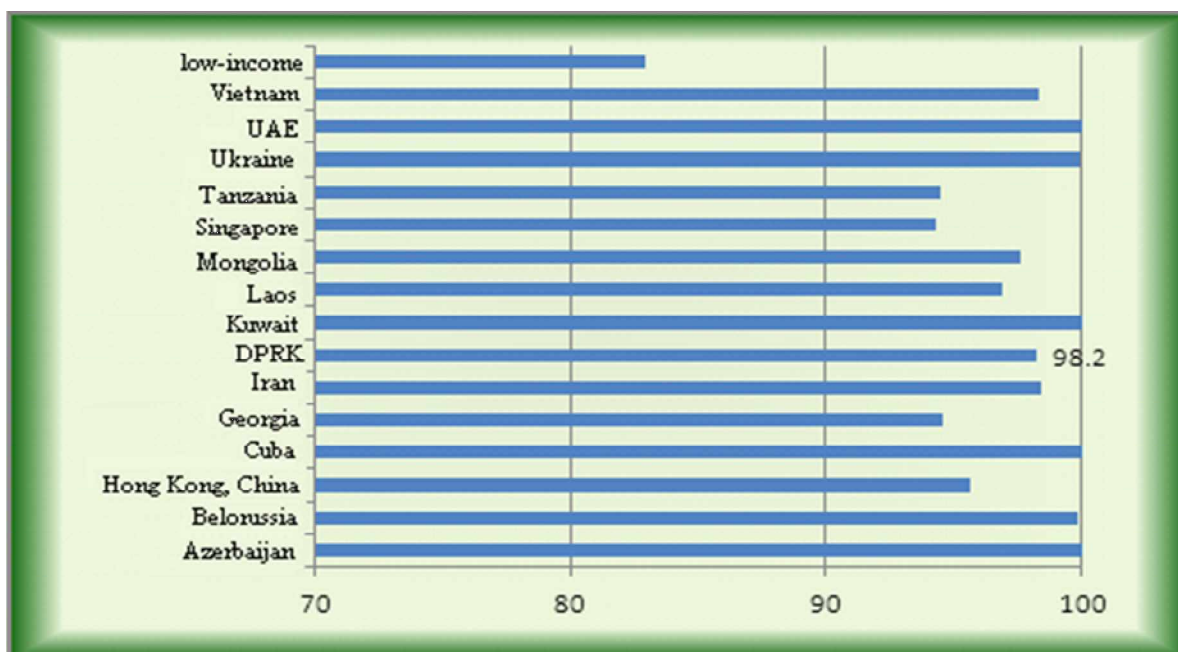
Training of primary school teachers plays a very important role in raising the quality of overall education. That is why, the Government puts efforts in improving the quality of normal education. As a result, the ratio of teachers who have received normal education for primary education reaches 98.2% (2009), which is relatively higher than the rest of the world as seen in Figure 3.4.1.

##### **Teachers who have received normal education by education level and region**

The rate of teachers who have received normal education for secondary and primary education in 2012 was 93.9% and 98.2% respectively. Among in-service teachers classified by level of education in urban and rural areas, the rate of teachers with graduation certificates of teacher-training colleges is shown in Figure 3.4.2.

As seen in the figure, the rate is high in urban in general, especially for primary schools (99.1% for primary schools, 95.2% for secondary schools). This shows that the DPRK Government is making efforts to improve the qualification of teachers in a long-term perspective.

**Figure 3.4.1 Rate of teachers who have received normal education for primary education in comparison with other countries (%)**

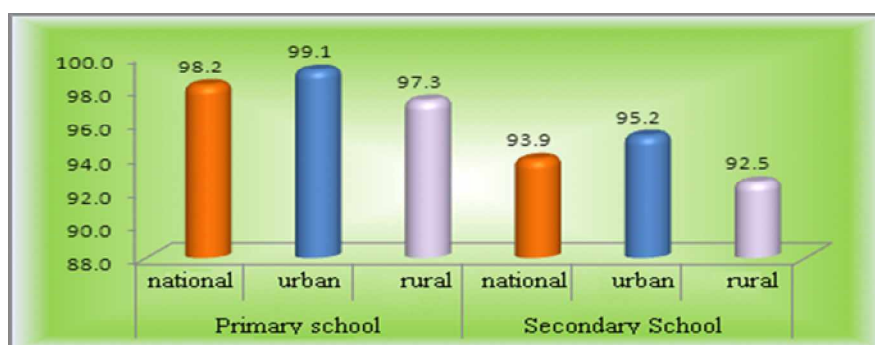


Source: Data set of Education Commission, DPRK, 2012

“GLOBAL EDUCATION DIGEST 2011” UNESCO INSTITUTE for STATISTICS

Yet, in rural areas the rate of teachers who have graduated from teacher-training colleges is lower than that of urban areas (97.3% for primary schools, 92.5% for secondary schools) and this is related with the decline in teacher training for rural children.

**Figure 3.4.2 Rate of teachers with graduation certificates of teachers training colleges classified by education level and region (%)**



Source: DPRK Education Committee (2012)

### Graduates from part-time course by education level

If we analyse the part time course graduates by education level, this course graduates take up 0.9% of the total number of primary school teachers in service and 4.8 % of the total number of secondary school teachers in service. The rate of part-time course graduates by areas is as follows:

**Table 3,4,1 Rate of part-time course graduates by education level and areas(%)**

Areas	Education level	Primary school	Secondary school
	Urban		0.6
Rural		1.1	6.7

*Source: DPRK Education Commission (2012)*

As seen in the table, the graduation rate is higher in rural (1.1%) than in urban, because teachers required in rural are trained through correspondance course.

As seen above, the Government makes great achievements in raising the qualification of teachers. But the average level of teachers is still low as the education level is low, which is related with the fact that those who have not received the regular normal education are in service at the lower schools down to kindergarten level.

### **Re-education of teachers**

The Government has given re-education to teachers so as to raise their qualification in keeping with the developing reality. Re-education is given to all teachers in service once every 3 years at the intensive training centers established from the center down to the bottom: provinces, cities and counties. Re-education course is conducted two times a year in summer and winter vocation period.

Yet, the educational facilities needed to keep abreast with the trend of development of modern science and technology are in shortage, and particularly in rural areas re-education course is not conducted in proper way because of poor transportation. As a result, the ratio of teachers from primary and secondary schools who have recieved re-education was 66-88% in the period of 1998-2010

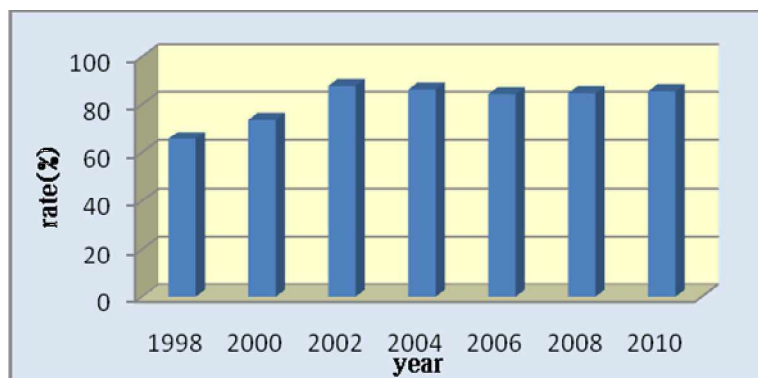
Thanks to the correct educational policy of the Government, great achievements have been made in raising the qualifications of teachers in keeping with the developing reality, but the above-mentioned difficulties still hinders the successful enforcement of the universal 12-year compulsory education.

### **3.4.2 Number of students per teacher**

Figure 3.4.4. shows the number of students per teacher in comparison with East-Asian countries.

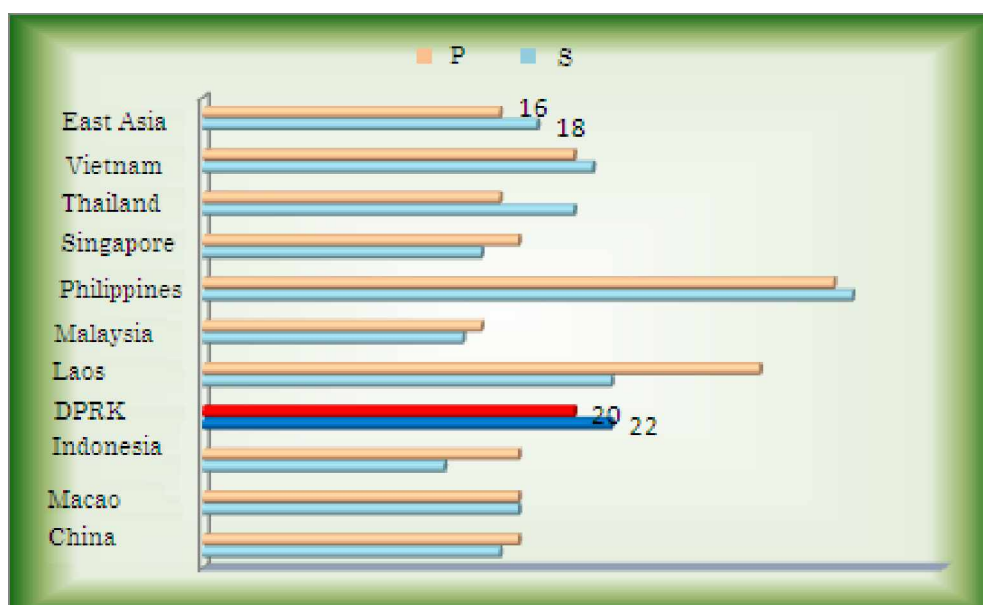
According to the 2008 census, the number of students per teacher was 22 in primary schools and 20 in secondary schools, which shows that the Government have trained many teachers to send to educational institutions. In consideration of the demand to decrease the number of students per teacher for higher quality of education, the number of students per teacher is small in secondary education but relatively big in primary education in comparison with the east-Asian countries. this is because there are not enough number of teachers working in primary education in DPRK.

**Figure 3.4.3 Rate of re-educated teachers (%)**



Source: Education Commission, Central Bureau of Statistics

**Figure 3.4.4 Number of students per teacher as compared internationally by educational level**



Source: DPRK Education Commission (2012)

Global Education Digest 2011 (UNESCO Institute for Statistics)

According to 2012 statistics of schools at all levels, the number of students per teacher is 18 in secondary school and 21 in primary school, which shows that there is a small difference in the education level. The number of primary school students per teacher (18) is still bigger than the world average.

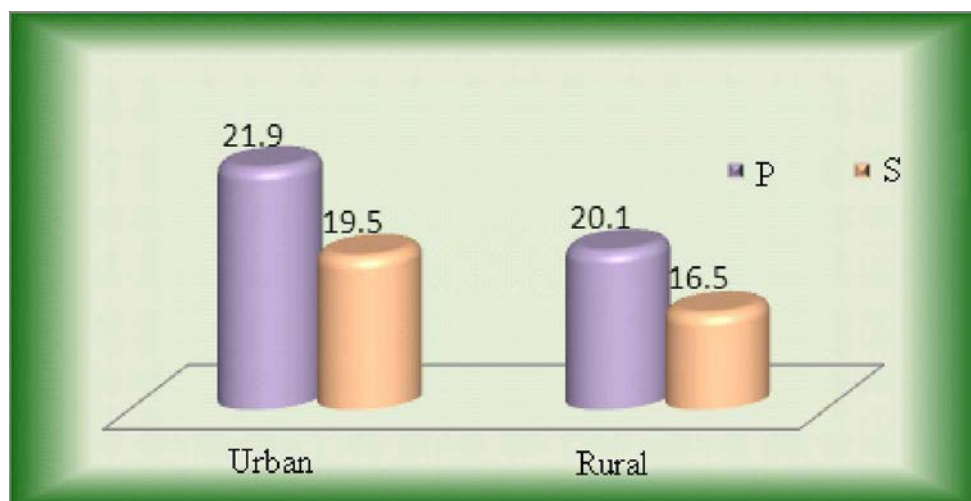
The following Table 3.4.2 and Figure 3.4.5 show the number of students per teacher in 2012 by education level and area.

**Table 3.4.2 Number of students per teacher by education level and area**

Areas \ Education level	Primary school	Secondary school
Urban	21.9	19.5
Rural	20.1	16.5

Source: DPRK Education Commission (2012)

**Figure 3.4.5 Number of students per teacher by education level and area**



As seen in the above table and figure, the number of students per teacher in urban is 21.9 in primary education and 19.5 in secondary education which is bigger than that in rural (20.1 in primary education and 16.5 in secondary education). This is because the DPRK has the small number of in-service teachers in comparison with the bigger number of students in urban than in rural.

### 3.4. 3 Number of students per class

**Figure 3.4.6 Number of students per class in comparison with other countries by education level**



Source : DPRK Education Commission (2008),

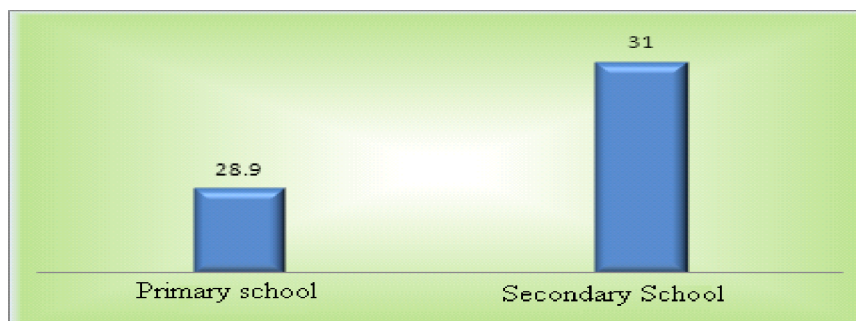
Global Education Digest 2011 (UNESCO Institute for Statistics)

Figure 3.4.6 shows the number of students per class in DPRK in comparison with East Asian countries by education level.

As seen in the figure, in 2008 the number of students per class was 29.3 in primary education and 31.6 in secondary education, which shows that the number of students per class is smaller than that of other countries by level of education.

As seen in Figure 3.4.7, in 2012 the number of students per class was 28.9 in primary education and 31 in secondary education, which shows that the number became small as against in 2008. This is thanks to the efforts of the Government to build more school buildings and expand the floor space of school buildings in keeping with the increase in the number of students. But referring to the Government policy to develop the aptitude and talent of students in conformity with their characters, the number of students per class at each education level is still high.

**Figure 3.4.7 Number of students per class by education level (2012)**



*Source: DPRK Education Commission (2012)*

As seen in Table 3.4.3, the number of students per class in urban areas is 32.0 in primary education and 33.4 in secondary education, which is bigger than that in rural areas (25.8 in primary education and 28.6 in secondary education).

**Table 3.4.3 Number of students per class by education level and area**

Areas \ Education level	Primary school	Secondary school
	Urban	32.0
Rural	25.8	28.6

*Source: DPRK Education Commission (2012)*

The big number of students per class impacts on giving individual help and heuristic method of teaching in class study according to each student's characteristics following the updated contents of education.

### 3.4.4 School hours of students and teachers by education level

Figure 3.4.8 shows the school hours of students in comparison with that of east-Asian countries.

**Figure 3.4.8 School hours of students by education level in comparison with other countries**



Source: DPRK Education Commission (2009)

Global Education Digest 2011 (UNESCO Institute for Statistics)

As seen in the figure, school hour of students in primary schools (aged 8-11) and in junior middle schools (aged 12-14) is 3 013 hours and 3 479 hours respectively, which is longer than other countries.

School hour of teachers is different by each level of education.

**Table 3.4.4 Average school hours of a teacher by education level**

Index	Primary school	Junior middle school	Senior middle school
School hours	900	650	600
Lecture performance(%)	99	99.5	98.7

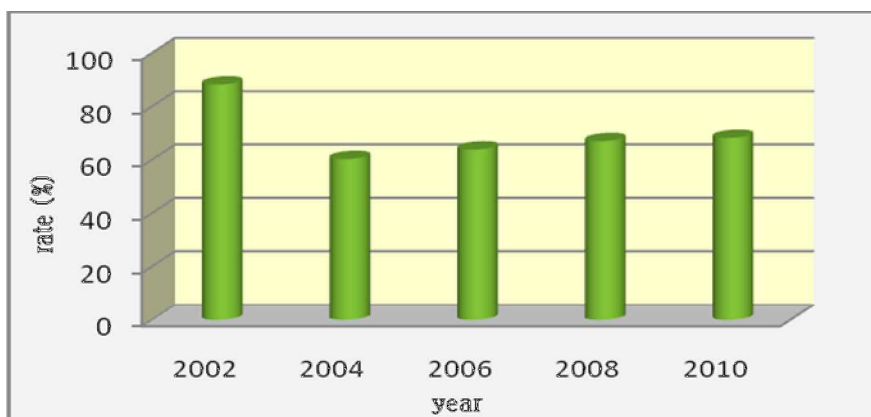
Source: DPRK Education Commission (2012)

This shows that the Government provides the students with more school hours so that they can acquire profound knowledge, capability and ability in the free compulsory education period.

### 3.4.5 Supply of textbooks

The ratio of primary- and secondary-school students who were supplied with textbooks decreased nearly to 30% in the period from 2002 to 2004 but afterward, gradually increased by the year of 2010.

**Figure 3.4.9 Rate of students who were supplied with textbooks ( )**



Source: Education Commission and Central Bureau of Statistics

**Table 3.4.5 Rate of students who were supplied with textbooks in 2006, 2008 and 2010 (%)**

Year	Rate of students supplied with textbooks
2006	63.7
2008	66.8
2010	68.0

*Source: 2011MDG National Report, CBS*

As seen in Table 3.4.5, the Government supplies textbooks and reference books to students in large numbers and the rate of students supplied with textbooks increases gradually every year. This is attributable to the educational policy of the Government attaching importance to the supply of textbooks even when it was in hardship.

Yet, the Government should supply more textbooks to the students for the successful enforcement of the universal 12-year compulsory education and to do this, it should overcome many difficulties in putting production facilities of the textbook print shops on modern basis and increasing paper production capacity.

### **3.4.6 Water and sanitation**

The Government makes a great effort to introduce tap-water supply in schools and improve public sanitary conditions so that students can study and live in good health in better cultural and hygienic educational environment.

Table 3.4.6 and Figure 3.4.10 show the status of water supply for improved water and sanitary conditions at kindergartens and schools.

**Table 3.4.6 Water supply for improved water and sanitation at kindergartens and schools (%)**

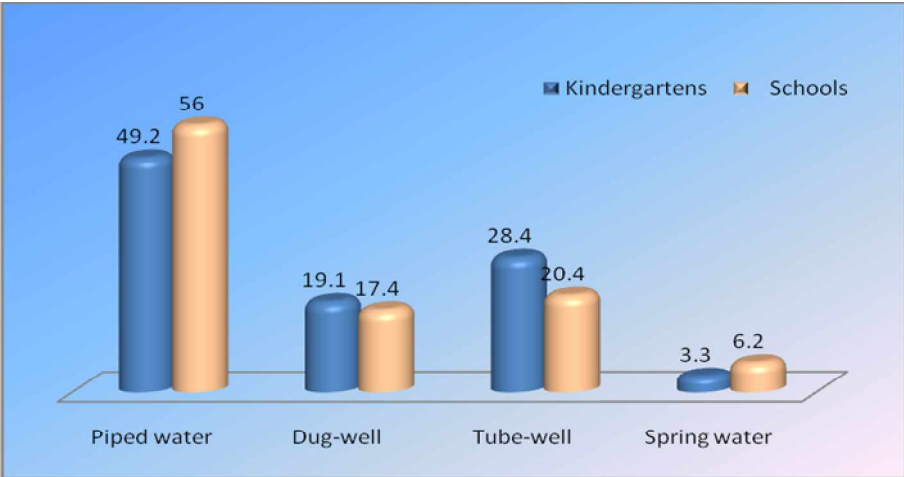
Types of water supply	Kindergartens	Schools
Piped water	49.2	56
Dug-well	19.1	17.4
Tube-well	28.4	20.4
Spring water	3.3	6.2

*Source: Survey on water supplement 2013, CBS*

As seen in the figure, what is main in water supply for improvement of water and sanitation is piped system, in addition to well, tube and spring. But at kindergartens and schools, the rate of piped water supply is low as 56% and 49.2%, respectively. This is because of some challenges in providing facilities and materials needed for improved water and sanitation at schools and kindergartens.



**Figure 3.4.10 Water supply for improvement of water and sanitation at kindergartens and schools (%)**



## Chapter 4 Education and socio-economic development

### 4.1 Education and labour

Thanks to the superior socialist education system in DPRK, everybody receives necessary education to participate in labouring for socio-economic development.

Working age in DPRK is 16. The state prohibits child labour under this age. It brings up children of the working people in nurseries and kindergartens at its expense. It also gives them 12-year compulsory education until they reach the working age, and then ensures further free education at universities and other higher education institutions of different levels while giving scholarship.

Analysis made in this chapter is based on 2008 census results.

Labor participation rate is an index that is used to estimate the people's participation in economic activities.

According to the 2008 census, the labour participation rate of the population above 16 is 70.2% excluding those in military service. The labour participation rate is 79.5% of male and 62.3% of female, which shows that the former is 17% higher than the latter. (Table 4.1.1)

**Table 4.1.1 Proportion of Working People by Age Group and Sex(%)**

Age	Total		
	Total	Male	Female
Total	70.2	79.5	62.3
16 - 19	52.6	49.4	55.4
20 - 24	88.7	84.0	91.6
25 - 29	87.5	87.8	87.1
30 - 34	90.2	96.0	84.3
35 - 39	91.3	98.3	84.2
40 - 44	91.5	98.6	84.4
45 - 49	91.3	98.5	84.4
50 - 54	90.9	98.0	84.2
55 - 59	55.5	96.8	19.0
60 - 64	15.8	28.9	5.1
65 - 69	5.1	9.2	2.1
70+	1.4	3.4	0.6

*Note: Figures shown excludes population living in military camps*

*Source: DPRK Population Census National Report, CBS, 2008*

As is shown in Figure 4.1.1, the labour participation rate of male population under 20 is relatively lower than that of female population, because more men receive education higher than secondary school education. Difference in the participation rate of population above 25 is distinct between male

and female, and generally male is higher than female. The participation rate of female population starts to fall down just after the age of 25 and makes a sharp drop after the age of 55 .

As is shown in Table 4.1.2 the labour participation rates in urban and rural are 78.8% and 80.7% respectively among male population, and 61.9% and 62.9% respectively among female population, which shows a slight difference as of 1%.

**Table 4.1.2 Proportion of Working People aged over 16 by Area and Sex**

Urban			Rural		
Total	Male	Female	Total	Male	Female
69.7	78.8	61.9	71.1	80.7	62.9

*Note: Those in military service are excluded*

*Source: National report on census in DPRK, Central Bureau of Statistics, 2008*

The proportion of working people by age group is also related to their educational attainment. Generally, the higher the educational attainment of the working people, the higher the quality of the workforce is and the larger the proportion of working people.

The proportion of the working people by highest educational attainment and by age group is shown in Table 4.1.3 and Figure 4.1.1.

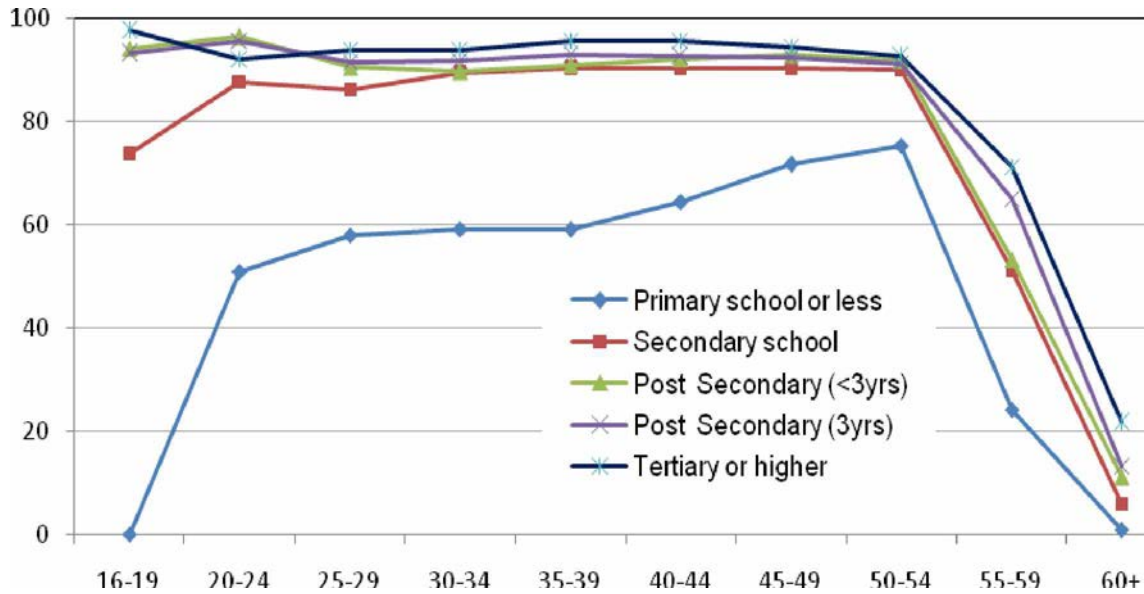
**Table 4.1.3 Proportion of Working People by Age Group and Highest Educational Attainment (%)**

Age	Primary school or less	Secondary school	Vocational (<3 yrs)	Professional (3 yrs)	Tertiary or higher
Total	0.9	73.3	68.7	78.5	80.4
16-19	0.1	74	94.2	93.2	97.7
20-24	51.1	87.7	96.5	95.8	92.3
25-29	58.1	86.3	90.6	91.6	93.9
30-34	59.2	89.4	89.7	92.0	93.9
35-39	59.2	90.3	91.1	92.9	95.7
40-44	64.6	90.5	92.2	92.6	95.7
45-49	71.8	90.3	93.0	92.5	94.5
50-54	75.4	90.2	92.0	91.4	92.7
55-59	24.2	51.4	53.4	65.2	71.4
60+	1.0	5.9	11.1	13.4	21.7

*Note: Figures shown excludes population living in military camps*

*Source: DPRK Population Census National Report, CBS, 2008*

**Figure 4.1.1 Proportion of Working People by Age Group and Highest Educational Attainment (%)**



As in Table 4.1.3 and Figure 4.1.2, the proportion of working people among graduates from tertiary or higher schools are highest as 80.4%. The proportion of working people among pre-secondary school graduates is lowest for the age group of 16-19, namely 0.1%. The reason is that the persons in this age group are in majority primary school graduates enrolled in secondary schools. The proportion of working people among pre-secondary school graduates remains relatively low for all other age groups which is mainly due to the fact that these categories include a relatively large number of disabled or those having physical difficulties. Until the retirement age of women, 55 years, working people count for all other educational levels for proportions above 90%. But it dropped to 65% and 71% for the age group 55-59 in both post secondary (3yrs) and tertiary or higher.

Table 4.1.4 exhibits the characteristics of working people by age group, sex and highest educational attainment. As for pre-secondary school graduates, the proportion of working females is higher than that of male for the age groups below 30 years, and lower from that age on until the age of 55 years; the difference is most striking in the age group 36-39 years. For secondary school graduates, the proportion of working females rises for the age groups below 25 years, and declines from 25 on. Since the proportion of working males in the corresponding age groups gradually increases, the differences by sex are growing from the age of 30. The differences in proportions by sex for post-secondary school (<3yrs) are comparable to those for secondary school attainment, which is mainly because of the age of marriage. The difference by sex for post-secondary school (3 yrs) is particularly large at the age group of 16-19, especially compared to other kinds of educational attainment. For graduates of tertiary and higher education the proportions of working males are more than 10 percent points higher than those of working females for the age groups from 30 years on.

Remarkable is also the proportion of women in this group of educational attainment in the age classes

below 25 years that with values of more than 95% are significantly higher than those for men in post secondary(<3yrs) and higher.

**Table 4.1.4 Proportion of Working People by Age group, sex and Highest Educational Attainment (%)**

Age	Primary school or less		Secondary school		Vocational (<3 yrs)		Professional (3 yrs)		Tertiary or higher	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
<b>Total</b>	<b>1.1</b>	<b>0.7</b>	<b>82.6</b>	<b>65.7</b>	<b>75.7</b>	<b>63.4</b>	<b>84.6</b>	<b>72.5</b>	<b>83.4</b>	<b>75.8</b>
16-19	0.1	0.1	72.5	75.2	90.5	95.4	75.5	96.1	96.5	98.1
20-24	47.4	54.4	83.4	90.5	96.0	96.6	91.4	96.9	85.2	96.8
25-29	56.8	60.0	86.4	86.3	96.2	88.5	94.4	89.8	96.2	91.8
30-34	62.5	55.9	95.4	83.3	97.0	84.8	98.0	85.3	98.0	89.4
35-39	69.4	50.6	98.1	83.4	98.6	84.7	98.6	85.6	99.1	89.3
40-44	74.9	57.4	98.3	83.7	98.7	85.5	98.9	85.4	99.4	88.5
45-49	77.4	67.1	98.2	83.5	98.6	86.4	98.9	85.8	99.3	87.7
50-54	82.1	70.5	97.7	83.0	98.2	85.6	98.2	85.6	98.9	87.1
55-59	88.0	9.2	96.4	16.4	96.6	16.7	97.4	27.2	97.9	33.2
60+	2.1	0.8	12.4	2.3	17.6	4.6	19.2	6.2	27.6	6.0

*Note: Figures shown excludes population living in military camps.*

*Source: DPRK Population Census National Report, CBS, 2008*

Generally, people who are qualified for engineers, specialists, assistant engineers and secondary specialists apply for appropriate jobs closely connected with their areas of majors. The labor population composition by levels of education and fields of national economy can be seen in Table 4.1.5

The working people with secondary or lower educational attainment number 8 426; the sectors with the highest shares with this group are agriculture, fishing and forestry (42.1%), wholesale and retail trade (17.3%) and manufacturing sector (16.3%); together counting for more than 75%. This is attributable to the fact that the overwhelming majority of working people with secondary or lower educational attainment are support laborers in grain production, workers engaged in wholesale and retail trade, or housewife's work-team members involved in garment manufacturing.

Working people with secondary educational attainment number to 9 420 185 and hold the largest share in the percent distribution of working persons by economic sector: 40.6% of laborers in agriculture, fishing and forestry, and 24.9% in the manufacturing sector.

Proportions of working people with post secondary (<3yrs) and post secondary (3yrs) educational attainment by economic sector are respectively: agriculture, fishing and forestry 35% and 28.9%, manufacturing sector 19.4% and 21.8%, and state administration 7.3% and 7.8%. The reason for this is that there are many agricultural vocational schools and post secondary (<3yrs) and post secondary (3yrs) schools in provinces, cities and counties.

**Table 4.1.5 Percentage Distribution of Working Population by Economic Sector and Highest Educational Attainment**

Industry	Total	Primary school or less	Secondary school	Post Secondary (<3 yrs)	Post Secondary (3 yrs)	Tertiary or higher
<i>Total</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>
Agriculture, fishing, forestry	36.0	42.1	40.6	35	28.9	11.7
Mining	5.9	5.0	6.7	3.3	3.8	2.9
Manufacturing	23.7	16.3	24.9	19.4	21.8	18.0
Electricity	1.2	1.0	1.2	1.3	1.3	1.0
City management	0.5	0.2	0.6	0.5	0.6	0.5
Construction	3.0	1.1	3.2	2.6	2.7	2.5
Wholesale, retail trade	4.6	17.3	4.3	6.0	7.0	4.6
Transport, storage	2.9	1.3	2.8	3.6	3.8	2.8
Accommodation, food..., personal serv.	1.2	1.1	1.1	2.1	2.0	1.0
Telecommunications, IT	1.0	0.5	0.9	1.1	1.3	1.9
Financial service, banking	0.2	0.1	0.1	0.6	0.7	0.4
Scientific research	1.0	0.4	0.5	0.8	1.2	3.6
Communal service, land administration	3.7	3.0	3.6	3.5	4.9	3.6
State administration	5.9	4.5	4.7	7.3	7.8	12.5
Education	4.5	2.3	1.6	3.7	4.2	22.7
Public health service	2.7	2.1	1.5	6.4	5.4	7.6
Culture, sports	1.1	0.5	0.8	1.3	1.4	2.3
Public service	0.8	1.3	0.9	1.3	1.0	0.6

*Note: Figures shown excludes population living in military camps.*

*Source: DPRK Population Census National Report, CBS, 2008*

The percentage distribution by economic sector of working people with tertiary or higher educational attainment is different from those with post secondary (3yrs) or lower educational attainment. The sectors which rank highest in the number graduates of tertiary or higher schools are education (27.7%), manufacturing sector (18%), state administration (12.5%) and agriculture, fishing and forestry (11.7%).

#### **4.2 Education and women**

In DPRK, women are the powerful force pushing forward the socio-economic development and all of them are educated and actively take part in state and social life with equal rights with men.

In DPRK, as a result of introduction of universal 11-year free compulsory education, the rates of

civilization and of secondary school graduation of women are high. In consideration of the fact that the education level of women was low before liberation, this is especially remarkable achievement.

According to the census in 2008, the ratio of female population attending secondary schools is nearly the same both in urban and rural areas. But in the level of above secondary school education there is a distinct difference between urban and rural and the ratio of women students in urban is a bit higher than in rural.

Table 4.2.1 and Figure 4.2.1 show proportion of female above 16 among the total population in urban and rural schools by the level of education.

**Table 4.2.1 Number and proportion of female population above 16 attending schools by area and educational level in 2008 (%)**

Educational level	Urban			Rural		
	Total (number)	Female (number)	Proportion(%)	Total (number)	Female (number)	Proportion(%)
Total	586 229	215 408	36.74	140 537	51 537	36.67
Vocational	99 442	54 718	55.03	34 145	18 385	53.84
Professional	117 160	54 816	46.79	39 223	16 326	41.62
University or Higher	369 627	105 874	28.64	67 169	16 826	25.05

*Source: DPRK Population Census National Report, CBS, 2008*

Female at professional, universities and post-graduate courses in urban are respectively 46.79% and 28.64%, 5.2% and 3.6% higher than the number of those in rural.

This shows the smaller number of female students receiving high education in rural compared to those in urban.

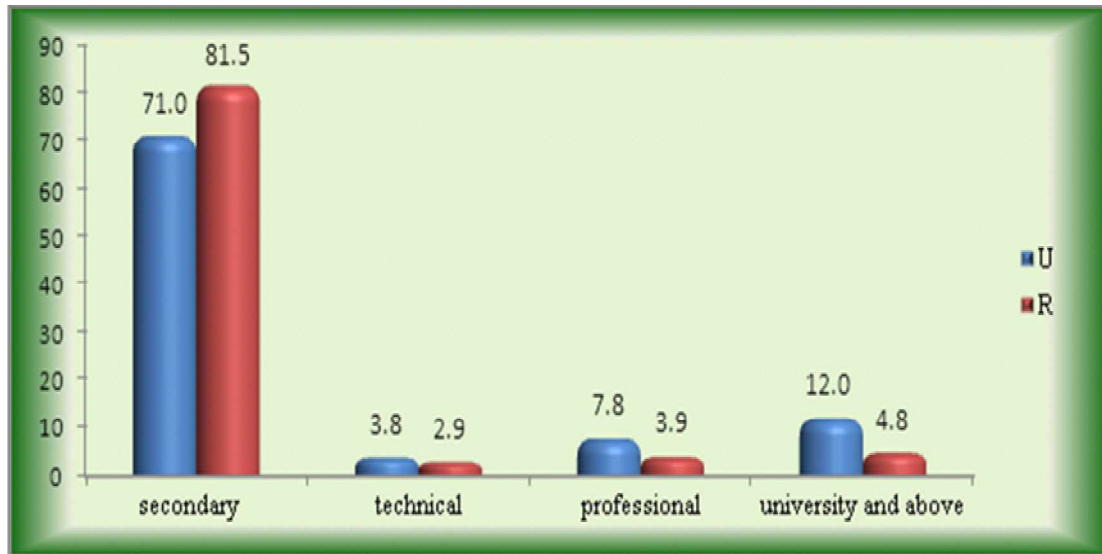
#### **4.2.1 Highest Educational Attainment**

According to the 2008 census, in the final education level of population above 25, there is a sex difference and female is lower than male in education level. For example, only 9% of female above 25 have graduated from universities, showing that women are 17% lower than men.

As in Figure 4.2.2, the 2008 census shows that among the female population above 25 there is a distinct difference in the level of final education between urban and rural.

The ratio of female population who have graduated from secondary schools is 10.5% higher in rural than in urban. But the ratio of female population who have graduated from vocational schools, specialized schools, universities and above is higher in urban than in rural. Particularly in the level of specialized schools, universities and above education, urban is 3.9% and 7.5% higher than rural, which is approximately 2 or 3 times higher.

**Figure 4.2.1 Ratio of female population above 25 by urban and rural areas and level of final education (%)**



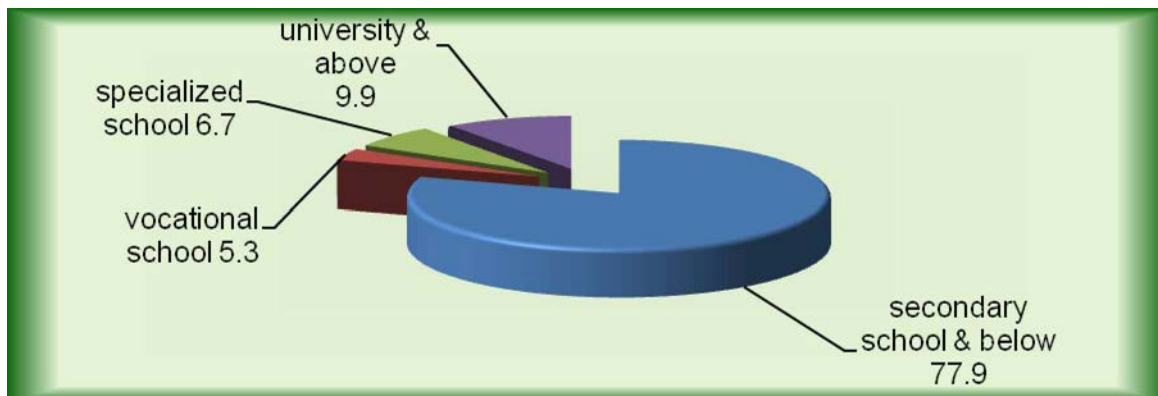
Source : DPRK Population Census National Report, CBS, 2008

To sum up, in the level of education the ratio of female population is higher in urban than in rural, which shows that women in urban receive education more than those in rural. In the level of above university education, the urban women were about 3 times higher than the rural women in number.

#### 4.2.2 Composition of female working population by education level

If we consider the proportion of female working population by education level, it is the same as shown in Figure 4.2.3.

**Figure 4.2.2 Composition of female working population classified by education level (%)**



Judging from the composition of female working population by education level, women with level of secondary school education and below still take up the majority and those who have reached the university education level and above account for approximately 10%.

According to education level and economic activities of women from the 2008 census, one out of 5 participating in economic activities has reached the level of vocational school and above education and one out of 8 - the level of university and postgraduate education.



Many women are engaged in education, and therefore, this sector covers 4.9% in the composition of working population by sectors of national economy. Table 4.2.2 shows the total number of teachers, the number of female teachers and its ratio at each level of school education.

**Table 4.2.2 Total number of teachers, the number of female teachers and its proportion by school level (%)**

School of all levels	Total number of teachers	Number of female teachers	Ratio (%)
Total	296 664	168 564	56.82
Kindergarten	33 582	33 256	99.03
Primary school	70 298	60 997	86.77
Secondary school	123 702	62 890	50.84
University & professional school	69 082	16 683	24.15

*Source: DPRK Population Census National Report, CBS, 2008*

According to the census, the total number of teachers in DPRK is 296 664, and among them the number of female teachers is 168 557, i.e. 56.82%.

At schools of all levels, women take up 99.03% and 86.77% respectively in kindergartens and primary schools, which covers the majority. But women take up 50.84% in secondary schools, which is similar to the ratio of male teachers, and the ratio of female teachers is no more than 24.15% in universities and specialized schools.

The data on women's participation in economic activities show that more effort should be put to making women actively participate in economic activities and improving their education level.

### **4.3 Education and Youth**

In DPRK, youth are the most vigorous group of society and the vanguards and shock brigades that promote the social and economic development.

#### **4.3.1 School attendance of population aged 16-29 years old**

According to the 2008 Census findings, the student bracket of the total 16-29- years-old population were 1 078 717, which means 21% of the age group were students; students at secondary schools, vocational and professional and universities were 39.9%, 11.5%, and 48.6%, respectively.

The number of students by educational levels and age groups are given below.

As seen in the table above, the school attendance of 17-19-year-old studying population at all educational levels, except at secondary schools, was the highest.

**Table 4.3.1 Percentages of students by educational level and age group**

Ages	Totals	Secondary schools	Vocational <3yrs	Professional 3yrs	Universities and Higer
Total (number)	1 078 717	430 139	124 093	144 715	379 770
16	36.9	89.4	3.5	2.9	1.2
17	14	9.9	28.3	18.3	12.3
18	10.4	0.7	24.3	20	13.4
19	7.7		12.4	14.3	12.5
20	5.1		7.1	6.1	9.8
21	3.4		4.5	3.6	6.9
22	2.6		3.5	3.6	5
23	2.6		3.1	4.8	4.5
24	3.1		3	5.6	5.7
25	3.3		2.4	5	6.7
26	3.4		2.4	5.2	6.9
27	2.8		2.1	4.5	5.6
28	2.6		1.9	3.6	5.3
29	2		1.5	2.5	4.2

Source: DPRK Population Census National Report, CBS, 2008

#### 4.3.2 Highest educational attainment of population aged 15-29 years old

As seen in the table above, except those who were attending secondary schools, 73.4% of 15-29-year-old population had graduated from secondary schools and nearly 8% of the population from professional.

The details of those findings are given in the table below.

**Table 4.3.2 Proportion of highest educational attainment by age group (%)**

Age group	Total population (number)	Primary school	Secondary schools	Vocational <3yrs	Professional 3yrs	Universities and Higer
Total	4 954 190	16.9	73.4	2.3	3	4.5
15 – 19	1 862 996	44.8	53.9	0.9	0.3	0.2
20 – 24	1 441 348	0	87	3.5	4.2	5.3
25 – 29	1 649 846	0	83.5	3	5	8.5

Source: DPRK Population Census National Report, CBS, 2008

**Table 4.3.3 Educational levels by sex and age group (%)**

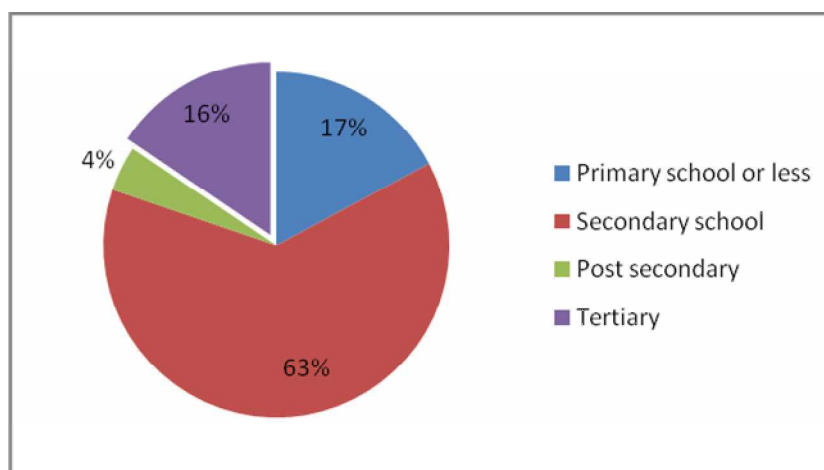
sex	Total population (number)	Primary school	Secondary schools	Vocational <3yrs	Professional 3yrs	Universities and Higer
men's total	2 241 092	19	73.4	1.2	1.9	4.4
15 – 19	883 962	48.2	51.2	0.4	0.1	0.1
20 – 24	555 939	-	90.7	1.8	2.2	5.3
25 – 29	801 191	-	85.9	1.7	3.9	8.6
women's total	2 713 098	15.1	73.3	3.2	3.8	4.5
15 – 19	979 034	41.9	56.3	1.2	0.4	0.2
20 – 24	885 409	-	84.7	4.5	5.4	5.4
25 - 29	848 655	-	81.2	4.2	6.1	8.4

Source: DPRK Population Census National Report, CBS, 2008

#### 4.4 Education and Elderly Population

In terms of educational attainment, it shows that the elderly population, in general, is relatively well educated. A great majority of them (63 percent) have completed at least secondary level of education while only about 17 percent have either no education at all or have completed only primary school.

**Figure 4.4.1 Elderly Population by Highest Educational Attainment**



Source: DPRK Population Census National Report, CBS, 2008

There are, however, significant differences in education level that the elderly attained (see the table 4.4.1). The younger groups have received much more education than their older counterparts mainly due to the educational system improved after the war.

Of the elderly population aged 60-64, nearly 70 percent have completed secondary level of education. One of every 5 is a graduate from a college or university and only less than 3 percent have not gone

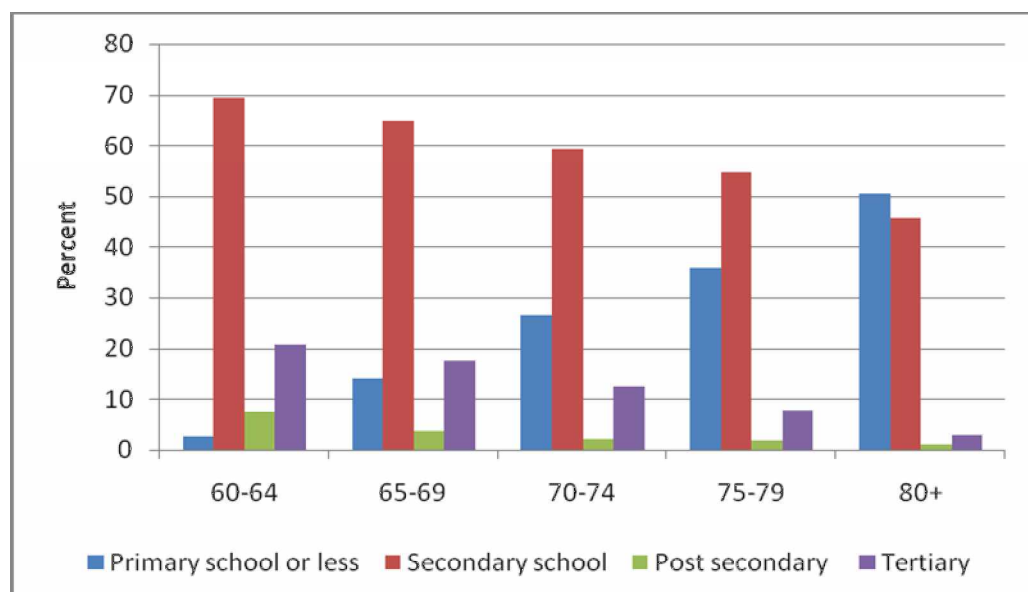
beyond primary level of schooling. These results reflect the impacts of educational system that was in place during the last four decades.

**Table 4.4.1 Percentage distribution of the Elderly Population by Highest Educational Attainment, Age Group and sex**

Sex and Age	Total	Primary school or less	Secondary school	Post secondary	Tertiary
Both Sexes	100.0	17.2	63.0	4.2	15.6
60-64	100.0	2.6	69.4	7.4	20.6
65-69	100.0	14.0	64.8	3.6	17.6
70-74	100.0	26.3	59.2	2.1	12.4
75-79	100.0	35.7	54.7	1.9	7.7
80+	100.0	50.5	45.5	1.1	2.9
Male	100.0	7.5	59.2	5.6	27.7
60-64	100.0	1.0	61.4	7.9	29.6
65-69	100.0	6.4	60.4	4.8	28.4
70-74	100.0	14.8	56.3	3.2	25.7
75-79	100.0	22.2	52.0	3.2	22.6
80+	100.0	37.1	45.2	3.0	14.8
Female	100.0	23.0	65.3	3.4	8.3
60-64	100.0	3.9	76.0	6.9	13.1
65-69	100.0	19.3	68.0	2.7	10.0
70-74	100.0	32.3	60.8	1.5	5.4
75-79	100.0	39.9	55.5	1.4	3.2
80+	100.0	52.5	45.6	0.8	1.1

Source: DPRK Population Census National Report, CBS, 2008

**Figure 4.4.2 Highest educational attainment of the elderly population by age group**



The educational attainment of the older generation is generally less than their younger counterparts. Those in the age group 65-79, for example, have also reached relatively high levels of education but not as much as those of age group 60-64.

Those aged 80 and above have received education during the 1940's or earlier. It is therefore not surprising that their educational attainment is not as high as their younger counterparts. Still, nearly half (45 percent) of the elderly age 80 and above have completed secondary level of education. About 50 percent received not higher than primary education.

## **Chapter 5 Evaluation on the implementation of EFA strategy and prospect of beyond 2015**

### **5.1 EFA-influenced Reform of education**

#### **5.1.1 Improvement of education contents and methods**

In order to achieve EFA goal, the Government, first of all, has made effort to continuously improve the education contents and methods in keeping with the demands of the times.

The Government has actively pushed forward the work of improving the education program of general secondary education in conformity with the times of knowledge-based economy and on this basis, adapting textbooks to it.

The Government has newly included English and computer courses in primary school education, compiled textbooks for these subjects, thus teaching these subjects to all students across the country from the year 2008.

The Government has strengthened mathematics and other basic science education, foreign language education and computer education in secondary school education and at the same time, given optional education according to the characteristics of regions and specific areas. The Government has improved mathematics and other basic science textbooks reasonably in conformity with the developing reality and adapted English textbooks for general secondary schools to those of middle schools No. 1. It has also improved the contents of computer education so that the students can acquire the capability of collecting, analysing and processing information, not merely typing and data retrieval.

The Government has strengthened basic technical education concerning industry for the students in urban areas, basic technical education concerning agriculture for the students in rural areas and basic technical education concerning forestry and fishery for the students in forestry and fishing areas.

The Government has also strengthened physical culture to help students grow tall and swimming education from the primary and secondary school education and taken measures for systematic training of the students interested in football and other sports activities.

The Government has gotten rid of dictation method, the method of making students learn by heart the lecture mechanically and other cramming teaching methods, and strengthened the work of applying the heuristic teaching method to education.

The Government has ensured that kindergarten education raised its effectiveness through games, songs and dances in conformity with their psychological characteristics and actively used national fairy-tale collections told by the peerless great men of Mt. Paektu and world fairy-tale collections and other interesting books.

The Government has ensured that primary and secondary school education attached importance to observation, experience and group discussion so that the students could foster the capability of

understanding the contents of textbook through their proactive thinking and of studying by themselves throughout their whole life.

### **5.1.2 Improvement of teachers' qualification**

For the successful achievement of the EFA goal, the Government has directed its effort to raising the qualification of teachers, the masters of education.

It has sent the excellent students among secondary school graduates to universities and normal colleges to train them to be able teachers.

It has organized teaching competitions, teaching method discussions and demonstration lectures and pushed forward the work of creating new teaching methods and enlarging the rank of model lecturers among teachers so that a large number of teachers could win the certificate of new teaching methods and the honour of October 8 model teacher.

It has raised the role of intensive teacher training centers at all levels — province, city and county — and strengthened the in-service re-education of teachers so that they could acquire more profound knowledge in conformity with the developing reality and raise their practical qualification.

### **5.1.3 Realization of IT-based and modern education**

Realization of IT-based and modern education is one of the important ways to improve the quality of education.

The Government has strengthened the material and technical foundations for IT-based modern education in conformity with the world trend of educational development and organized computer program competitions and exhibitions in the field of education so that computer-based education programs and computer-based teaching materials could be prepared and introduced into education.

It has taken a measure to strengthen the distance education in conformity with the requirement of the times of knowledge-based economy so that a large number of working people could be admitted into distance education system to acquire the advanced scientific and technical knowledge.

### **5.1.4 Contents of the universal 12-year compulsory education**

The ultimate goal of the universal 12-year compulsory education is to train the coming generations to be comprehensively developed talents who are knowledgeable, moral and healthy by raising their independent ideology and creative ability.

The aim of kindergarten education is to develop the independent ideological consciousness, mental faculty, and emotional feeling and elementary sports ability of children by combining nursing and education properly in conformity with the characteristics of their age and mental characteristics and prepare them for primary school education.

Kindergarten has a 2-year course (junior and senior) and compulsory education is given in the senior course. Kindertartens admit 4-year-old children and gives them ideological and moral education, mother tongue education, intelligence education, emotional education and physical training.

The aim of primary school is to prepare students to form the framework of world outlook, acquire the mother tongue fluency, elementary knowledge and capability and thinking ability needed for understanding matters and phenomena through education in mathematics and elementary knowledge of nature and society and apply it to practice, foster deep emotion and build up strong physique so as to be fully ready for secondary education.

Primary school admits 6-year-old children who have finished 1-year compulsory pre-school education and teaches them socialist morality, mother tongue, mathematics, English, information technology and so on for 5 years.

The aim of junior secondary school is to prepare students to consolidate the framework of world outlook, acquire general basic knowledge needed for the completion of secondary general education and basic information technology, basic knowledge and ability of elementary emotional life and build up strong physique to be fully ready for senior secondary school education.

Junior secondary school admits 11-year-old students who have finished 5-year primary school education and teaches them socialist morality, mother tongue, mathematics, natural science, English, Korean history and geography, information technology, basic technology and so on for 3 years.

The aim of senior secondary school education is to prepare students to form the firm framework of world outlook, acquire the complete general secondary knowledge, creative ability and noble emotion and build up strong physique so as to lead a proper life in their military service, workplaces and universities after graduation and acquire the solid foundation needed for life-life study.

Senior secondary school admits 14-year-old students who have finished 3-year junior secondary education and teaches them socialist morality and law, mother tongue and literature, mathematics, physics, chemistry, biology, English, history and geography, psychology and logics, information technology, basic technology and so on for 3 years.

## **5.2 Lessons drawn from the implementation of EFA strategy in 2005 and onward**

In DPRK, most population has finished the level of secondary school education and above through the universal 11-year compulsory education.

**First**, the Government should increase its investment in education based on its education development strategy.

**Second**, the Government should further raise the secondary general education.

The analysis of the total number of primary and secondary school students from 2008 to 2012 shows that the number of students decreased by nearly 280 000. The projection of the number of population aged 0 to 14 in the period of 2015-2040 will decrease gradually.

As dependent children decrease while dependent aged people increase because of highing ageing population, the working population, the main force of economic development of the country, reduces in number. Therefore, the role of the working population is very important. This demands that the Government directs its effort to raising the general secondary education to improve decisively the



education level of the working population.

**Third**, the Government should improve the quality of education in conformity with the developing reality.

As seen in above tables, the GER takes the lead in the world, but improvement of quality of education remains to be an important challenge.

The rate of teacher-training college graduates should be high in the composition of kindergarten and school teachers.

Particularly in rural areas, the rate of teacher-training college graduates becomes relatively low as against urban areas and there is a sharp drop in the number of kindergarten and primary school teachers.

Since the Government has filled up the vacancies of kindergarten and primary school teachers in rural areas with correspondence course graduates, it should improve the quality of correspondence education and strengthen the re-education of kindergarten and primary school teachers in rural areas.

The number of students per teacher and the number of students per class should be decreased.

The Government is still in difficulty in improving the quality of education because it lags behind as against the world advanced level in the number of students per teacher and the number of students per class.

Particularly in primary schools in urban areas, the number of teachers is relatively small as compared with that of students and the number of students per class is big. Therefore, the Government should take a measure to increase the number of primary school teachers and the number of classrooms needed in urban areas.

**Fourth**, textbooks should be properly supplied to the students.

Remarkable improvement has not been made in the supply of textbooks since 2006, which is only less than 70%. The Government should increase its investment and mobilize all possible resources for the improvement in the supply of textbooks so as to improve the quality of education.

**Fifth**, the quality of adult education should be raised.

The Government should improve the composition of labour force in quality by raising the level of vocational school and higher education of the working people in rural areas.

The Government should enhance the education level of women so that they can actively participate in social and economic activities with high cultural and knowledge level.

**Sixth**, it is important to increase the general enrolment rate in higher education for the improvement of qualified labor force.

The Government should pay deep attention to further improvement of the quality of working population by decisively increasing the quality of secondary general education, for the number of population under 15 is estimated to decrease gradually in the 2040's .

### **5.3 Prospect of 2015 and onward**

The Government will make great effort to attain the goal of better quality while consolidating the achievements in quantitative index of EFA.

The Government's policy of making all people well-versed in science and technology is very important in successfully attaining the EFA goal for 2015 and onward.

Making all people well-versed in science and technology has the purpose to prepare all people to be beings with high level of technology and knowledge who can successfully solve all scientific and technological issues arising in the building of a thriving nation by acquiring the advanced scientific knowledge and technological skills needed in their sectors and units and applying them to practice.

Education plays an important and responsible part in making all people well-versed in science and technology.

The Government will make great effort to raise the qualification of people, improve the quality of education as the dependency rate against working population becomes high due to reduction of schooling population in comparison with the increase in the whole population in future.

First of all, it will ensure the quality the universal 12-year compulsory education enforced since 2014.

It will map out the 2<sup>nd</sup> programme of universal 12-year compulsory education to develop the universal 12-year compulsory education to a higher level.

It will also focus its effort on training of teachers as the number of students per teacher is not so small, and on their re-education to raise the qualification of in-service teachers in conformity with the developing reality. Particularly, it will realize the distance education with focus on the improvement of teachers' qualifications.

It will also push forward the construction of the needed school buildings in a short period of time as the number of students is big now, as well as the work of repairing or rehabilitating the school buildings which are in danger of collapse because of long-year standing.

Particularly, it will put its special efforts on refurbishing the schools for students who are in special wants, including those in the areas hit by natural disasters, rural and mountainous areas and far-away islands and orphanage for those who are in difficult situation.

It will also satisfy the demand of students for textbooks by modernizing the production facilities of the textbook printing shops and strengthening the paper production bases on a nation-wide scale and at the same time, push forward under a long-term plan the work of supplying CD textbooks and other modern study tools as conditions allow.

It will also push forward the work of putting education on IT and modern basis by further increasing the number of computers in schools and produce and supply equipment, chemicals and facilities for experiment and practice in a proper way and manufacture and supply various audio-visual materials for all levels of schools and subjects in good time.

It will also concentrate its efforts on the work of renovating schools in conformity with the demands

for pedagogy and hygiene so that the students can study in clean educational environment and in good health.

The Government will strengthen the informal higher education for secondary school graduates.

This education plays an important role in making all people well-versed in science and technology.

In future, all secondary school graduates who are to be sent to factories and enterprises will participate in labour activities after receiving vocational education and high-skilled workers will also be trained in the vocational education system.

The Government will make efforts to further raise the quality of higher education.

It will develop the major universities into the 1st-class ones and establish universities and specialized higher education institutions in an appropriate way in conformity with the demands for the development of science and technology, society, economy and culture of the country so as to perfect the education courses in these universities and colleges.

It will also expand and diversify the study-while-working system in scope and form and improve its management, and at the same time, establish the distance education system embracing those who want to receive higher education so that this system can play an important role in expanding higher education.

## Appendix

### 1. Education level of population identified in the 2008 census

Information about education level of the population above 5 was collected for the first time in the 2008 census. The 2008 census has enabled us to historically analyze the result of the national educational system.

First of all, we have analyzed the census questions on school enrolment with focus on the age group of 5-29 as defined by the international standard.

**Table1.1 School Attendance Rate Among Population Aged 5 to 29, by Sex**

Age	Rate of the schooling population (%)		
	Total	Male	Female
Total	55.9	57.1	54.5
5	87.7	87.7	87.7
6	99.7	99.7	99.7
7	99.95	99.96	99.95
8	99.99	99.99	99.99
9	99.99	99.99	99.99
10	99.99	99.99	99.99
11	99.99	99.99	99.99
12	99.99	99.99	99.99
13	99.99	99.99	99.99
14	99.99	99.99	99.99
15	99.99	99.99	99.99
16	93.9	91.9	96.1
17	36.8	35.5	38.2
18	27.7	25.3	30.2
19	20.6	20.4	20.8
20	14.9	15.4	14.4
21	10.0	11.0	8.9
22	7.7	9.4	5.8
23	7.7	9.8	5.5
24	9.1	13.1	4.8
25	10.3	17.0	3.4
26	10.3	17.7	2.5
27	8.8	15.4	1.8
28	8.0	13.9	1.7
29	6.3	11.1	1.3

*Source: "National report on census in DPRK", Central Bureau of Statistics, 2008*

**Table1.2 Educational Attainment of Population Aged over 15, by Sex**

Education level	Total	Male	Female
Total	18 474 057	8 871 335	9 602 722
%	100.0	100.0	100.0
Uneducated	0.4	0.1	0.7
Primary school	7.1	5.7	8.4
Secondary school	71.9	69.6	74.0
Vocational school	3.5	3.6	3.4
Specialized school	6.4	7.3	5.6
University & postgraduate course	10.7	13.7	8.0

Source: "National report on census in DPRK", Central Bureau of Statistics, 2008

**Table1.3 Education level of the population aged above 5 (%)**

Age (year)	Total	None	Kindergart en & primary school		Vocational school	Specialized school	University & Postgraduate course
			Secondary school	Secondary school			
Total	21 639 820	754 490	4 497 206	12 852 654	562 624	1 073 257	1 899 589
5 - 9	8.3	90.4	25.9	-	-	-	-
10 - 14	9	-	44.9	-	-	-	-
15 - 19	9.2	-	18.6	8.8	5.5	0.7	0.2
20 - 24	8.2	-	-	11.3	16.4	11.3	4.8
25 - 29	7.8	-	-	10.4	8.9	9.6	9.2
30 - 34	7.5	-	-	9.9	7.4	11	9.6
35 - 39	9.9	-	-	12.7	9.9	14.8	14.8
40 - 44	9	-	-	11.4	8.4	13.3	14.4
45 - 49	7	-	-	8.8	6.9	9.4	11.9
50 - 54	5.9	-	-	6.9	6.6	9.9	12.1
55 - 59	4	-	-	4.8	9.5	6.2	6.5
60 - 64	4.7	0.2	0.6	5.5	12.1	7.4	6.6
65 - 69	4.1	1.1	2.7	4.5	5.1	4.3	5.6
70 - 74	3	2.3	3.5	3	2.2	1.7	3.1
75 - 79	1.5	2.6	2.2	1.4	1	0.4	1.1
80	0.8	3.2	1.5	0.6	0.3	0.1	0.2

Source: "National report on census in DPRK", Central Bureau of Statistics, 2008

**Table1.4 Population by Type of Educational qualification and by Sex, 1993 and 2008**

	1993			2008		
	Total	Male	Female	Total	Male	Female
Total	1 789 918	1 029 861	760 057	2 972 852	1 671 996	1 300 856
Engineer	376 328	307 684	68 644	778 198	615 657	162 541
Assistant engineer	453 092	274 707	178 385	772 534	446 473	326 061
Expert	534 459	304 707	229 752	876 869	494 954	381 915
Mid-level expert	426 039	142 763	283 276	545 251	114 912	430 339

Source: "National report on census in DPRK", Central Bureau of Statistics, 2008

**Table1.5 Percentage Distribution of the Population with qualification by Field of Study, by Sex and by area (%)**

Major subjects	Total		Composition by gender		Composition by urban & rural	
	number	composition	male	female	urban	rural
Total	2 972 852	100.0	100.0	100.00	100.0	100.0
Education	591 387	19.9	10.8	31.6	19.9	19.0
Art & humanics	124 940	4.2	4.2	4.1	4.2	4.9
Social science & Law	317 790	10.7	10.0	11.6	10.7	11.7
Natural science	136 505	4.6	4.7	4.5	4.6	5.2
Engineering, Manufacture, Construction	812 522	27.3	33.3	19.6	27.3	29.6
Agricultural science	490 935	16.5	20.2	11.7	16.5	11.9
Public health	274 040	9.2	6.4	12.8	9.2	9.9
Welfare service	219 087	7.4	10.1	3.9	7.4	7.7
Other	5 646	0.2	0.2	0.1	0.2	0.2

Explanation: Classification of subjects based on ISCED ,1997

Source: "National report on census in DPRK", Central Bureau of Statistics, 2008

## 2. Population Projection

The change and growth trend of different age groups is the most important factor that defines the strategy for EFA development and the size of investment in education.

Here estimated the total population and the number of children and students classified by education

level for the coming 35 years (2015-2040).

**Projection of total population**

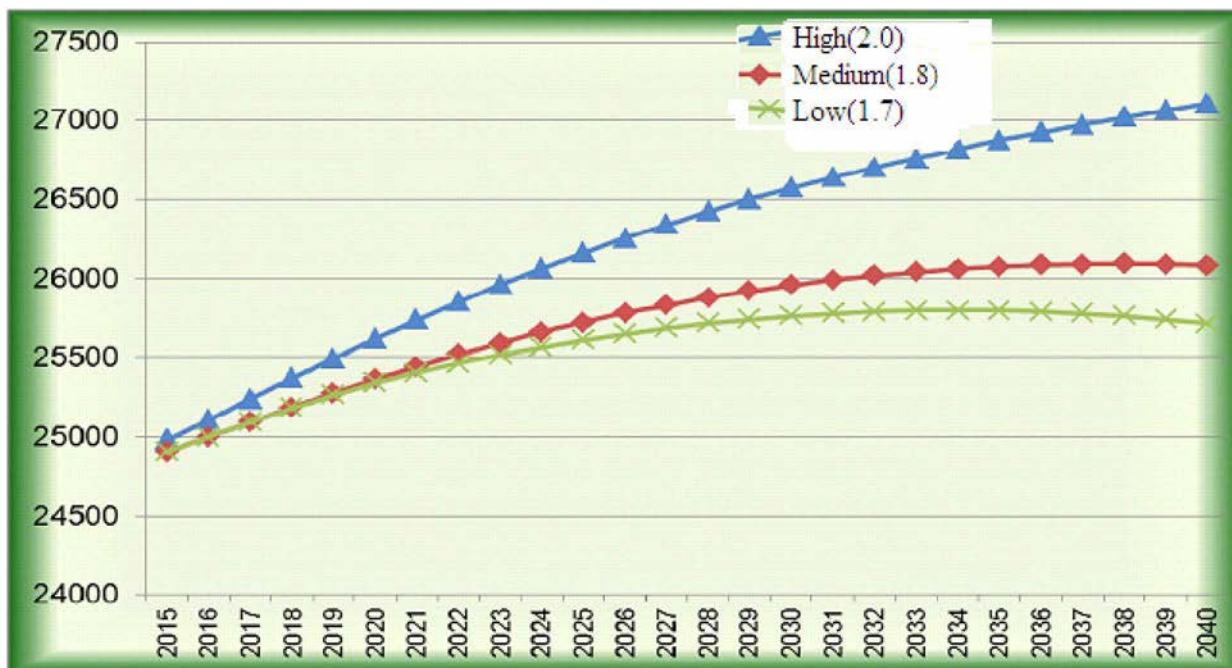
Table 2.1 shows the curve showing the change of the total population from 2015 to 2040.

As seen in the table and figure, the total population increases for 25 years in future but from 2040 and onward, decreases gradually. This is because the birth rate is below 2.

**Table 2.1 Total Population Projected (2014-2040) by Three Variants (1000 persons)**

Year	High(2.0)	Medium (1.8)	Low(1.7)
2015	24 982	24 906	24 938
2020	25 621	25 364	25 378
2025	26 162	25 723	25 649
2030	26 572	25 958	25 797
2035	26 875	26 076	25 837
2040	27 110	26 081	25 765

**Figure 2.1 Projected Population by Three Variants from 2015 to 2040**



**The estimation of population in the levels of kindergarten, primary and secondary school education**

The estimated number of the population aged 0-14 between 2015 and 2040 for different scenarios is shown below.

**Table 2.2 Projected Population aged between 0-14 (2015-2040), 1 000 persons**

Year	High(2.0)	Medium(1.8)	Low(1.7)
2015	5 214	5 138	5 138
2020	5 293	5 036	5 014
2025	5 443	5 004	4 894
2030	5 412	4 873	4 676
2035	5 254	4 711	4 452
2040	5 127	4 535	4 278

Decrease in the birth rate decisively affects the change in the population aged 0-14.

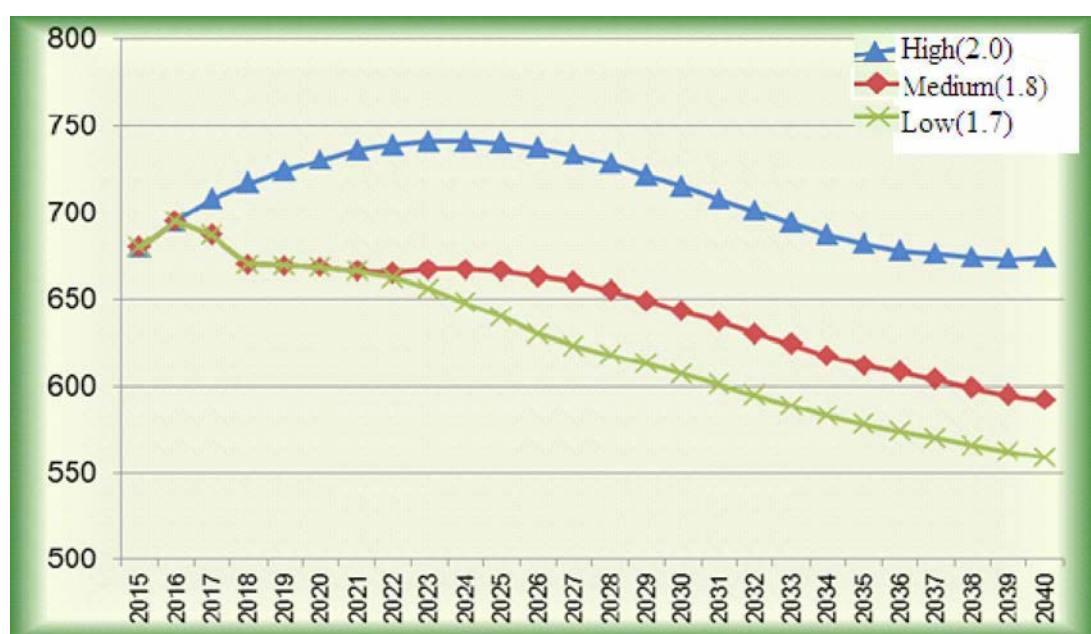
As seen in the Scenario 2 of the table the number of the population aged 0-14 is estimated to gradually decrease by about 600 000 in around 2040.

The projected number of the population aged 4-5 between 2015 and 2040 for different scenarios is shown below.

**Table 2.3 Projected Population of Kindergarten level (2015-2040), 1 000 persons**

Year	Plan 1 (2.0)	Plan 2 (1.8)	Plan 3 (1.7)
2015	680	680	680
2020	730	668	668
2025	740	666	640
2030	715	643	607
2035	682	612	578
2040	674	592	559

**Figure 2.2: Projected of Population aged between 4-5 of Kindergarten level (2015-2040)**





As seen in the table and figure, the number of kindergarten population aged 4-5 is estimated to increase a bit in the following 2-3 years and afterwards, gradually decrease by 100 000 in around 2040.

The estimated number of the primary school population aged 6-10 from 2015 to 2040 for different scenarios is shown below.

**Table 2.4 Projected Population aged between 6-10 at Primary school (2015-2040), 1 000 persons**

Year	Plan 1 (2.0)	Plan 2 (1.8)	Plan 3 (1.7)
2015	1675	1675	1675
2020	1747	1700	1700
2025	1839	1666	1655
2030	1833	1650	1569
2035	1759	1583	1495
2040	1694	1513	1429

**Figure 2.3 Projected Population aged between 6-10 at primary school level (2015-2040)**



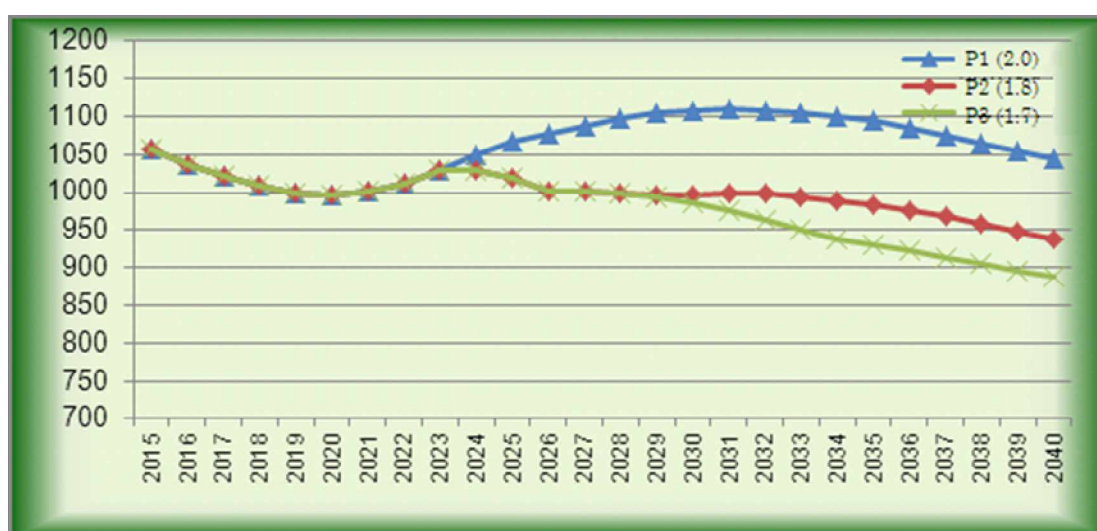
As seen in Scenario 2 of the table and figure, the number of primary school population aged 6-10 is estimated to increase by about 30 000 by 2020 and afterwards, gradually decrease by about 160 000 in around 2040.

The projected number of junior secondary school population aged 11-13 from 2015 to 2040 for different scenarios is shown below.

**Table 2.5 Projected Population aged between 11-13 at lower secondary school (2015-2040),  
1000 persons**

Year	Plan 1 (2.0)	Plan 2 (1.8)	Plan 3 (1.7)
2015	1056	1056	1056
2020	997	997	997
2025	1066	1020	1020
2030	1108	997	986
2035	1094	984	930
2040	1044	939	887

**Figure 2.4 Projected Population aged between 11-13 at lower secondary school (2015-2040)**



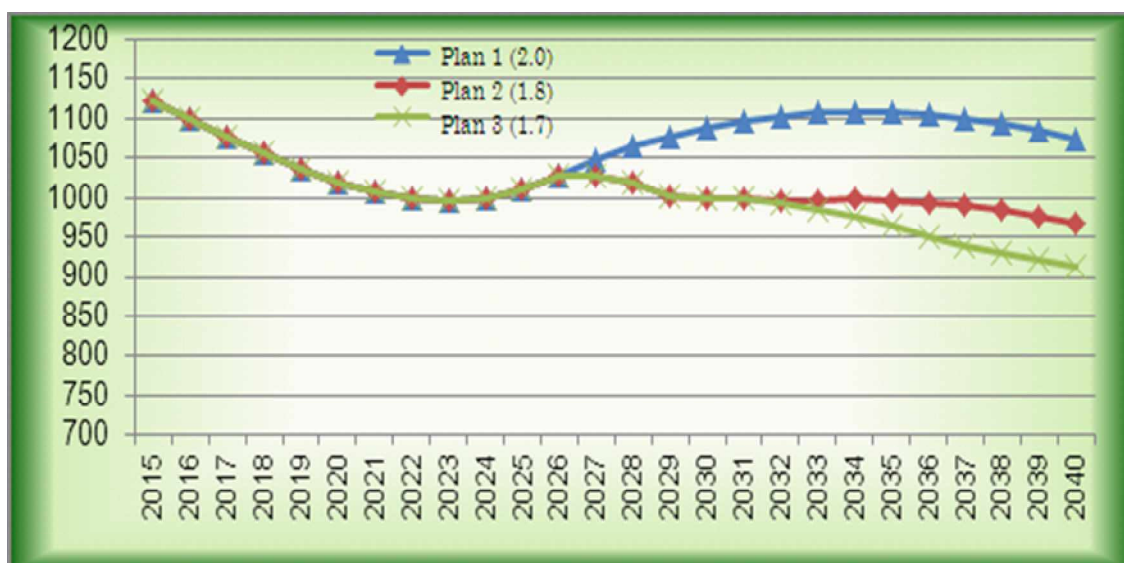
As seen in Scenario 1 of the table and figure, the number of junior secondary school population aged 11-13 is estimated not to increase although there is a slight change and gradually decrease by about 120 000 in around 2040.

The projected number of senior secondary school population aged 14-16 from 2015 to 2040 for different scenarios is shown below.

**Table 2.6 Projected Population aged between 14-16 at senior secondary school (2015-2040),  
1000 persons**

Year	Plan 1(2.0)	Plan 2(1.8)	Plan 3(1.7)
2015	1123	1123	1123
2020	1020	1020	1020
2025	1011	1011	1011
2030	1087	1000	1000
2035	1108	997	964
2040	1075	967	914

**Figure 2.5 Projected Population aged between 14-16 at upper secondary school (2015-2040)**



As seen in Scenario 2 of the table and figure, the number of senior secondary school population aged 14-16 is estimated to be similar to the trend of change in the junior secondary school population. It is estimated not to increase although there is a slight change and gradually decrease by about 160 000 in around 2040.

### Conclusion

- As seen above, with the drop of birth rate to below 2, the number of population aged 0-14 and the number of the working population aged 15-59 decrease gradually, but the number of total population continues to increase till around 2040. This is because the number of ageing population above 60 increases by nearly 2 times.
- As the number of population aged 0-14 decreases, the number of such population groups as kindergarteners aged 4-5, primary schoolers aged 6-10, junior secondary schoolers aged 11-13 and senior secondary schoolers are all expected to decrease gradually.
- The projection of the population by age group provides the benchmark to be referred to deciding the direction and strategy of EFA and general secondary education development, and the amount and details of expenditures to education.