ANALYSIS OF THE SITUATION OF CHILDREN AND WOMEN IN THE DEMOCRATIC PEOPLE'S REPUBLIC OF KOREA

1946 - 2006
UNITE FOR CHILDREN

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28 Munsudong
PO Box 90
Pyongyang
DPR Korea

E-mail: pyongyang@unicef.org

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CONTENTS

List of figures

List of boxes

List of tables

PREFACE

This analysis is meant to further the understanding of the situation of children and women in the Democratic People's Republic of Korea (DPRK). We hope that it will serve as a resource for informing the policies and responses of both the government and the international community involved in protecting and promoting the rights and improving the lives of children and women. As the basis for UNICEF's work in the country, this analysis is meant to illuminate and expound on the linkages between the prevailing conditions that impact on the situation of women and children.

The life-cycle perspective employed promotes a holistic analysis that unifies many sectoral and contextual issues. It illuminates the intergenerational perspective necessary for dealing with both chronic crisis and longer-term development. In short, it is useful in understanding the totality of children and women's needs and interests and the causalities between them.

This document is based on the 2003 Analysis of the Situation of Women and Children. Although there remains a relative paucity of data, this update has drawn on multiple sources including the National Nutrition Assessment 2004, the country submissions to and concluding observations of the Committee on the Rights of the Child, the Committee on the Elimination of All Forms of Discrimination against Women, and the Committee on Economic, Social and Cultural Rights. Ongoing work at the county level has provided rich sources of information albeit still limited in scope. Examples of these are the UNFPA Survey on Reproductive Health (2004), UNICEF Baseline Surveys of Focus Counties, and WFP Household Food Security research.

The reliability and limited availability of data have been notable challenges in the preparation of this situation analysis. There is still much to be done in the DPRK to strengthen statistical services, foster greater consistency in figures used by different authorities, and particularly to promote more evidence-based planning, review and evaluation.

This situation analysis was prepared for UNICEF by Charulata Prasada with contributions from the staff of the UNICEF Office in Pyongyang, as well as by discussions with a wide range of partners. We are particularly grateful for the substantial inputs of our sister UN agencies, particularly WFP, WHO and UNFPA, which will allow this document, with its widened scope, to inform the preparation of the UN strategy for DPRK. Although dialogue with the government has contributed to this draft, the views expressed are those of UNICEF and do not necessarily reflect the analysis of the government. Where divergence exists, it is hoped that this will be helpful in providing reflections from a different standpoint, one that has only one concern: the well-being and progress of the children and women of the DPRK.

UNICEF DPRK
June 2006

Figure 1: Democratic People's Republic of Korea

Source: United Nations map, January 2004

ACRONYMS AND ABBREVIATIONS

AES	Anti-epidemic station
AFP	Acute flaccid paralysis
AIDS	Acquired immune deficiency syndrome
ARI	Acute respiratory infection
BMI	Body mass index
CBS	Central Bureau of Statistics
CCA	Common Country Assessment
CEDAW	Convention on the Elimination of All Forms of Discrimination against Women
CPR	Contraceptive prevalence rate
CRC	Convention on the Rights of the Child
DOTS	Directly-observed treatment short-course
DPRK	Democratic People's Republic of Korea
DPT	Diphtheria-pertussis-tetanus (vaccine)
EFA	Education for All
EIU	Economist Intelligence Unit
EOC	Emergency obstetric care
EPI	Extended programme on immunization
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FDRC	Flood Damage Rehabilitation Committee
FRCOG	Fellow of the Royal College of Obstetricians and Gynecologists
GAVI	Global Alliance for Vaccines and Immunization
GDI	Gender development index
GDP	Gross domestic product
GEM	Gender empowerment measure
GFATM	Global Fund to Combat AIDS, Tuberculosis and Malaria
HIV	Human immunodeficiency virus
ICCPR	International Covenant on Civil and Political Rights
ICESCR	International Covenant on Economic, Social and Cultural Rights
ICPD	International Conference on Population and Development
IEC	Information Education Communications
IMR	Infant mortality rate
ITN	Insecticide-treated bed nets
KCNA	Korean Central News Agency
KDWU	Korean Democratic Woman's Union
KPW	Korean People's Won (also Won)
LBW	Low birth weight

MDGs	Millennium Development Goals
MICS	Multiple indicator cluster survey
MMR	Maternal mortality ratio
MoCM	Ministry of City Management
MoE	Ministry of Education
MoPH	Ministry of Public Health
MUAC	Mid-upper arm circumference
NGO	Non-governmental organization
NID	National immunization day
NNA	National Nutrition Assessment
NPA	National Plan of Action
OPV	Oral polio vaccine
PDS	Public distribution system
RHS	Reproductive health survey
ROK	Republic of Korea
RTI	Reproductive tract infection
SPA	Supreme People's Assembly
STI	Sexually transmitted disease
TB	Tuberculosis
TFR	Total fertility rate
U5MR	Under-five mortality rate
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
VIP	Ventilated improved pit
WFP	World Food Programme
WHO	World Health Organization
WPK	Workers' Party of Korea

COUNTRY CONTEXT 1

The Korean peninsula is situated in north-east Asia. It is bordered to the north by China and to the north-east by Russia, and is otherwise surrounded by sea. At the end of the Second World War in 1945, Korea was divided into two halves, which became the Democratic People's Republic of Korea (DPRK) to the north and the Republic of Korea (ROK) to the south. Both are Member States of the United Nations.

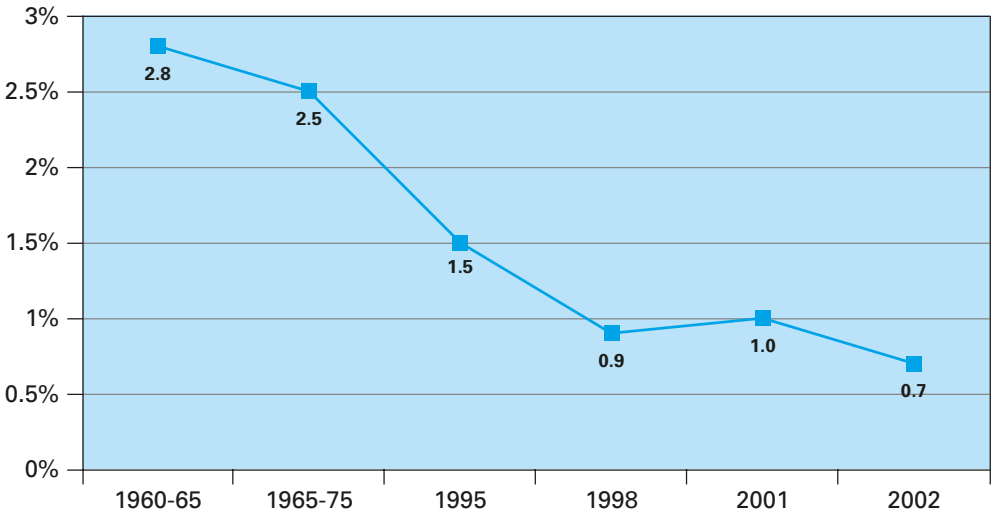
The DPRK has a total land area of 222,209 sq km.[1] Mountains constitute 80 per cent of its territory and plains make up the other 20 per cent.[2] Most of the soils in the mountainous regions lack organic materials and are relatively infertile. The DPRK comprises nine provinces (Ryanggang, North Hamgyong, South Hamgyong, Kangwon, Chagang, North Phyongan, South Phyongan, North Hwanghae and South Hwanghae) and one municipality directly under central control (Pyongyang).

Population

In 2003, the population of the DPRK was reported to be 23,464,000.[3] It is thought that the population growth rate may have stabilized over the past two years. However, until late 1999 there was a steady decline reported in population growth rates since the 1960s (see Figure 1).[4] The total fertility rate (TFR) declined from 2.2 in 1993 to 2 in 1999.[5] Life expectancy also declined during the same period from 73.2 years to 66.8[6] years. The last national population census was undertaken in 1993. It revealed that women slightly outnumbered men; women were 51.3 per cent of the total population. Nine per cent of the population was reported to be under five years of age in 2001.[7] Figure 2 shows the population breakdown by age. These figures, provided by the Flood Damage Rehabilitation Committee (FDRC) in 2003, are largely consistent with earlier population data originating from the Central Bureau of Statistics (CBS) and other parts of the government.

These show a child demographic not dissimilar to that of China and Thailand. Whilst the DPRK's under-five population in 2003 was 8 per cent of the total, that of China was 7.1 per cent and that of Thailand 8.4 per cent, considerably less than for a least-developed country, such as Cambodia (14.6 per cent).[8]

Figure 2: Population growth



Source: National Report on the Implementation of the Decisions of the World Summit for Children, Government of the DPRK, January 2001. UNFPA 2002 Reproductive Health Survey

1 National Report on the Implementation of the Decisions of the World Summit for Children, Government of the DPRK, January 2001.

2 DPRK Core Document, Office of the United Nations High Commissioner for Human Rights, 1993.

3 Reproductive Health Survey in DPRK 2004, CBS, PC, UNFPA, May 2005.

4 National Report on the Implementation of the Decisions of the World Summit for Children, Government of the DPRK, January 2001.

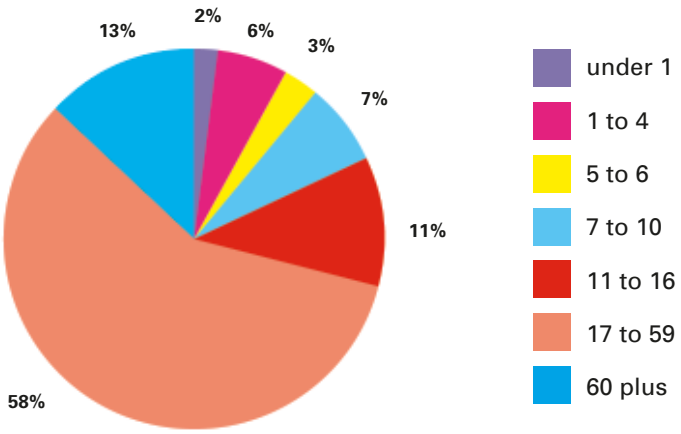
5 Ibid.

6 Ibid.

7 Ibid.

8 Statistics for China, Thailand and Cambodia taken from UNICEF, *The State of the World's Children 2005*.

Figure 3: Population by age (2005 projections)

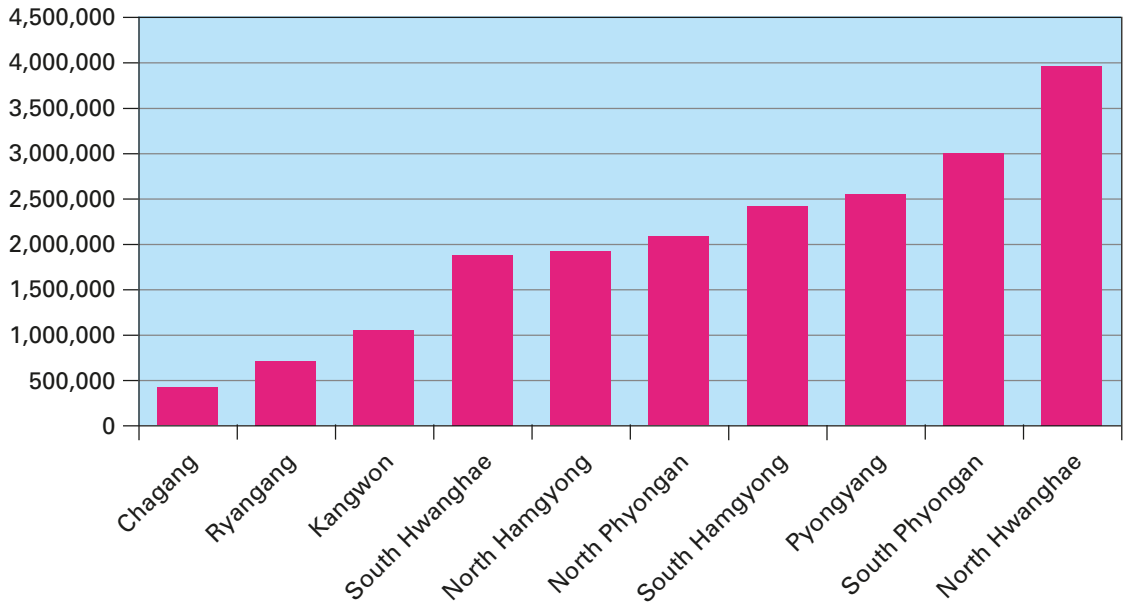


Source: FDRC, 2005

The DPRK is ethnically almost completely homogeneous. Similarly, there is no known linguistic diversity, Korean being the single national language, with no distinguishable dialects spoken in the DPRK. Although ethnic homogeneity contributes to the cohesiveness of the society, it cannot be regarded as the only factor underpinning identity and stability within the nation. Historic threats from external actors, including 35 years of colonial rule under the Japanese, are also cementing forces. "DPR Korea is committed to the philosophy of *Juche* and it has relied on its own strengths and resources to a large degree for its development."[9] Religious freedom is guaranteed by the Constitution, though it is not known what proportion of the population actually practise religion.

[9] UN, *DPR Korea, Common Country Assessment*, 2002.

Figure 4: Distribution of population according to province/city (2005 projections)



Source: FDRC, 2005

Figure 4 shows population by province and city revised and takes note of the changed status of Nampo and Kaesong as an official cities; Nampo has now become an integral part of South Phyongan province and Kaesong of North Hwanghae province. As one would expect, the majority of the population is concentrated in lowland areas. The presence of large industrial cities has also had an impact on population distribution. The rapid urbanization of the 1950s resulted in a majority of the population (61 per cent) living in towns and cities. This is explained primarily by the priority given to heavy industry during the reconstruction period following the Korean War (1950–1953). The clustering of populations is not limited to urban areas; in rural areas too populations are by and large clustered into semi-urban settlements based around cooperative farms and work teams.

External factors shaping the country situation

External factors play a preponderant role in shaping the situation of the DPRK. Reconstruction and development have been profoundly shaped by geopolitics within the region, as well as by global cold war and post-cold war politics.

Historically the Korean Peninsula was seen as a zone of influence for both China and Japan, and it has played a major part in their rivalries. Korea was occupied by Japan from 1910 until the end of the Second World War in 1945. It was during this time that much of the heavy industry, which characterized the economy of the northern part of the peninsula until very recently, was first developed to provide for Japanese military requirements. The Second World War left the Korean Peninsula divided into two provisional administrations, which in 1948 became the governments of the DPRK (north) and ROK (south), each claiming jurisdiction over all of Korea.

In 1950, war broke out again, with the two Koreas pitted against one another. The Korean War ended in 1953 with the peninsula still divided. Importantly, there was no peace treaty, only an armistice, and this has left a legacy of a state of war to this day. Security is thus an issue of overriding importance in Korea, and the status of the peninsula is subject to the interests of a number of nations.

The Korean War (1950–1953) resulted in widespread destruction. Following the war, the priority of the DPRK was thus reconstruction, which it undertook with assistance of its allies – the countries of the Warsaw Pact and China – along with transformation of the country into a socialist state. This was done at a very rapid pace. Heavy industry and mining became the centrepiece of the economy. This was later supplemented by the development of light industry to produce consumer goods. The majority of the DPRK's external trade was with the socialist bloc, largely in the form of barter arrangements, and highly subsidized. These preferential practices ensured access to cheap sources of energy and raw materials.

The country also rapidly developed an impressive set of policies and programmes in the social sector, providing free and universal access to health, childcare, education, maternity benefits and a host of other schemes. These were made possible to a great extent by the revenues generated from the expanding economy, helped in large degree by the assistance from and preferential trading relations with the Soviet Union, China and Eastern Europe. Thus the country achieved notable growth through the 1970s. It contributed assistance to a number of developing countries, notably in Africa.

The gradual breakdown of the socialist bloc in the late 1980s, leading to its complete disintegration around 1990[10], had a severe and detrimental impact on the DPRK. This resulted in a downturn not only in industrial production but also in the agricultural sector, as access to necessary inputs both imported and locally produced shrank. Energy production declined, further exacerbating these problems. The State's capacity to pay for imports of food, to purchase food locally for distribution and operate its wide range of social services was considerably impaired. On top of this came a series of natural disasters (flooding, typhoons and droughts), beginning in 1994, which brought about widespread damage to industry, mines and agriculture, and led to acute food shortages. This was followed by ten years of humanitarian assistance by the international communities, channelled mostly through the United Nations and international NGOs.

Many external commentators argue that the resources required for redevelopment of the northern half of the peninsula can all be found in Korea itself. Certainly the pace of moves towards reunification, and especially a final resolution to the Korean War, as well as a final settlement with Japan, represent the most important external factors for future development in the DPRK.

Governance

The organs of governance in the DPRK are regulated by the Constitution. This was first adopted in 1972 and subsequently amended and supplemented in 1992 and 1998. The Constitution describes the DPRK as an "independent socialist"[11] and "revolutionary"[12] state "guided in its activities by the *Juche* idea".[13] Sovereignty "resides in the workers, peasants, working intellectuals and all other working people".[14] They "exercise power through their representative organs – the Supreme People's Assembly and local People's Assemblies at all levels":[15] county, city (or district), province (or municipality under direct central authority).

"All organs of the State are formed and function on the principle of democratic centralism."[16]

Until the passing away of President Kim Il Sung in 1994, executive authority was vested in the presidency. On his death, however, he was named Eternal President of the DPRK, and the amended Constitution in 1998 divided executive authority among the National Defense Commission, the Presidium of the Supreme People's Assembly and the Cabinet. Whilst there are three political parties active in the DPRK, the Constitution clearly delineates a role of "leadership of the Workers Party of Korea"[17] (WPK). The current leader of the country, Kim Jong Il, draws his authority from his positions as Chairman of the National Defense Commission and Secretary-General of the WPK. The President of the Presidium of the Supreme People's Assembly, Kim Yong Nam, carries out duties of a Head of State, such as receiving "the credentials and letters of recall of diplomatic representatives accredited by foreign states".[18]

Central governance in the DPRK is carried out through "Commissions and Ministries of the Cabinet [that] supervise and guide the work of the sectors concerned in a uniform way under the guidance of the Cabinet".[19] In a practical sense, the central government and people's committees at local level share responsibility for different areas of governance including administrative and legislative functions.

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[10] This refers to the collapse and breakup of the Soviet Union, the reunification of Germany and the fall of socialist governments in Eastern Europe, as well as the transformation of China into a market economy.

[11] Socialist Constitution of the Democratic People's Republic of Korea, 1998, Article 1.

[12] Ibid, Article 2.

[13] Ibid, Article 3.

[14] Ibid, Article 4.

[15] Ibid, Article 6.

[16] Ibid, Article 5.

[17] Ibid, Preamble.

[18] Ibid, Article 111.

[19] Ibid, Article 127.

Government revenues are not derived from taxation. Rather they come through the trading of state and cooperative assets, such as agricultural produce, industrial products and services. The ownership of the these assets is divided among the central government, local people's committees and workers' and peasants' cooperatives, thus providing each with the means it needs to carry out its functions. With the contraction of the economy, the revenues to each of these organs may have fallen to levels below those needed for the maintenance of essential services.

The economy

The economy represents one of the most fluid and multidimensional parts of the society over the past decade. On 1 July 2002, the government announced economic reforms oriented towards stimulating the Socialist Economy. These changes might be regarded as the response to prolonged economic hardships that were underpinned by the loss of favourable economic arrangements amongst traditional trading partners and the successive natural disasters faced by the DPRK though the 1990s. They were presented as "economic management improvement measures".

The DPRK's economic development was founded on the basis of central planning, collective production and State (or collective) ownership of almost all land and enterprises. Successive economic plans have given emphasis to development of heavy industry and to mechanization of agriculture. There was some diversification of the economy in the 1980s.

The consequences of the floods and drought of the mid-1990s to the DPRK economy, combined with the economic decline of the economy in the 1980s that was exacerbated by the collapse of the Soviet Union, are well known.

Government figures show a decline in per capita income from US$991 in 1993 to US$457 in 1998, i.e. less than half.[20] Since 1998 though, the macro economy seems to have resumed some consistent growth, as shown in Table 1.

Diversification in trade relations is becoming increasingly inclusive of different countries, outside the former socialist bloc, notably Japan, Saudi Arabia and Australia. Hong Kong is also an important trading partner. Inter-Korean trade also expanded.

DPR Korea Key Economic Indicators 1997–2004 (expressed in US dollars and excluding inter-Korean trade) provided by the government are presented in Table 1 below:

Table 1: Economic overview, 1997–2004

	1997	1998	1999	2000	2001	2002	2003	2004
Estimated GDP growth rate [percentage real change]	-2.2	0.5	0.1	3.2	3.9	3.2	7.7	4.0
GDP per head	464	458	454	464	478	490	524	546
Total merchandise export	914	858	859	877	885	908	920	948
Total merchandising import	1,038	917	918	933	939	988	1,008	1,029
Total trade deficit	124	59	59	56	54	80	88	81

Source: Central Bureau of Statistics, 2005

The 2004 Gross National Product (Bank of Korea) was US$12.8 billion.

Though the economy has shown signs of improvement over the past six years, many of the issues related to competitiveness, lack of self-sufficiency, and a relative vacuum in investment and suitable trading partners continue to be major constraints.

[20] National Report of the DPRK to the 5th East Asia and Pacific Ministerial Consultation on Children, Beijing, May 2001.

Economic reforms

The 2002 economic reforms had the avowed aim of strengthening socialism[21] and appear to have introduced a number of key structural changes to the economy.

The Public Distribution System (PDS) was adjusted. While a core basic ration is available to all citizens, consumers could also acquire goods and services from other sources, including from new "consumers" markets. On the consumption side, recent adjustment measures have raised wages of miners and soldiers more than for other workers, providing better material incentives but leading to differences in purchasing power. Food prices have increased four-fold. Housing and fuel subsidies have been reduced. The Won has been devalued sharply, making exports more viable. "A key adjustment has been the removal of subsidies to urban consumers to restore financial stability while enabling farmers to obtain a better return from crop sales."[22]

On 1 August 2002, the government instituted a currency reform revising the exchange of the Korean People's Won (KPW) from 2.16 to 153 KPW to the US dollar, with this rate further susceptible to changes in international market conditions. The government decreed on 1 December 2002 that the officially used foreign currency would be the Euro. However, Euros and dollars continue to circulate side-by-side. Another more recent attempt to mobilize cash holdings, this time in Won, was the issuance of government bonds. It is still far too early to say whether this measure will achieve success.

Among the most important constraints to macroeconomic development has been the lack of inward investment. To stimulate this, the government enacted new legislation reforming the allowable proportion of foreign ownership in joint ventures beyond 50 per cent. It also began to expand the number of special economic zones from the one in Rajin-Sonbong, in the north-east on the border with Russia, to three more: Sinuiju, in the north-west on the border with China; Kaesong, in the south-west on the truce line with the ROK; and Kumgang, in the south-east, also on the truce line with the ROK.

The government has underscored that some 30 social service schemes related to health, education, entitlements for women, childcare, protection of the disabled, etc. will remain unchanged. There are, however, question marks over the affordability of such a wide range of free services with the current state of the national economy.

At a macroeconomic level, the positive impact of the reforms might be linked to GDP growth rates, and the slight improvement in the trade deficit. There has been a burgeoning of farmers markets around the country, and several consumer goods, food and non-food items of all sorts are freely marketed openly in Pyongyang city. However, inflation is thought to be high.

The 2002 policy adjustments required factories to rationalize their production to be more profitable, against the context of industrial decline related to limited domestic and international demand combined with limited production capacity which has led to re-deployment of workers, especially among women.

Agriculture and food security

The food and agricultural production has consistently demonstrated deficits of some 30 per cent compared to 1994, while it seems that there has been an improvement in production for the 2005 harvest although no government figures are available. The food gap has ranged from 1.36 million tonnes in 1998/99 to 2.2 million tonnes in 2000/01,[23] thus creating a certain dependence on external food aid, as well as for necessary agricultural inputs, such as chemical fertilizer.

[21] This analysis of economic reforms is based on briefings from the Ministry of Foreign Affairs, discussions among staff of the humanitarian and development organizations based in Pyongyang, as well as well as the analysis of the situation presented in the Country Programme Action Plan 2005–2006 for the Programme of Cooperation between DPRK and UNDP.

[22] DPRK/UNDP, *Country Programme Action Plan 2005–2006*, 2004, p. 7.

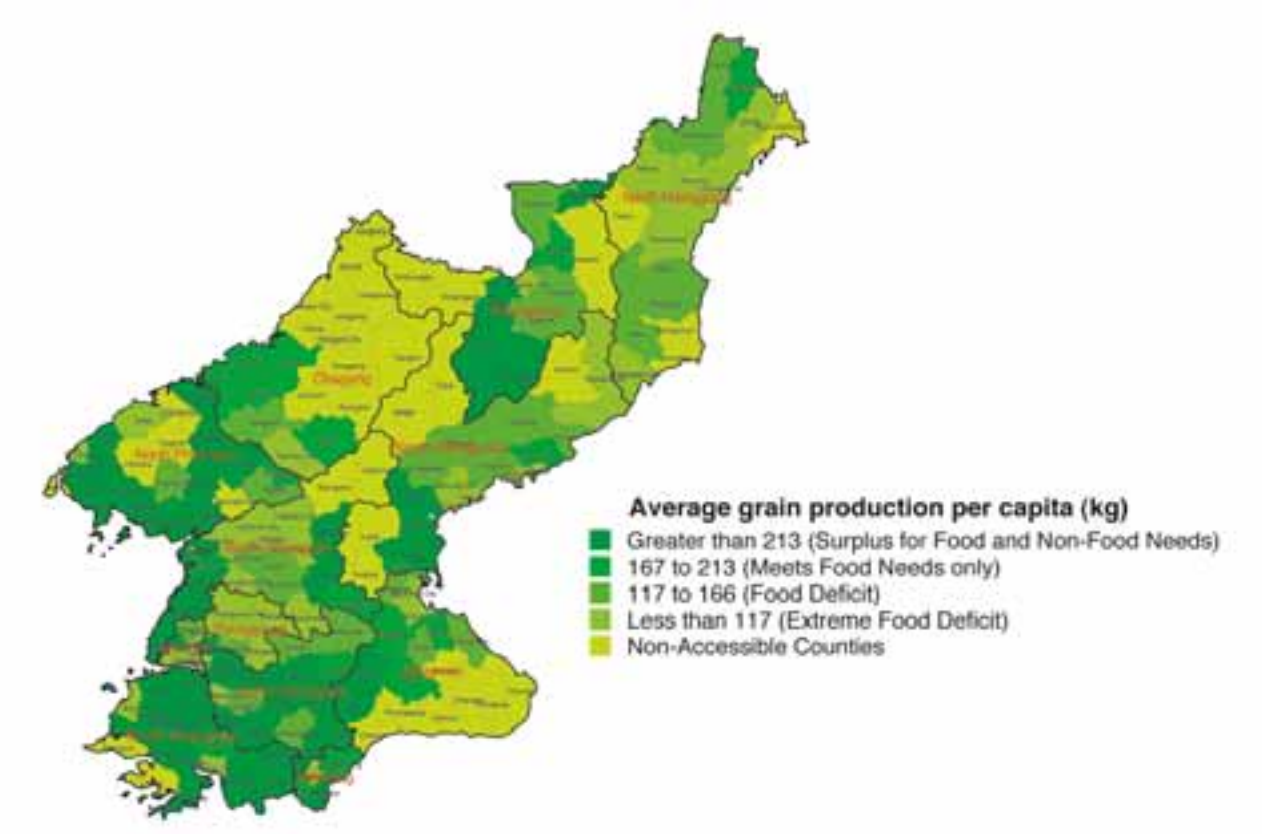
[23] FAO/WFP Crop and Food Supply Assessment Mission to the Democratic People's Republic of Korea, 29 July 2002 and government figures.

DPR Korea appears to have the narrowest gap between double cropping seasons in the world – barely a week, indicating a highly intensive agriculture. The recent introduction of double cropping has increased output but its environmental effects are yet to be assessed. Along with excessive cultivation on steep slopes, the country faces major challenges to environmental management, particularly soil nutrient depletion and erosion. Yield per hectare of paddy rice has reportedly fallen from 8 tonnes in the 1980s to about half that at present. For the last decade, domestic production has been insufficient.[24]

The 2002 Common Country Assessment noted a particular vulnerability in terms of food security at the subnational level in the north-eastern mountains and the flood and drought prone part of the country with a large population in this once industrial stronghold (Ryanggang, North Hamgyong and South Hamgyong provinces).[25]

It is worth noting that about one fifth of the DPRK's land is suitable for high-yield agricultural production without intensive use of inputs. Its future comparative advantage lies in developing other parts of the economy in order to fund more purchase of food from other sources.

Figure 5: Grain production per capita



Source: WFP DPRK, updated in July 2003

Although this map is dated, in that it documents production by county for 1999–2002, it clearly demonstrates the agricultural limitations of the north-east, underlining the region's vulnerability.

The pressure towards increasing agricultural production has resulted in the encroachment of sloping land for crop production. The degree of effort put into this marginal cultivation is clearly motivated by the possibility of retaining the harvest within families, but the calorific expense, not to mention environmental consequences such as lack of terracing, availability of fuel wood, heightened risk of flooding, may not be commensurate with the returns.

[24] DPRK/UNDP, *Country Programme Action Plan 2005-2006*, 2004, p. 7.

[25] UN, *DPR Korea, Common Country Assessment*, 2002, p. 15.

Organic farming, or "the conservation agriculture concept", is presented as one option for improving certain agricultural practices as it requires less and lighter machinery that is energy-saving and has reduced labour and fertilizer requirements.[26]

In spite of the onset of avian influenza in neighbouring countries, the DPRK was fortunate to avoid a loss in livestock. There are an estimated 2.7 million goats in the country that do not compete for grain with humans. They are highly adaptable and capable of utilizing a wide range of crop residues, which make them relatively easy and cheap to keep. They are serving an increasingly important role in supplementing nutrition as well as income generation. Goats also served as a means of capital storage and may be sold to aid cash flows in times of need providing a degree of financial stability.[27]

Household food security

The Government divides the population into two broad categories in terms of food distribution: cooperative farmers and workers. The first group constitutes about 30 per cent of the population, a total of seven million people, and are entitled to purchase from their farm at a heavily subsidized price, a ration of about 600 grams of cereals per day. The workers, who include officials, state-farmers and unemployed, about 16 million in total, purchase cereal rations through the Public Distribution System (PDS). The price is the same as for the farmers.[28]

Since the PDS was revised in October 2005, it aims to meet 100 per cent of people's cereal needs by providing average rations of 500 grams per person per day. However, so far, many counties have not been able to reach this goal.[29]

While the PDS system aims to cover the population's cereal needs, state-shops are supposed to provide all other basic food and non-food items at subsidized prices. However, today the availability of food in state-shops is essentially limited to condiments and vegetables. People are progressively adopting strategies to overcome the shortfalls of food. The most common means are: (1) through purchases from private markets, (2) transfers from relatives, (3) the cultivation of kitchen gardens, and (4) the collection of wild foods.

In the 2004 nutrition survey, most households reported multiple sources for all types of food. The PDS was reported as the most common source of staple foods; about 20 per cent of households mentioned the market as the source of staple food. There is a wide variation in the percentage of households reporting "own production" as a source of staple foods across provinces with the highest levels reported from Ryanggang, South Hamgyong and South Hwanghae.[30]

Wild foods are frequently used by households across all provinces. The most commonly used are wild greens, herbs, roots and nuts.[31] Wild foods are likely to be a source of micronutrients.

Fifty-seven per cent of PDS dependants have kitchen gardens and virtually all cooperative farmers have kitchen gardens with the average size of 79 sq m (24 Pyong).[32]

A detailed analysis undertaken by WFP shows fairly systematically that less-arable regions in the north/north-east provinces (such as Ryanggang, Chagang, North Phyongan, North Hamyong and South Hamyong) naturally tend to be more involved in alternative food production such as livestock raising, kitchen gardening and the gathering of wild foods.

Of course, food consumption even within households is likely to differ on the basis of age, according to gender roles and health status. WFP has made efforts to understand the social customs surrounding food preparation and consumption towards a more accurate understanding of food security, which is to be published soon.

[26] FAO/WFP Crop and Food Supply Assessment Mission to the Democratic People's Republic of Korea, November 2004.

[27] OCHA (2005) Democratic People's Republic of Korea: A Framework for International Cooperation in 2005.

[28] WFP [2004] Household Food Security in DPRK.

[29] WFP DPR Korea Monthly update, November/December 2005.

[30] DPRK 2004 Nutrition Assessment, Report of Survey Results, CBS, ICN, DPRK, February 2005.

[31] Ibid.

[32] FAO/WFP (2004) Crop and Food Supply Assessment Mission to the Democratic People's Republic of Korea, 22 November 2004.

Planning and information systems

The DPRK is a centrally planned economy. Overall responsibility for formulation of both medium-term plans and annual budgets rests with the State Planning Commission, a Cabinet-level body. Planning tends to emphasize achievement of quantitative targets in a production mode, rather than qualitative goals related to human development. However, the DPRK has subscribed to the Millennium Development Goals (MDGs), as well as those of *A World Fit for Children*.[33]

As in other socialist states, medium-term plans guided overall economic, social, defence and other activity. After an initial five-year plan, focused entirely on reconstruction, up to 1960, a series of seven-year development plans ensued with periods of adjustment between them. The last seven-year plan came to a close in 1993. There has been no further overall medium-term planning of the economy, though there do exist a number of sectoral and other plans. Recently, however, the government presented a set of national priorities for 2004–2006 and looking beyond to 2007–2009, which are very much in line with the MDGs.

Box 1: Millennium Development Goals: Implementing the Millennium Declaration

Millennium Development Goals to be achieved by 2015:

1. Halve extreme poverty and hunger.
2. Achieve universal primary education.
3. Empower women and promote equality between women and men.
4. Reduce under-five mortality by two thirds.
5. Reduce maternal mortality by three quarters.
6. Reverse the spread of diseases, especially HIV/AIDS and malaria.
7. Ensure environmental sustainability.
8. Create a global partnership for development, with targets for aid, trade and debt relief.

Source: United Nations Department of Public Information, October 2002

The centralization of planning has had major consequences for local-level data collection and management of information systems. Beyond the obvious questions surrounding the local responsiveness and efficiency of central planning, there are also challenges associated with data gathering and information-based planning. Policies across sectors consistently commit to take a learning-based, scientific approach to programme delivery. There is indeed a widespread practice of collectively mapping production in order to improve performance at local levels. However, this is not replicated at higher levels. The DPRK relies heavily on censuses and sectoral reporting systems. Data is collected from local levels and reported horizontally and vertically to the Central Bureau of Statistics (CBS) and concerned line ministries. Although it is mentioned that data are verified and checked for accuracy by CBS at the county and provincial levels, there is no evidence of data analysis at the local level.

Field observations confirm that record keeping is meticulous at all levels across sectors and institutions.

However, reporting follows an upward flow towards the centre, rather than being effectively analysed and employed for planning purposes at each level. Although impressive local systems of information management exist for cooperative production figures, these systems of local mapping and responsive planning have not been replicated in the social sector. The international community has observed that, in spite of the wealth of existing data, there is scant aggregation, analysis and sharing of information for the purpose of development cooperation.

Limitations on the availability of disaggregated data, particularly by gender, represent a profound barrier to accurate assessment, responsive planning and evaluation, whether on grounds of efficiency, effectiveness or equality.

[33] The Millennium Development Goals are those emanating from the UN's Millennium Summit in 2000. *A World Fit for Children* is the outcome document of the UN General Assembly's Special on Children in 2002. In both cases, and consistently between them, they emphasize outcomes that are designed to enhance the quality of human life.

Social organization and communication

Communication, advocacy and social mobilization are central priorities to maintaining the high levels of organization present within DPRK. The government relies on various channels of communication for disseminating information through campaigns and providing sources of entertainment. Communication channels and social organizations play a significant role in maintaining social cohesion and stability. A closely integrated system of social organizations regularly mobilizes the population around a range of issues. For example, unions of industrial and agricultural workers, women, youth, etc. serve the primary function of organizing segments of the population around social and cultural issues. The country is reliant on both traditional forms of communication as well as mass media.

The Korean Central News Agency (KCNA), a government body, is the sole news agency in the country. There are three television channels, as well as radio, all state controlled, but there is little known on access, use and impact of the media. Traditional media include mobile loudspeaker vans and loudspeakers in fields, which are frequently used to broadcast music and messages to workers and others. The population is entirely literate, and so the written word could be a very powerful vehicle. There is tremendous emphasis placed on person-to-person communication at village and neighbourhood levels.

The entry points for addressing the family and issues surrounding childcare knowledge, attitudes and practices remain a challenge, although there has been some progress made in channelling basic health and childcare messages to the community level building on the universal literacy. Presently, there is an extremely heavy reliance on section doctors[34] as virtually the sole systematic point of contact between institutions and families. Field motivators, who are frequently the same person as the section doctor, are also present at the *ri/dong* level.[35] The Ministry of Public Health's Health Education Institute employs "informers", whose role is to inform about campaigns or mobilize action. Recently the Korean Democratic Woman's Union (KDWU) with its far-reaching network has also been used to channel messages to mothers and childcare workers.

[34] Section (or household) doctors are assigned to village work teams and urban neighbourhoods, each covering around 130 families.

[35] A *ri* is a subdivision of a rural county and is equivalent to the territory covered by a cooperative farm. A *dong* is a similar subdivision of an urban district.

The prevailing tendency to disseminate, inform and instruct may not appropriately address underlying issues related, for instance, to childcare or sanitation that have to do with embedded values and norms. The DPRK is a tightly organized society. The well-established channels of mass mobilization and public participation have remained largely intact throughout the hardships faced by the nation. Capacity building in the area of communication is guaranteed, therefore, to have widespread effects. However, the technical capacities for development of communication programmes have suffered due to both lack of inputs and contact with developments in other countries.

Policy context for children and women

The DPRK's commitment to the well-being of children and women is enshrined in its Constitution, laws and policies that guarantee a comprehensive set of social services, subsidies and safety nets. The basis for the current systems of education, health, childcare and women's equality were established at the very inception of the country through the first decision taken by the Special People's Committee in 1946. Policies have since evolved in parallel with reconstruction and development efforts. The social security system was developed as a means of promoting equality among urban and rural populations resulting in relatively equitable extension of services throughout the country.

The particular strength of the DPRK's policy framework lies in its comprehensiveness, integration and consistency in addressing the interests of children and women. It has been aligned with the collective production system. The government has proactively broadened and updated its laws and policies on an ongoing basis also making an effort to harmonize with international innovations and standards. While government spending on social services is low, the government has, nevertheless, kept its commitment to social entitlements, particularly those for children and women. This was reaffirmed in the enactment of the economic reforms begun from 1 July 2002 with the continuation of social welfare for 30 categories of recipients. This includes subsidies to education, the health system and care for children. The government also continues to guarantee a minimum ration of food staples, the scale of which will be determined by food availability.[36]

[36] Humanitarian and Development Working Group paper on economic reforms, Pyongyang, 6 August 2002.

Laws and policies relating to children

The DPRK has a longstanding State policy of collectively supporting children's care, upbringing, education and overall socialization. The codification of standards for the care of children began as early as 1947 with the Rules of Childcare, in which the State assumed responsibility for providing childcare. Subsequent legislation in 1949 – the Rules of Childcare Centres – further developed regulatory standards.

The present system of care for children is based primarily on the Law on Nursing and Upbringing of Children (1976). In establishing the rationale and framework for the nursery system, the law commits to maintaining standards for feeding and encouraging the psychosocial development of children, as well as assuring hygiene and epidemic prevention. Operationally, social cooperative organizations[37] are obliged to maintain the material conditions of nurseries and kindergartens at levels determined by the State. The legal framework is integrated and, therefore, commitments for care for women during pregnancy and maternity benefits are included within this law. The law also establishes that pregnancies must be registered, thus facilitating antenatal care. Following its accession to the Convention on the Rights of the Child (CRC), the DPRK adopted the Civil Law in September 1990 and the Family Law in October 1990. The Civil Law defined children as persons below the age of 17 years and established equal civil rights for adults and children, and adopted standards of civil responsibility for children. The Family Law obligates the State to pay primary attention to providing the material conditions for mothers to bring up and educate children soundly (Article 6). It also ascribed special responsibility to women for the upbringing and education of children (Article 18). The Constitution guarantees universal free and compulsory education for 11 years: one year of preschool, four years of primary school and six years of secondary school.

The DPRK's policy framework related to children is extremely comprehensive. However, its realization is contingent on extensive investment in multiple sectors and layers of institutions. Economic constraints have, in effect, led to under-investment.

Laws and policies relating to women[38]

Women's equality is promoted through a series of interrelated laws on labour, the civil code, public health, nursing and child rearing, and the family, as well as in the Constitution. These all have special provisions intended to protect and promote women's rights. There exists a considerable amount of overlap between the various policies and no notable inconsistencies between them.

The commitment to women's equality was first articulated in the Law on Sexual Equality in 1946. The law served as the legal foundation for women's equal status stipulating women's rights in marriage and divorce, and to alimony and child support. It protects women from sexual exploitation by prohibiting any form of prostitution, concubinage and polygamy. Equal inheritance and voting rights were also given to women.

Key to promoting women's rights was to bring them into the workforce. Targets and norms for this began to evolve as early as 1958, although actual codification of major standards came about with the enactment of the Socialist Labour Law of 1978. This guaranteed protective standards during pregnancy including restriction from performing heavy and strenuous work harmful to health and prohibition of night labour. Women with infants were restricted from working late hours.

Policies surrounding maternity leave have progressed considerably since 1978. The original provision was for 35 days before and 42 days after delivery. Since then maternity leave has been extended to a total of 150 days, of which 60 days might be taken before delivery. Should maternity leave be extended to 180 days to be taken after delivery, it would certainly facilitate the State recommendation that undisrupted, exclusive breast-feeding be practiced for six months from birth.

The Law on Nursing and Children's Upbringing (1976) does entitle women to leave the workplace for breast-feeding, but the practicality of exercising the entitlement remains undocumented. According to this law (Article 20), wages, provisions and shares of distribution for the period of maternity leave are borne by the State or by the social cooperative organizations and would, therefore, be dependent on affordability. Operationally, policies promoting women's equality are supported by an extensive health care network, counselling centres (under the authority of local people's committees) and childcare institutions.

[37] These are cooperative farms in rural areas and state enterprises in urban areas.

[38] For further discussion, see Chapter 4.

International agreements and treaties

The DPRK is a State party to four of the six core international human rights instruments. It acceded to them in the following years:

- International Covenant on Economic, Social and Cultural Rights (ICESCR) – 1981;
- International Covenant on Civil and Political Rights (ICCPR) – 1981;
- Convention on the Rights of the Child (CRC) – 1990;
- Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) – 2001.

To its credit, the DPRK has in place comprehensive national machinery for observing human rights. The government has largely observed the overall spirit of engagement alongside these commitments. The government welcomed the special rapporteur on violence and most recently, in 2004, a delegation of the CRC Committee led by its Chairperson.

Convention on the Rights of the Child (CRC)

The DPRK has been vigilant about children's rights. It signed and ratified the CRC and has subsequently submitted two reports, the most recent in May 2002.[39] The DPRK has revised some 50 laws, including formulation of the Family Law and the Civil Law, in order to ensure compliance with the provisions of the Convention. It has also formulated its second National Programme of Action for the Well-being of Children 2001–2010.

The Concluding Observations of the CRC Committee on the most recent State Party Report are summarized in Box 2.

Box 2: Summary of Concluding Observations of the Committee on the Rights of the Child

The Committee expressed concern over the:

- Reduction of relative spending on social sectors such as health and education
- Lack of involvement of civil society in promoting children's rights
- Absence of reliable, relevant, gender and age disaggregated data
- Persisting disparities of children with disabilities, different social groups and rural areas in accessing basic services
- Suffering of girls from prejudicial traditional stereotypes
- Constraints on child participation and lack of respect for the views of the child
- Persistence of corporal punishment
- Quality of institutionalized care for children
- 24-hour nursery and kindergarten systems that deprive children of parental care
- High numbers of children separated from their parents and living in institutions
- Low number of cases of child abuse reported
- Children's survival in health, particularly the high rate of malnutrition and stunting
- Insufficient attention given to adolescent health issues, including developmental, mental and reproductive health concerns
- Quality of education
- Child migrants and returnees

The Committee encouraged the State to:

- Take measures to implement the National Plan of Action for children, encompassing the MDGs and goals contained in A World Fit for Children
- Establish or designate a single governmental body responsible for coordination and implementation of the NPA
- Improve the protected access of children to complaint mechanisms
- Place greater emphasis on and support the responsibilities of parents in raising and caring for children
- Develop a comprehensive policy for inclusion of children with disabilities
- Improve the quality of health care, education, and childcare institutions

Source: CSC/C/15/Add.239 1 July 2004, Concluding Observations of the Committee on the Rights of the Child: Democratic People's Republic of Korea

[39] The second periodic report was reviewed by the Committee on the Rights of the Child in 2004.

Convention on the Elimination of All Forms of Discrimination against Women (CEDAW)

The DPRK's accession in 2001 to the CEDAW, the most comprehensive treaty on women's human rights, reaffirms its international commitment to guarantee women's equality. CEDAW provides for equality between women and men in the enjoyment of civil, political, economic, social and cultural rights. It stipulates that discrimination against women is to be eliminated through legal, policy and programmatic measures and through temporary special affirmative measures to accelerate women's equality, which are defined as non-discriminatory.

The Convention is notably the only human rights treaty to affirm women's reproductive rights. The initial national report to the Committee on the Elimination of All Forms of Discrimination against Women was submitted in 2003. By July 2005, the CEDAW committee had released its preliminary concluding observations. Included within these observations was the committee's encouragement that the State be proactive in its measures and policies to eliminate discrimination against women and ensure that *de jure* [formal] and *de facto* [practice] equality be achieved. The committee was also concerned with direct and indirect discrimination and recommended that awareness campaigns on CEDAW, in particular the meaning and scope of indirect discrimination aimed at legislators, the judiciary and the legal profession, be undertaken.

Recurring concerns

Since December 2003, the Committees on Economic, Social and Cultural Rights, CEDAW and CRC have all registered concluding observations. The committees' recurring concerns surrounded:

- High rates of malnutrition amongst children and maternal mortality. On a related point, they all mentioned the quality of basic social services. The CRC committee notes that "despite the increase of the social budget, expenditures for children in absolute terms, especially in the education and health sectors, have decreased over the years." The CEDAW committee specifically calls for poverty alleviation measures aimed at improving the situation of women and in reducing their vulnerability.
- Both the CRC and the ICESCR committees highlighted the excessive degree of state involvement in childcare. Orphanages and baby homes are their particular concern. The CRC committee has encouraged the state to explore alternatives.
- Both the CRC and the ICESCR committees noted with concern the segregation of disabled children.
- Each of the concluding observations also commented on the lack of appropriate, reliable and disaggregated data.

All of these issues are indeed key concerns related to human rights as well as fundamental development issues. Towards addressing some of these concerns, the CRC committee recommends that the State party strengthen its cooperation with United Nations bodies, specialized agencies and the international donor community in the area of policy planning, and provide them with full access to all vulnerable groups, in particular children, and to other areas which require special attention. It also recommends sharing information on policies and financial expenditures in the social sector.[40]

Budgets and fiscal policy

The DPRK does not release detailed information by category on national budgets. However, announcements on the growth rates against previous years have been made. Difficulties in commenting on fiscal spending relate to the categorization applied to spending, or more specifically to the practice of clustering different categories of expenditure, for example, culture with social security. The DPRK's fiscal spending can be broadly divided into three areas: social and cultural; national defence; and management.[41] The DPRK was historically proud of exceptionally high expenditures on socio-cultural programmes, which encompass education, health, environment, social security, welfare, housing and local development, as well as cadre training and culture.

[40] CSC/C/15/ADD. 239 1 July 2004 concluding observations of the Committee on the Rights of the Child: Democratic People's Republic of Korea.

[41] Ibid.

The State's exclusive sponsorship of social provision obviously required extensive investments in establishing the current systems. An example is seen in education. Remarkable increases in socio-cultural expenditure and reduced military spending accompanied the expansion of compulsory education to 11 years in 1971–1976.[42] This has been difficult to maintain. For example, in comparing actual expenditure on education between 1994 and 1999, it has declined by almost 30 per cent, even though it has remained virtually constant as a percentage of total national expenditure, indicating constancy of government commitment.[43] Given comprehensiveness of coverage and entitlements, the State's fiscal capacity to maintain adequate levels of investment to assure access and quality has posed a challenge.

The proportion of social sector spending devoted to basic social services (i.e. basic and primary education, as opposed to university education, or primary health care, as opposed to the operation of specialist hospitals) is not known, and thus an assessment of the DPRK's performance against its commitment to the 20/20 initiative[44] of the 1995 Copenhagen Social Summit is not feasible.

Interestingly, budget allocations for local development are clustered with social and cultural expenditures, making it difficult to apprehend the extent to which financial resources are earmarked for basic services at points of contact/delivery. In recent years, the government has embraced the notion of "social assistance" by generating/mobilizing resources for social services through local-level institutions such as cooperative social groups, etc. in select areas such as education and childcare institutions (See for example the National Plan of Action for Implementing Education for All).

The close monitoring of resources and resource mobilization for social services, social assistance and safety nets will be key in the future.

[42] Ibid.

[43] Democratic People's Republic of Korea, The Second Periodic Report on the Implementation of the Convention on the Rights of the Child, May 2002. This is further discussed in Chapter 3.

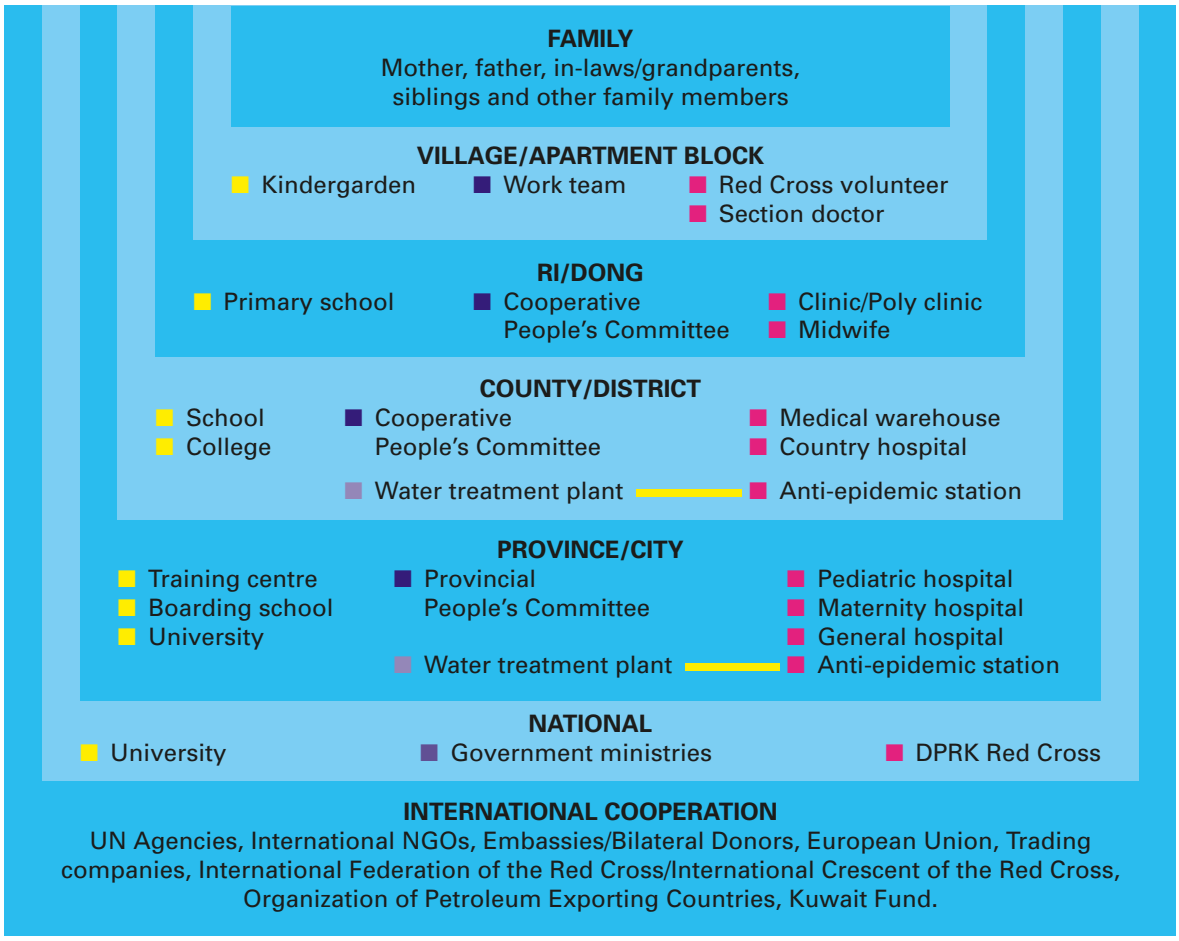
[44] The 20/20 initiative called for governments of developing countries to devote 20 per cent of national budgets to basic social services and for developed countries to provide 20 per cent of their official development assistance to the same end.

Institutional map

In 2002, a rudimentary mapping exercise was undertaken by UNICEF national and international staff to identify key institutions and their various resources and accountabilities. Figure 6 shows the networks of institutions most significant to the situation of children. Some of the notable points related to the social organization of the DPRK are:

- There is close integration between production systems and service delivery facilities.
- There is a concentration of management and referral-level institutions at the county/district-level, indicating this as a key entry point for programming.
- More specialized and training resources are placed at the provincial level, and programmes need to take these into account.

Figure 6: Map of institutions relevant to children



EARLY CHILDHOOD | 2

Early childhood is the most rapid period of development in a human life. The years from conception through birth to eight years of age are critical to the complete and healthy cognitive, emotional and physical growth of children. In short, it is a time when the foundations of physical growth, mental development and socialization are laid. It is also a time of heightened vulnerability when disease patterns, interacting with inadequacies of care, can seriously undermine that foundation, often resulting in compromised growth and development, and even death.

Although there have been some improvements in early childhood nutritional status, malnutrition in the DPRK continues to be a development challenge. This in turn manifests itself in reduced well-being and performance throughout the lifecycle. Whereas food shortages and natural disasters had a significant effect on early childhood development in the mid to late 1990s, the present state of malnutrition reflects a wider range of determinants. These include a combination of:

- Nutritional and physical status of women;
- Overall care environment and capacity of primary and secondary caregivers to provide adequate care;
- Vulnerability to infection as a result of eroded water and sanitation systems and health care systems; and
- Quality and quantity of food to meet nutritional requirements for growth and development of young children.

Foetal growth

Early childhood development is significantly impacted by conditions prior to birth and the overall status of women[45] before and during pregnancy. According to WHO (1995), women with a pre-pregnancy body weight less than 45 kg have been reported to have an 80 to 90 per cent increased risk of delivering a low birth weight baby. Compromised nutritional status and health of women before and during pregnancy generally impact intra-uterine growth and development negatively and can result in low birth weight (LBW). Newborns with LBW are vulnerable to infection and prone to further malnutrition.

In spite of the three national nutrition assessments (1998, 2002, 2004) and a large-scale multiple indicator cluster survey MICS (2000), very little data surrounding the nutritional status of women within the reproductive age group are available. Data on weight gain during pregnancy have not been compiled and made available, and body mass index (BMI) is not measured. However, the stature of women appears to be small.

In 2004, 32 per cent of women with a child less than 24 months of age were found to be malnourished, measured by a mid-upper arm circumference (MUAC) of less than 22.5 cm. Overall, this reflects no change from 2002; however, small reductions in maternal nutritional status between the 2002 and 2004 assessments were apparent for women aged 25 to 29 and 30 to 34 years.[46] The difference between the two surveys related to the slight rise in malnutrition amongst women above 35 years of age. The prevalence of maternal malnutrition was similar in all provinces except for South Hwanghae, which was 28 per cent lower than the national average. This might reflect better nutritional status of women, because the prevalence of maternal anaemia was also lowest in this province. These findings are consistent with the pattern reported in the DPRK 2002 National Nutrition Assessment.

Anaemia in mothers was 34.7 per cent, indicating little change between 2002 (33.6 per cent) and 1998 (34.7 per cent).[47] Anaemia tended to be higher in the youngest and oldest age groups included in the assessment. Regional variations similar to those found in 2002 showed the highest prevalence of anaemia in South Phyongan (61.3 per cent) followed by North Phyongan (47.8 per cent). There are regional variations in anaemia prevalence rates, although the highest prevalence rates in 2004 were in different provinces from those reported in the 2002 survey.

[45] For further discussion on the situation of women, see Chapter 4.

[46] None of these differences were statistically significant.

[47] There was an improved participation from 2002 in the haemoglobin assessment, with 59 per cent of women with a child less than two years agreeing to the test. Overall, 34.7 per cent of the women had anaemia (Hb < 12.0 g/DL), but only 0.5 per cent had moderate to severe anaemia (Hb < 9.0 g/DL).

Similar patterns to maternal malnutrition were observed in the distribution of women by body weight categories. The 2002 assessment also measured weight showing that 16.7 per cent of mothers weighed less than 45 kg and 55.8 per cent less than 50 kg. A pre-pregnancy weight of less than 54 kg has been shown to be associated with less than ideal pregnancy outcomes across a number of studies.[48]

As previously mentioned, growing evidence shows that compromised nutritional status for women as they approach pregnancy and during pregnancy is closely linked to both low birth weight and stunting in early childhood. In 2004, the prevalence of stunting was 22 per cent higher in the children of malnourished mothers.[49] In addition, low weight-for-age was associated with maternal malnutrition and the prevalence of underweight was 43 per cent higher in malnourished mothers. According to mother's recall,[50] 30 per cent of children were identified as born with small birth size. The prevalence of stunting increased by 62 per cent when comparing the range of children who were very large at birth (19 per cent) and children who were perceived to be very small at birth (30.7 per cent).

Previous findings supported this linkage between compromised maternal nutritional status and stunting. Both the 1998 and 2002 assessments also collected information on birth weights through mothers' recall. The 1998 survey found that 9.1 per cent of mothers reported birth weights below 2.5 kg. In 2002, the respective figure was 6.7 per cent, ranging from 4.8 per cent in Pyongyang to 8.5 per cent in North Hwanghae and Ryanggang provinces.[51] These rates are very low compared to other countries, and there have been questions about the reliability of mothers' recall. The external experts assisting the 2002 assessment believed, however, that mothers' recall was good, though they noted too that in the 1998 survey, if birth weights of 2.5 kg are added to those below 2.5 kg, the proportion more than doubles in both 1998 and 2002.[52] They also noted that birth weight is not a measure of linear growth, and low birth weight may not, therefore, have such an impact on later stunting, which is linked more with the quality of diets of mothers before and during pregnancy than with its quantity.[53]

However, mothers' recall regarding perceived small birth size applied in the 2004 survey indicating almost one third (31 per cent) of children born with small birth size is considered to be more in line with other maternal and child nutritional indicators.

Survival

There is a lack of data on child survival. Figure 7 shows that the initial impressive gains made by the DPRK in reducing the under-five mortality rate (U5MR) have since been blunted. The Ministry of Public Health (MoPH) reports that U5MR in 2000 was 47.6 per 1,000 live births. U5MR increased by about 1.8 times between 1993 and 1999. A commensurate rise in the infant mortality rate (IMR) indicates a steady increase over the last decade in children's risk of dying before reaching five years of age.[54]

As in many other countries in the region, neonatal deaths are underreported. However it is thought that neonatal survival has increased since 2000. There still remains though a notable lack of information surrounding neonatal health.

[48] Ibid.

[49] Although this difference was not statistically significant, there was a statistically significant difference between mean height-for-age and maternal malnutrition.

[50] In the DPRK 2004 National Nutrition Assessment, mothers were asked to report on the perceived size of their child at birth. This data was collected for all children less than 24 months and has been used to provide insight into the possible role of low birth weight in childhood malnutrition.

[51] Report on the DPRK Nutrition Assessment 2002, Central Bureau of Statistics DPRK, November 2002.

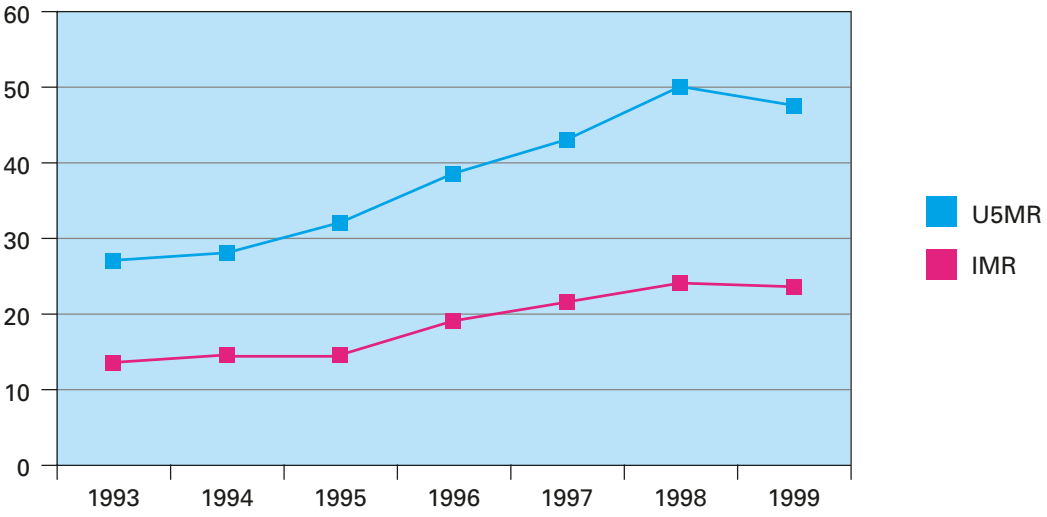
[52] Using this calculation, the portion of LBW would rise from 9.1 per cent to 22.7 per cent and from 6.7 per cent to 14.6 per cent in 2002.

[53] Roger Shrimpton and Yongyout Kachondam, Food and Nutrition in the Democratic People's Republic of Korea: The nutritional status of the mothers of young children, 2003 (unpublished paper).

[54] National Report on the Implementation of the Decisions of the World Summit for Children, Government of the DPRK, 2001, and DPRK National Report to the 5th East Asia and Pacific Ministerial Consultation on Children, Beijing, 2001.

The main causes of death in children under five are diarrhoeal diseases and acute respiratory infections (ARIs), combined with malnutrition as in many other developing countries, though little is known about causes of death in the perinatal and neonatal periods. About one in five children had diarrhoea in the two weeks prior to the survey. The prevalence of diarrhoea was lower in Pyongyang than other provinces. Twelve per cent of the children had ARI symptoms, 20 per cent had a fever and 85 per cent had both ARI and fever in the two weeks prior to the survey. Children 6 to 17 months were more likely to have ARI and ARI with fever. The vast majority of children with ARI were taken for treatment according to the NNA 2004.

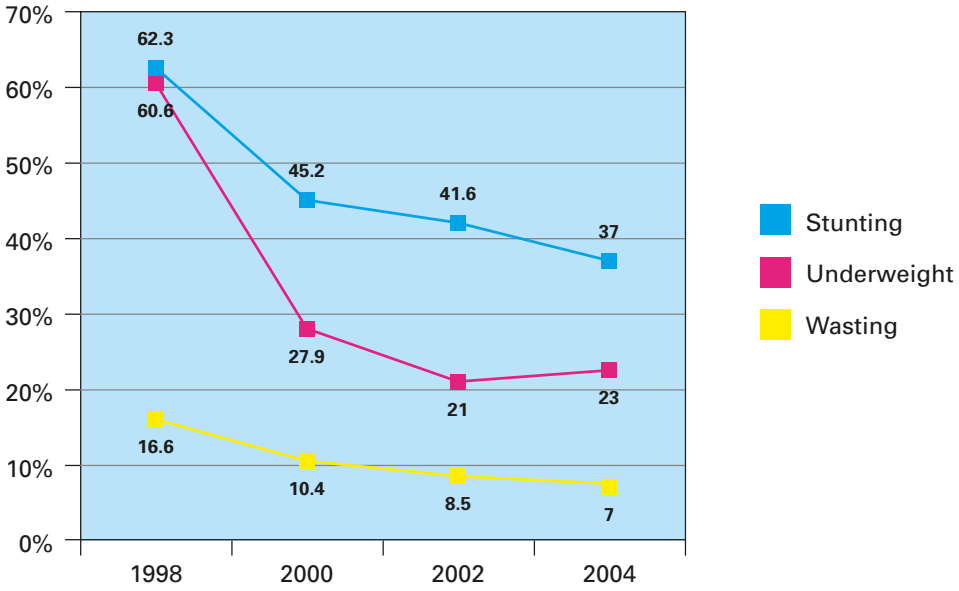
Figure 7: Infant and under-five mortality rates (per 1,000 live births), 1993–1999



Early childhood growth and development

Four nutrition surveys were conducted in the DPRK in 1998, 2000, 2002 and 2004. In spite of select differences,[55] their extensive scope, similar design and sampling methods allow them to be compared. The mean aggregates of these surveys do show some discernible trends. There are considerable improvements for all three measures of malnutrition[56] (as shown in Figure 8[57]). The 1998 survey gives an indication of the seriousness of the acute food shortage that prevailed in the mid-1990s. It is thus no surprise that children's nutritional status should have improved considerably since then, also in view of the substantial humanitarian relief effort that ensued.

Figure 8: Prevalence of malnutrition, 1998, 2000, 2002 and 2004



The 2004 NNA showed an overall decline in childhood malnutrition from 1996 to 2002. Whereas the improvements in acute malnutrition (wasting) have continued to improve steadily between 2002 and 2004, the rate of underweight children actually increased in the same time frame, though this may be due to differences in the measurement methods. Chronic malnutrition (stunting), declined to 37 per cent. The decline in the prevalence of severe stunting was notable, falling from 14.4 per cent in 2002 to 11.8 per cent in 2004.[58] In spite of the apparent improvement, the stunting rate is still high, according to the World Health Organization (WHO) classification. Put simply, more than one third of children aged six and under in the DPRK suffers from chronic malnutrition and about one eighth of children are severely stunted.

The persistence of relatively high levels of stunting is indicative of serious problems for both the physical growth and psychosocial development of young children. These have far reaching consequences affecting the whole of their lives. Recent international research has shown that retarded growth and development in the youngest years cannot be later regained or compensated for.

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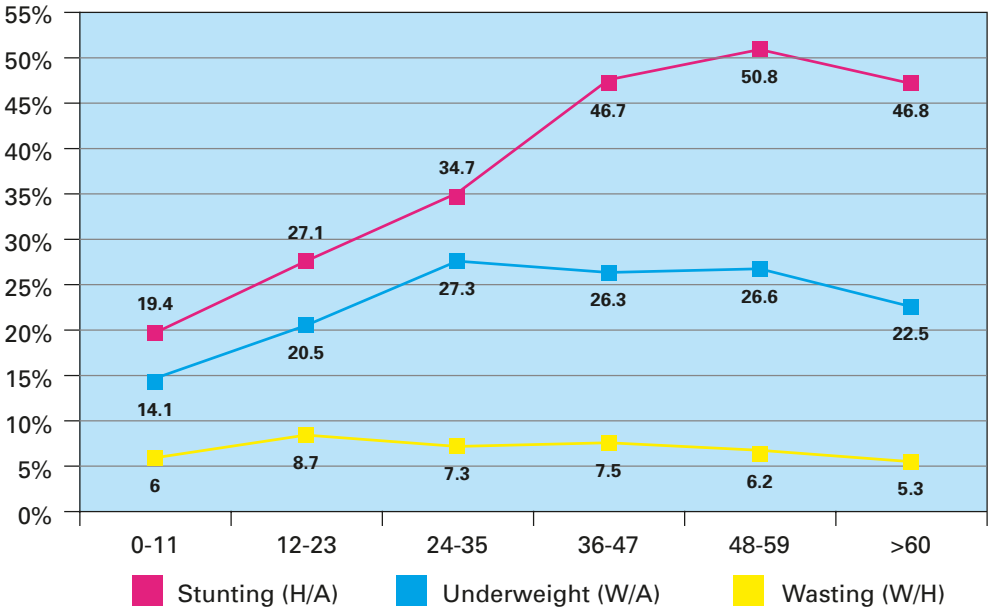
[55] The 1998 multiple indicator cluster survey (MICS) of children aged 6 months to 7 years covered the entire country and was based on 80 accessible counties, representative to regional level. The 2000 MICS of children aged 0-5 years was based on 80 accessible counties, representative to regional level. The 2002 nutrition assessment covered 10 out of 12 provinces/cities (excluding Chagang and Kangwon provinces) and was based on 200 accessible *ri/dong*, representative to province/city level. The 2004 assessment involved a total of 4,800 households from 160 *dong* or *ri* clusters of which 97 were from urban areas and 63 from rural areas. There was 2,109 children aged less than two years (44 per cent of children <6 years).

[56] Wasting (or acute malnutrition) is a measure of insufficient weight for height and is used to determine children at immediate risk, particularly where the degree of malnutrition is moderate and severe when it is less than 80 per cent of normal or less than 2 Z score. Underweight is a measure of insufficient weight for age and is often used as a means to track growth (weight gain) over time. Stunting (or chronic malnutrition) is a measure of insufficient height for age and shows the longer-term impact of nutritional insults on a child affecting physical growth and the development of the brain and central nervous system.

[57] The figures for 2002 have been statistically adjusted to reintegrate the missing children from the sample, in view of the fact that, due to time constraints, only the youngest child in each household was measured.

[58] DPRK 2004 Nutrition Assessment, Report of Survey Results, CBS, ICN, DPRK, February 2005, p. 43.

Figure 9: Prevalence of malnutrition by age (months), 2004



Source: CBS ICN DPRK 2004 Nutrition Assessment Report of Survey Results

As seen in Figure 8, the prevalence of underweight children in 2004 was 23 per cent. This is a high prevalence of low weight-for-age in pre-school aged children (WHO 1995). Figure 9 reveals a progressive increase in the prevalence of underweight until 24 to 35 months and then a slight decline, although the prevalence was very similar for the children in the older age groups. There was a similar age pattern for severe underweight although a more marked decline was seen for older children 54 to 71 months; this is not however shown in Figure 9.

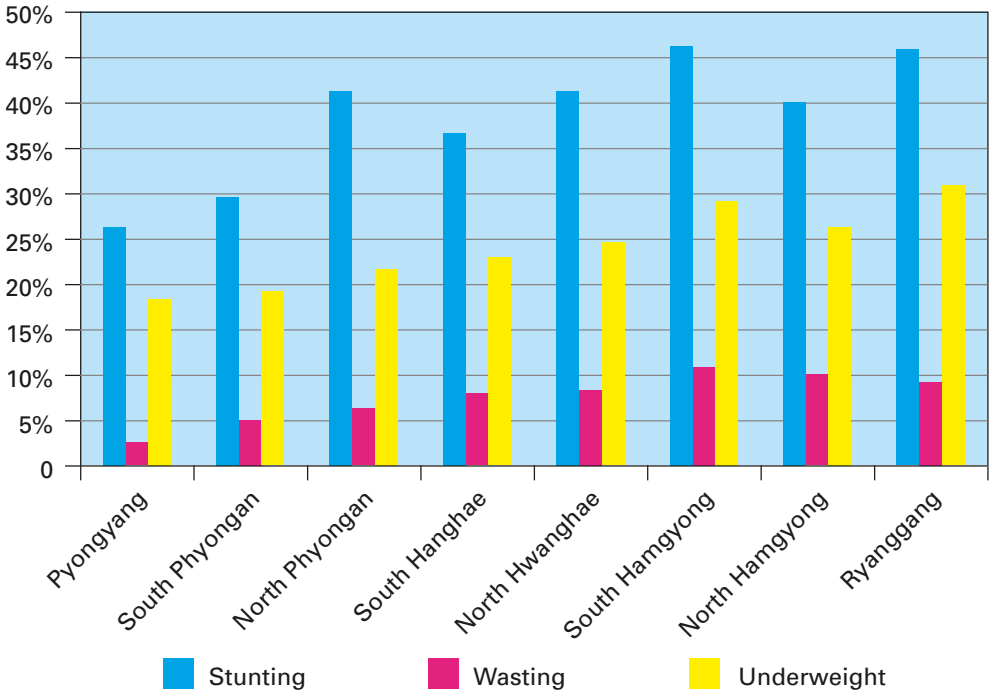
The prevalence of wasted children in 2004 was 7 per cent (Figure 8). This is a medium-level prevalence of low weight-for-height in pre-school aged children (WHO 1995). There was a slight increase in the prevalence of wasting in children 12 to 23 months, and thereafter a slow decline with increasing age. There was a similar age pattern observed for severely wasted children although the peak was in children 18 to 23 months.

In sum, children are most nutritionally vulnerable in early childhood (before four years of age) as indicated by the prevalence rates of stunting, wasting and underweight shown in Figure 9.

There were three age-specific stunting trends that became apparent in the 2004 NNA:

1. There was no change in the stunting rates between the surveys for children 0 to 11 months. Stunting in this age group is largely influenced by foetal growth and maternal malnutrition. The observed association between small birth size and stunting indicates that more efforts to improve maternal nutritional status will be required to rapidly reduce the prevalence of stunting in infants.
2. The stunting rates in children 12 to 35 months have fallen sharply and were approximately 30 per cent lower than 2002. If this progress in reducing stunting continues, the overall prevalence of stunting will fall by a substantial amount in future surveys.
3. The stunting rate in the children 36 to 71 months did not change between the surveys. Children usually do not exhibit catch up growth beyond three years of age even if their diets improve. It is thus critically important to provide interventions that have an impact on the growth of very young children.

Figure 10: Prevalence of malnutrition by province



Source: CBS ICN DPRK 2004 Nutrition Assessment Report of Survey Results

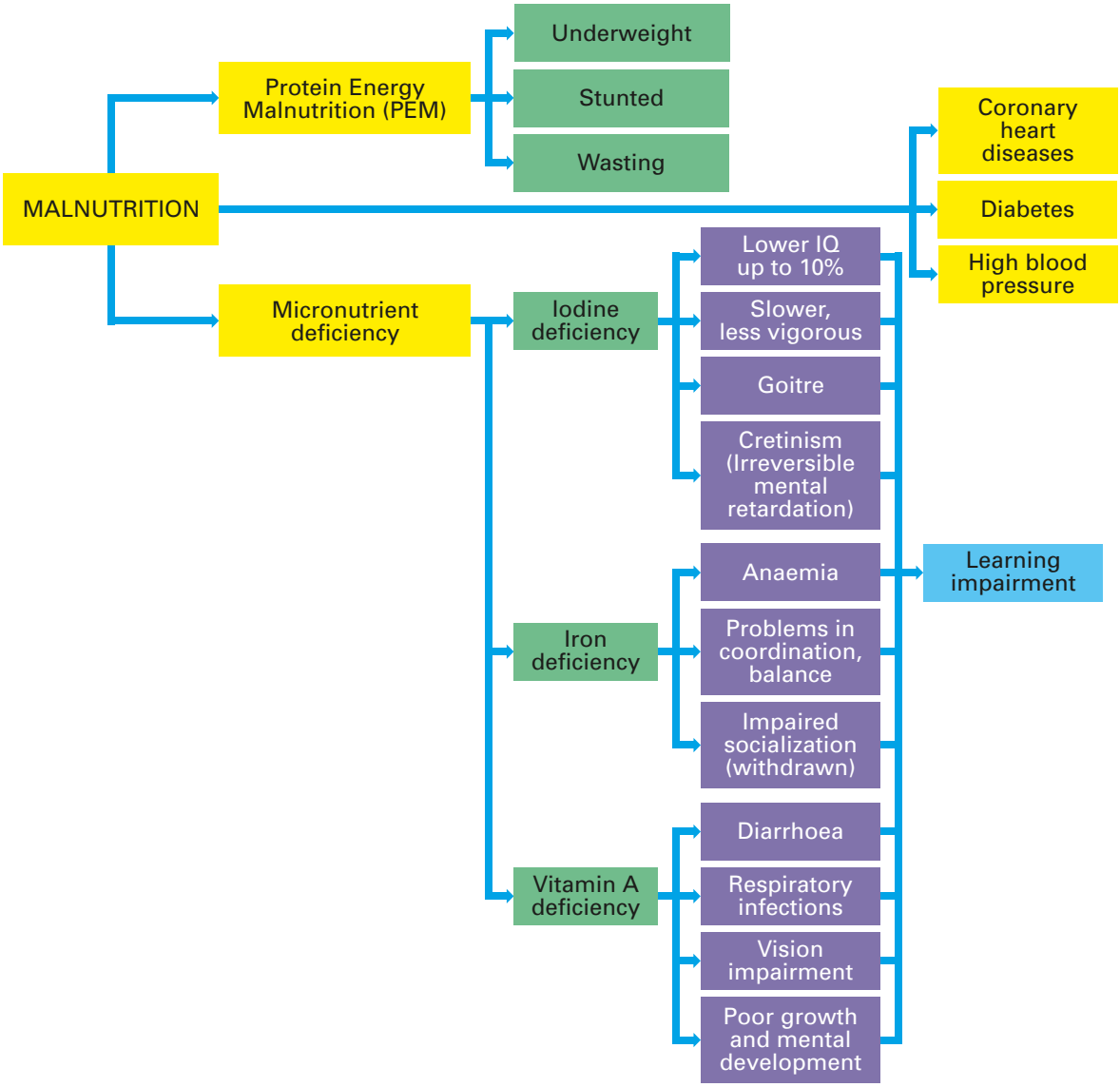
The 2004 NNA provided information on nutritional status of children disaggregated by province and city. This showed marked differences across the country, with the best situation prevailing in Pyongyang and the worst in South Hamgyong and Ryanggang provinces (see Figure 10). The prevalence of stunted children varied significantly by province. As with underweight, two provinces, South Hamgyong and Ryanggang, had a very high level of stunting based on WHO criteria of more than 40 per cent, and four other provinces had high levels of 30-39 per cent.

The prevalence of underweight children also varied significantly by province. The highest prevalence was in the more remote north-eastern provinces of South Hamgyong, North Hamgyong and Ryanggang, and in these provinces underweight was significantly higher than in Pyongyang, the province with the lowest prevalence. In six provinces, the prevalence of underweight based on WHO criteria was high (>20 per cent).

This confirms evidence from field observations that the population in the north-east of the country is in a more vulnerable situation and arguably requires greater attention. The assessment also provided the means to compare the situation of boys and girls and of children living in urban and rural areas, finding in each case no significant difference.

There is a growing body of evidence globally that micronutrients play a significant role in the growth and development of young children, as well as in immune systems. Figure 11 shows the consequences of micronutrient deficiencies in the life cycle of the child. It is likely that young children in the DPRK would be susceptible to micronutrient deficiencies, given their very limited diets, especially the relative absence in meat, fish and eggs. Feeding issues are further discussed in the next section.

Figure 11: The consequences of malnutrition throughout the life cycle of the child



Source: Adapted from the Philippines National Strategic Framework for Plan Development for Children 2000–2025

Unfortunately, there have yet been few studies on the situation of micronutrient deficiencies in children in the DPRK. The limited evidence is the following:

- The 1998 MICS reported the prevalence of anaemia in 31.7 per cent of children aged 6 to 84 months. There have been no updates of this indicator but, as noted above, more than one third of mothers (34.7 per cent) were found to be anaemic in the 2004 NNA. It is likely that many children are born with pre-existing anaemia. This will affect their energy levels, growth potential and immunity from disease.
- A study of goitre prevalence, caused by iodine deficiency,[59] conducted some years ago in eight provinces, found rates ranging from 4 to 26 per cent depending on the province. The 2000 MICS found that only 1.7 per cent of households surveyed had fully iodized salt.[60] The 2004 NNA found that 40 per cent of households were using salt with some level of iodine. There was less consumption of iodized salt in the northern mountainous provinces. The government has notably prioritized universal salt iodization as an explicit result sought through its National Programme of Action for Children.
- In children, vitamin A deficiency can lead to increased risk of blindness, morbidity and mortality. Preventing vitamin A deficiency in children is a key child survival intervention. Clinical signs of vitamin A deficiency have regularly been observed in childcare institutions, though the only available figure is from the 1995 mid-decade review of progress towards the World Summit for Children goals, which indicated a prevalence of 9.3 per cent. However, twice-yearly supplementation of children aged 6 months to 5 years, begun in 1998, has proven extremely successful. In DPRK, the coverage of supplementation of children with high-dose vitamin A in the six months prior to the survey was very high (100 per cent in Pyongyang, with the lowest coverage being 93.8 per cent in Ryanggang). In the group of children born before 20 November 2003, the coverage was uniformly very high across all provinces.
- According to the 2004 NNA, about 6 per cent of pregnant women had night blindness during their last pregnancy. Night blindness during pregnancy is an indicator of vitamin A deficiency (see Chapter 4, Adulthood, for detailed discussion).

[59] The human body requires a daily intake of small amounts of iodine and cannot store it, like it does other micronutrients. Iodine deficiency in a foetus can result in stillbirth and cretinism; it is the largest worldwide cause of mental disability. More insidiously, it robs children of 10 to 15 IQ points. The most striking physical manifestation of iodine deficiency, by no means visible in all cases, is a swelling of the thyroid gland in the neck into a goitre.

[60] The globally accepted response to iodine deficiency, given that iodine has progressively disappeared from soils and thus from plant food sources, is the fortification of salt with potassium iodate.

Care for children

Infant and young child feeding

The rate of exclusive breast-feeding of children six months of age appears to be steadily declining based on a comparison of the nutrition assessments of 1998, 2002 and 2004 (see Figure 12). However definitions and metrics surrounding interpretations and measurement of exclusive breast-feeding are likely to have impacted the accuracy, with different questions in different surveys eliciting different answers. The 1998 nutrition survey, for instance, reported that 96.5 per cent of children were exclusively breast-fed for the first four months of their lives. However, the clarity of understanding of the term "exclusive breast-feeding" was questionable, because mothers commonly believe that to give infant water does not detract from the exclusivity of breast-feeding.

Figure 12: Exclusive breast-feeding among children under six months of age

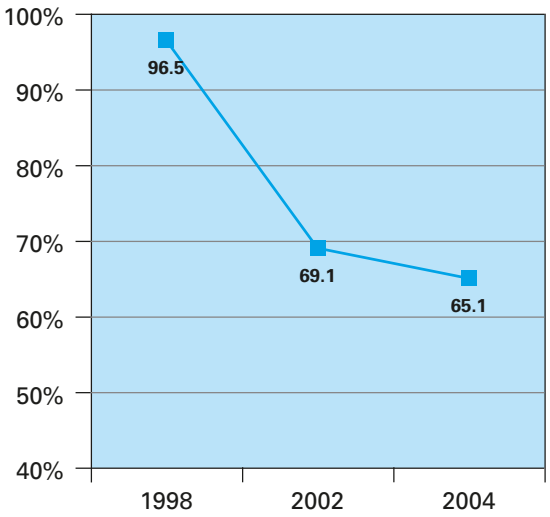
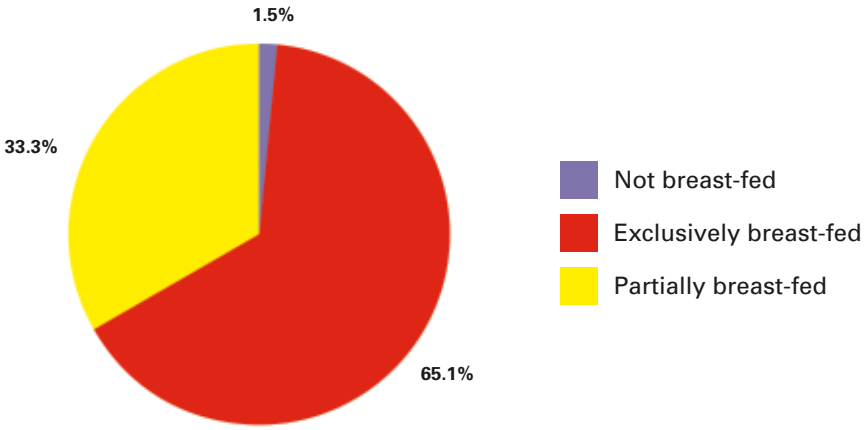


Figure 13: Breast-feeding practices

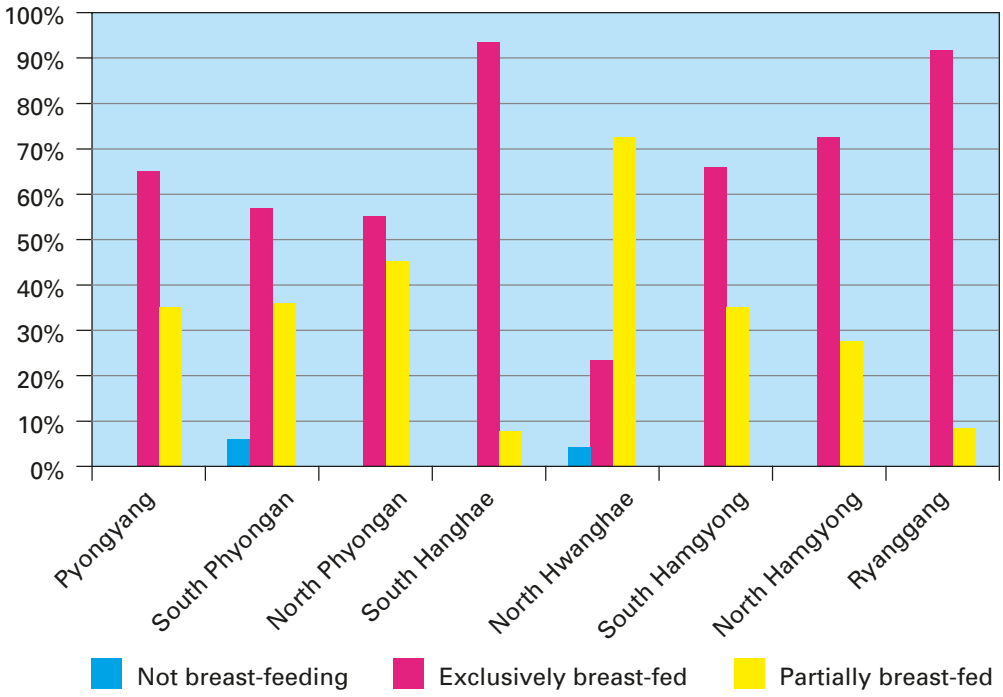


Source: CBS ICN DPRK 2004 Nutrition Assessment Report of Survey Results

In the 2002 nutrition assessment, there was more care taken over the question of breast-feeding, and it found a mean rate of exclusive breast-feeding of children under six months of 69.6 per cent, with lows of 43.1 per cent in Pyongyang, and 47.1 per cent in North Phyongan.

The 2004 NNA found that 65 per cent of children of six months of age or less were exclusively breast-fed according to 24-hour recall (see Figure 13). The almost 10 per cent difference in the rate of exclusive breast-feeding between urban (69.1 per cent) and rural (59.4 per cent) areas was striking. Provincial level variations (see Figure 14) also show marked differences amongst rural and urban areas. Understanding the enabling and inhibiting factors further will be key to promoting breast-feeding. In spite of the 2001 Policy on Breast-feeding and the approval of MoPH signified by the introduction of training on breast-feeding into their main curricula, the decline of the national average indicates that exclusive breast-feeding remains a challenge.

Figure 14: Infant feeding patterns by province



Source: CBS ICN DPRK 2004 Nutrition Assessment Report of Survey Results

Despite the high proportion of institutional deliveries, reports suggest that the initiation of breast-feeding is often late by 12 to 24 hours. The disruption of breast-feeding has obvious implications for the health and nutritional status of children. In addition to depriving them of antibodies present in breast milk, it reduces valuable psychosocial stimulation and bonding. The introduction of other foods at this early age also exposes children to sources of infection that are not present in breast milk. The challenge of improving hygiene standards will be key in addressing these vulnerabilities.

The government revised its policy on breast-feeding in 2001, raising the recommended period of exclusive breast-feeding from three to six months. However, children enter nurseries at the age of three months on the termination of the mandated period of maternity leave. Despite the deliberate and close proximity of nurseries to workplaces, breast-feeding is frequently rushed or disrupted. This may also be a contributing factor in the drop off in breast-feeding noted in the various nutritional surveys.

In the DPRK, childcare responsibilities fall primarily on working women and caregivers in institutions, both of whom face limitations in time and resources. Between six months and three years, children have high nutritional requirements per kilogramme of body weight. They are highly susceptible to infections and, having very small stomachs, need frequent feeding with sufficiently dense but easily digestible foods. This is equally a time when children need a lot of care and attention.

Traditional homemade complementary foods lack protein, fat and micronutrients. The available diet is primarily watery and cereal and vegetable based, and is inadequate to the nutritional needs of children at this age. Food shortages and low purchasing power have resulted in not only scarcity but also a lack of diversity in the types of foods available and purchased. Prior to the emergency, complementary food consisted of rice, carrots, fish and oil. However, these commodities are not always readily available or affordable. There has been some effort towards fortification of cereal/milk-blended foods, biscuits and noodles, which are supplied to children and pregnant and lactating women as food aid. Fortification of a broader range of commonly used foods, such as cooking oil and flour, has not yet begun and would need levels of investment not presently available.

Health care

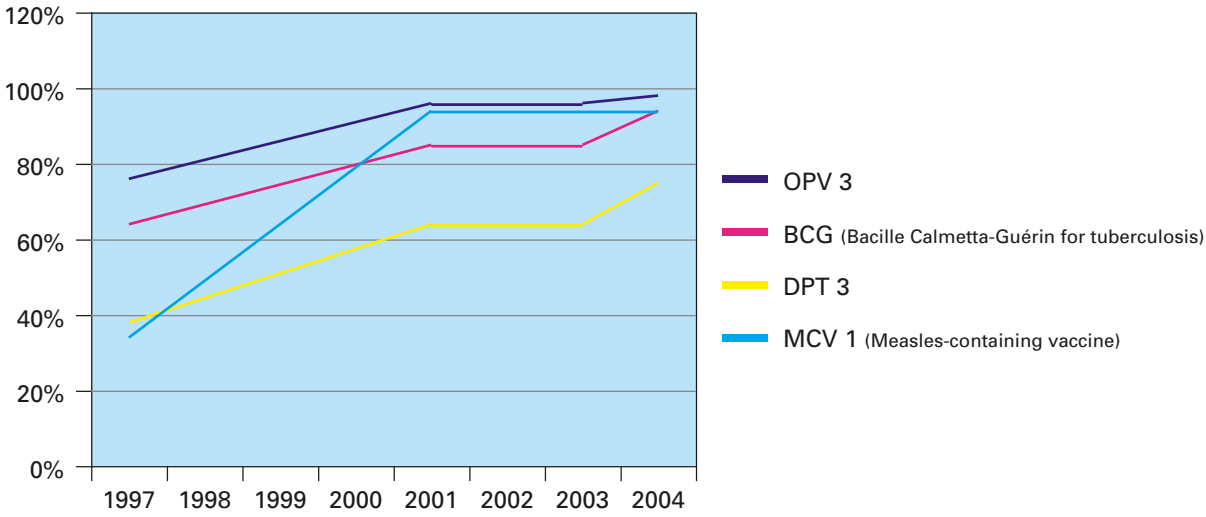
The DPRK has a very extensive network of health care institutions and providers. This comprises section (or household) doctors attached to each work team, one per 130 families; clinics, polyclinics and hospitals in each *ri* and *dong*;[61] a hospital and anti-epidemic station in each county or urban district; hospitals attached to significant urban factories; and specialized institutions, including maternity and paediatric hospitals in each province and municipal city. There are also tertiary institutions in Pyongyang. Health care is by law provided completely free of charge. The existence of this network is a major achievement and an advantage in the provision of health services to children. However, over the past decade or so, the system has become increasingly vulnerable due to the economic difficulties faced by the country. This has led to a general rundown of infrastructure and especially shortages of medicines and other supplies.

The DPRK previously produced its own drugs but, like other parts of the industrial economy, these factories now run well below their potential. Most essential drugs to treat basic respiratory infections and diarrhoeal diseases in children have been provided by external agencies.

[61] *Ris* and *dongs* are subdistrict levels of governance in, respectively, rural and urban areas. The *ri* corresponds to the area of a cooperative or state farm.

A major area of comparative success has been in the prevention of disease through immunization. Prior to the 1990s, the DPRK had a very impressive and very complicated immunization programme. With limited funding and the onset of the natural disasters, this deteriorated rapidly. The country revamped its immunization strategy basing it on international standards, as defined by WHO. However, the 1998 MICS found very low coverage levels due to a number of factors: notably difficulties involved in the change of strategies, lack of equipment, and shortages of electricity to power the cold chain.[62] The 2000 MICS indicated that coverage rates had picked up significantly, and this was largely confirmed by the 2002 nutrition assessment, though reliance on recall, rather than vaccination cards, renders the results less credible: Different statistics have been used by MoPH for its application to the Global Alliance for Vaccines and Immunizations (GAVI), which the 2002 result for DPT 3[63] would seem to confirm. National estimates accepted by MoPH, WHO and UNICEF suggest a continued upturn, though this needs to be sustained (see Figure 15). Presently, the coverage of all antigens except DPT is more than 93 per cent. DPT coverage has increased from 68 per cent in 2002 to 72.5 per cent in 2004 (See Figure 15). According to Government figures for 2004, Hepatitis B vaccination has reached a nationwide coverage of 97.2 per cent following its introduction with support from GAVI in 2003.

Figure 15: Immunization coverage, 1997–2004



Source: WHO/UNICEF estimated coverage [for 2004, country official estimated coverage used]

With improved surveillance of acute flaccid paralysis (AFP),[64] it is now clear that polio has been eradicated, though formal polio-free certification is to be done for WHO's Southeast Asia Region as a whole and may still take some more time.[65] Vitamin A supplementation for children aged six months to five years has been brought to similar high coverage levels, in fact, the highest in the Asia-Pacific region. Over the last four years, deworming pills[66] have also been given to children aged two to five years.

These successes are largely attributable to national immunization days (NIDs). To further promote immunization, 'take home' cards have been introduced. This is consistent with the norm in most countries, keeping vaccination cards with the family. Clearly there is further scope to capitalize on this strategy, and the capacity for social mobilization of the DPRK's health service, for other health interventions.

[62] The cold chain refers to the network of refrigeration and insulation devices needed to ensure that vaccines are kept at the required low temperatures to ensure their potency.

[63] DPT refers to the triple antigen vaccine against diphtheria, pertussis (or whooping cough) and tetanus, which is given in three doses. OPV is oral polio vaccine, which is also given in three doses. The figure for OPV is undoubtedly actually that for the national immunization days, explaining the difference between the DPT and OPV rates; in the regular immunization programme, these two vaccines are given together.

[64] This is the means of detecting and verifying potential polio cases. Not all AFP is due to polio, which is verified through laboratory tests of stool specimens.

[65] The region includes some other countries where there is still transmission of wild poliovirus.

[66] High worm load is a factor preventing children from gaining adequate nutrition from food and especially inhibits the absorption of iron, leading to anaemia.

Although mobilization for national immunization days is highly successful, challenges surrounding planning and management and cold chain performance threaten the achievements made in immunization. For example, the HepB vaccine is more demanding on cold chain requirements, and this remains a constraint for ensuring the quality of the vaccines. This is not surprising given the context of economic fragility and formidable energy constraints within the country.

Box 3: EPI programme in the DPRK

The Expanded Programme on Immunization (EPI) provides essential vaccination services in DPRK, targeting about 400,000 children under one-year old and 430,000 pregnant women. The programme aims to increase protection of children against seven vaccine-preventable diseases: diphtheria, pertussis, tetanus, poliomyelitis, tuberculosis, measles and hepatitis B, as well as protecting pregnant women against tetanus. The programme receives support of UNICEF, WHO and GAVI.

Apart from its economic and funding constraints, there are other factors inhibiting the effectiveness and efficiency of the health service. The extensive base network is certainly a positive feature which should be maintained. However, there are indications of over-capacity in hospitals, with hospital beds and their attendant human resources somewhat underused. This could be explained by constraints over quality of care, availability of medicines and, in winter, heating. However, this is an area that would benefit from comprehensive analysis of the factors determining use of health facilities.

Moreover, health professionals have not had access to many of the advances that have taken place in public health around the world. These include basic aspects of care as much as more advanced technological questions. An example of this is the worldwide renewed interest in nursing as an essential component of patient care, whereas the DPRK has a ratio of doctors to nurses that is almost the inverse that prevails in other countries. Its research, development and training institutions are focused more on specialities, than on advancing basic standards of care. There is a need to increase the scale of the DPRK's contacts with other countries, and with information on advances in health care systems, as well as a need to change the orientation of its higher institutions toward the achievement of fundamental results for children's health.

Childcare institutions

Institutional care during early childhood is the norm in the DPRK. The Law on Nursing and Upbringing of Children was adopted in 1976. It articulates the State's commitment to the financing of early childcare and defines the basic requirements of satisfactory/humane nursery conditions. The government's conceptual approach towards early childhood care is multi-sectoral, although nurseries fall under the umbrella of the Ministry of Public Health. Nurseries accept children from the age of three months to four years. Attendance is optional. Kindergartens, which come under the Ministry of Education (MoE), cater to children aged five to six years. The second year is the first of the compulsory 11-year education system. Based on this system of early childhood care and education, children enter primary school at seven years of age. Nurseries and kindergartens are attached to factories, enterprises and cooperative farms, and are supported financially by the concerned units.

The total number of children enrolled in nurseries and kindergartens in 2002 was 2,192,342 suggesting near total enrolment in early childcare programmes.[67] It is, however, possible that there is some over-reporting of enrolment, and certainly enrolment does not match attendance throughout the year. Many field reports indicate decreasing numbers of children attending nurseries, particularly in the winter months. Practically, the economic hardships faced by cooperatives, state enterprises and social organizations have obviously influenced the amount of food and financial resources available to nurseries and other childcare institutions. Whereas individuals and families might adopt coping strategies, such as kitchen gardening and individual terracing, it remains unclear how institutions for the care of children are adapting to hardships.

[67] Figures provided by the Flood Damage Rehabilitation Commission.

The 2000 situation analysis noted that caregivers are under a significant amount of stress. This remained a point of concern in the analysis published in 2003. In 2005, the caregiver-to-child ratio in baby homes was sufficient, but remained low in nurseries. Improving the overall environment and quality of care in childcare institutions certainly remains a challenge in promoting the healthy development of young children.

In addition to the nurseries, the State also maintains 14 baby homes for orphans and other children for whom their parents are unable to care. In 2002, these numbered 2,371 children aged 0 to 4 years.[68] This number includes triplets, who are cared for by the State during the first five years of their lives on the grounds that their care would be overburdening for their families.[69] Children whose mothers are sick and unable to care for them are also kept in the baby homes. Comments related to nurseries also apply to baby homes, which may be even less financially stable, given that they have no connection with any productive enterprise but are fully dependent on the State for their funding. Field observations indicate that there is considerably more malnutrition in baby homes than in nurseries, and more malnutrition in children centres/orphanages than in kindergartens, though some attempts are made at the rehabilitation of severely malnourished children in baby homes.[70] However, it is by no means equivalent to the systematic medical treatment and care by trained health professionals available at paediatric hospitals. The comparison of malnutrition rates between different types of institutions is shown in Table 2 using data collected by WFP during food aid monitoring visits in August 2005.

Table 2: Comparison of malnutrition rates between different types of institutions

Institution	Malnourished	Weak	Malnourished and Weak
Baby home	9%	16%	25%
Children centre	4%	11%	14%
Nursery	4%	9%	13%
Boarding school	4%	6%	10%
Kindergarten	1%	4%	5%
Primary school	1%	1%	1%

Source: World Food Programme (August 2005)

The very youngest children are clearly in a more disadvantaged situation, as they have no one to breast-feed them. Following their time in baby homes, the children move on to orphanages during their fifth and sixth years. In 2003, there were 12 orphanages in the DPRK catering to 1,544 children.[71] These are the equivalent of kindergartens for children who are orphaned.

The CRC committee expressed deep concern for children in institutional care. Recognizing that the quality of care is severely compromised due to financial constraints and limited human resources, the committee underscored concerns for children's psychosocial development. The committee encouraged the State to consider increased parental and family care as well as foster care and adoption as alternatives to institutionalization. Between 2003 and 2005, there has been an observable increase in family involvement in the upbringing and care of children. In recognition of the need to develop household/family knowledge surrounding care practices for survival, growth and development of children, the Korean Democratic Woman's Union (KDWU) began a nationwide information dissemination campaign.

[68] *Second Periodic Report on the Implementation of the Convention on the Rights of the Child*, Government of the DPRK, 2002, p. 30.

[69] There is a potential conflict here with Articles 3, 9 and 18 of the Convention on the Rights of the Child.

[70] This happens particularly in instances where a parent or other family member is unable to remain with the child. Baby homes are set up to provide 24-hour care for young children, whereas the hospitals are not.

[71] *Second Periodic Report on the Implementation of the Convention on the Rights of the Child*, Government of the DPRK, 2002, p. 30.

In 2003, a law on the protection of disabilities was adopted in order to ensure equal access for persons with disabilities to public spaces, transportation and public services. The State also runs a number of institutions for disabled children. Although very little in known about these institutions, it is recommended that they would be consistent with its adherence to the Convention on the Rights of the Child (notably Article 23) were the government to review its apparent policy of blanket institutionalization. The globally accepted approach is to care for disabled children within their families and communities, wherever possible. The CRC committee recommended that a holistic approach towards the inclusion of children with disabilities be developed that includes strengthening early detection, the development of special school curricula and the inclusion of disabled children within mainstream schools as soon as possible.

Growth monitoring and promotion

Growth monitoring is routinely practised at nurseries and backstopped by section doctors attached to each institution. However, the division of responsibility for growth monitoring seems to differ among institutions. In some cases, caregivers are responsible for both the weighing and the analysis of results; in others, they do the weighing, and the section doctors analyse the results; in still others, the responsibility for both falls on the section doctors. Since the section doctors are attached to *ri* or *dong* clinics, a second set of records of children's weights is also kept there.

Experiences from other countries, where malnutrition is a significant concern, demonstrate that growth monitoring is most effective when caregivers and guardians are involved in the actual process of weighing and analysis of results. Experts in nutrition working within the DPRK over a long period note that the capacities of caregivers for early detection and appropriate response to growth faltering, and undertaking actions for actual prevention of malnutrition, should be enhanced. Building the capacities of caregivers for systematic prevention and treatment of malnutrition, based on the growth monitoring process, is clearly an unmet need associated with the early childcare institutions.

One other significant drawback to the overall effectiveness of present growth monitoring practice relates to the lack of systematic contact and coordination with families. Present reports suggest a virtual disjunction between family and institutional care. Caregivers meet family members when they drop off or collect children, which may often be done by an elder sibling. This inhibits the holistic assessment and analysis of children's care environments. Clinical symptoms seen in institutional childcare environments, such as diarrhoea, reduced energy or vomiting, might not be explained to the family, nor their causes addressed. In short, the utility of growth monitoring becomes restricted to curative responses, where caregivers or section doctors only inform parents when problems have a measurable impact, therein negating the preventive and promotive functions. Recognizing that in the DPRK childcare institutions play a significant role, but are only one of two major care environments, linkages with families and to overall planning within the community need to be reinforced as a matter of priority.

Psychosocial care and school readiness

As noted in the Law on Nursing and Upbringing of Children, socialization and education are both essential objectives of the institutionalized care system. In spite of the extensive commitment to promoting the optimal development of children, the caregiver-to-child ratio and quality of care to provide the essential psychosocial care and stimulation for young children remain areas of concern.

The incidence of stunting is not only very concerning from the standpoint of survival and physical growth but also for the overall development of children. Stunting is the only tangible indicator of psychosocial development.[72] In situations of inadequate nutrition, the body spontaneously ranks survival first and growth second, and cognitive and brain development last. This does not, however, imply that survival, growth and development are sequential. Rather, they take place simultaneously and, therefore, adequate feeding must be accompanied by psychosocial stimulation in order to enable optimal early childhood development. Practically, this means that children must be held, stroked, spoken to and stimulated visually with objects.

With a low ratio of caregivers to children, the various task burdens are too high to provide the same amount of stimulation for all children to develop to their optimal capacity. Moreover, there is a shortage of toys and learning materials. Integrated early childhood development is a relatively new approach and subject. It is, however, proving to be amongst the most effective strategies/entry points for human development in both developing and developed countries alike. Cuba, for example, has incrementally built a national system of day-care centres and early childhood groups that reach 98.3 per cent of children in the 0 to 6 year age group.

The government has made commitments to improving the quality of early childhood care and education in its National Programme of Action for the Well-being of Children 2001–2010. The commitments include strengthening the capacity of caregivers and kindergarten teachers in nutritional and hygiene management, assigning medical workers to nurseries and kindergartens, and mobilizing social organizations, the KDWU in particular, to extend active social assistance to nurseries and kindergartens.

The government's commitments to improve the standards in nurseries and kindergartens are reinforced in their long- and medium-term goals in the NPA on Education for All (EFA). Cognitive and intellectual development of children in nurseries, the development of up-to-date teaching and toys, refresher teacher training for kindergarten teachers, and the facilitation of closer ties with parents are regarded as key priorities.

According to the government some 37,000 kindergarten teachers receive in-the-field refresher training for 3 to 6 months every 4 to 5 years. These trainings are reportedly delivered through mobile training units.

The realization of these commitments through international cooperation represents an opportunity to profit from the rich international lessons surrounding early childhood care and education. Investments and innovations in the quality of services are likely to increase the effectiveness of nurseries and kindergartens in promoting cognitive and psychosocial development as opposed to merely serving as centres of guardianship for children.

[72] World Bank: http://worldbank.org/children/devstages.html.

Environmental factors

The deterioration of the water and environmental sanitation systems have resulted in inadequate and low quality water supplies. This has negatively impacted standards of hygiene and child health in the DPRK.

Water supply

The NNA 2004 found that the majority of the population (82 per cent) relies on piped water systems (see Figure 16). This was ten per cent higher than 1998, when 72.3 per cent of the population relied on piped water as the major source. According to the NNA findings, there is a great deal of uniformity within the country, "even in the remote northern provinces". The only provinces with a lower proportion of households with piped water sources were North Phyongan and South Hwanghae.[73]

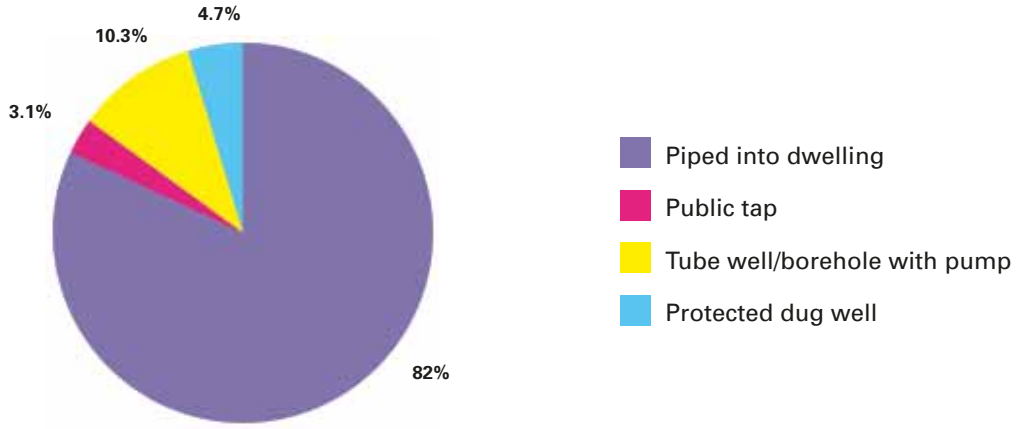
However, a 2004 UNICEF baseline survey of limited scope[74] found that only 58.6 per cent of households had piped drinking water in their dwelling (see Figure 17), while a significant portion of the population relied on hand pumps, protected dug wells and protected springs.

The apparent increase reflected in the NNA findings are surprising in the absence of the rehabilitation of the water supply system, although innovations such as the gravity feed systems that have been tested around the country might be a factor in this increase. It also clearly indicates the need for more local-level studies on water supply and other such areas of child welfare and development alongside the overall need for improvement in statistical data gathering, sampling and analysis. Local-level observations show a significant difference between access to (piped water installed in dwelling), and the availability of (time per day) water through the network.

[73] ICN DPRK 2004: 69 Nutrition Assessment Report of Survey Results.

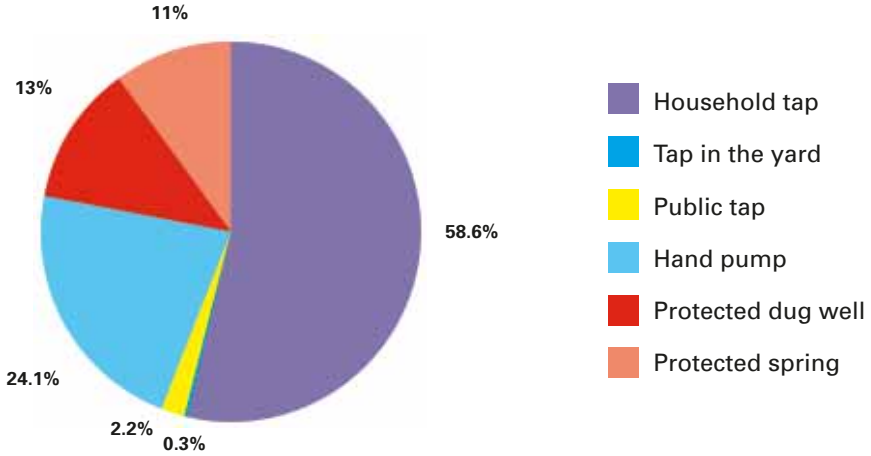
[74] CBS Report on the Baseline Assessment in Three Counties (June 2004).

Figure 16: Sources of water



Source: CBS ICN DPRK 2004 Nutrition Assessment Report of Survey Results

Figure 17: Drinking water sources

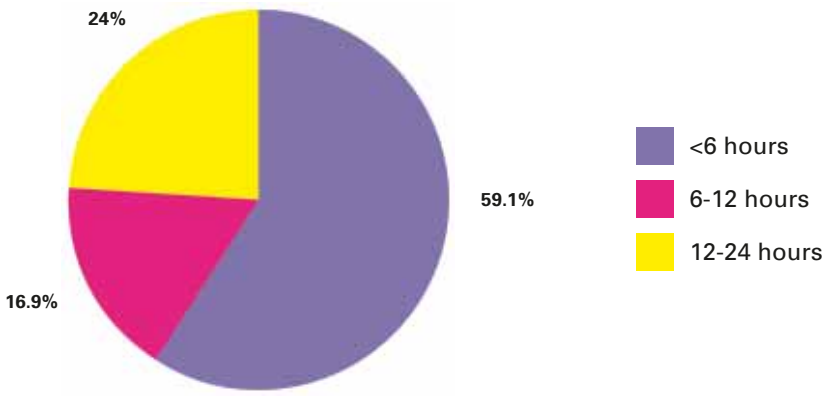


Source: CBS Report on the Baseline Assessment in Three Counties (June 2004)

Deterioration in water supply systems has resulted in a significant decrease in effective availability of potable water. In most parts of the country, water runs according to a time schedule for water flow. A 2004 UNICEF baseline survey[75] undertaken in three focus counties found that 59 per cent of the population had six hours or less of water supply during the day (see Figure 18). A 2002 assessment of water supply and sanitation needs in three counties (Kosan in Kangwon Province and Kowon and Jongpyong in South Hamgyong Province) indicated that 80 per cent of the water supply needs of the population remained unmet.

[75] CBS Report on the Baseline Assessment in Three Counties (June 2004).

Figure 18: Duration of piped water supply



Source: CBS Report on the Baseline Assessment in Three Counties (June 2004)

The limitations in water supply are rooted in a combination of both crisis, such as flooding, and the lack of systematic renovations and rehabilitation.

The shortfalls in water supply are related to a range of technical factors, such as inadequacy of water sources, which require re-planning, and the maintenance and rehabilitation of the water storage structures, pipelines (delivery and distribution) and pumping systems. Leakage due to rusted pipes, estimated by the Ministry of City Management (MoCM) to be up to 50 per cent, exacerbates supply problems. In addition to aging motors and pumps that are incapable of distributing the maximum yield, key connections are lacking due to missing parts and maintenance of electrical equipment. Also restricted by recurrent power shortages, pumping stations are unable to supply adequate amounts of water.

MoCM has piloted new systems of water supply such as the gravity feed in parts of the country. MoCM is seeking to scale up this technology as a central national priority as the gravity feed systems are well suited to the abundance of perennial water sources in the hills and mountains of the DPRK.

MoCM has also begun the installation of deep water hand pumps as an alternative to the centralized water supply system. Deep water hand pumps are generally between 20 to 60 metres instead of the common three to seven metre wells.

Water quality

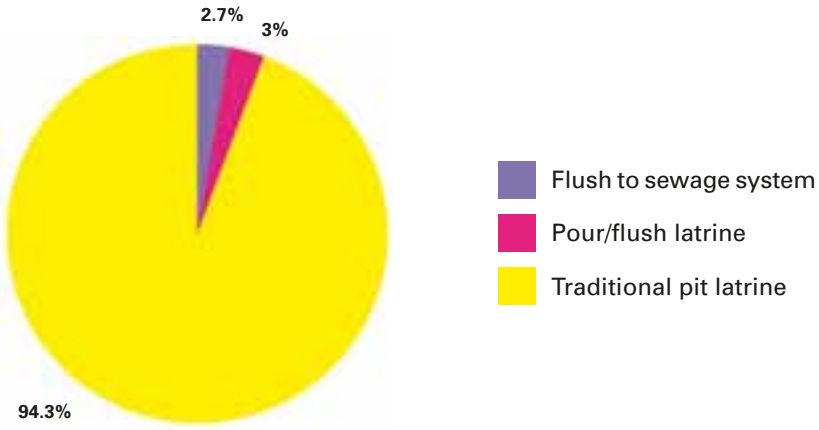
Although official figures on water quality are not readily available, reports of sub-standard water quality and contamination are common. MoCM notes that outbreaks of water-borne diseases, caused by secondary contamination of water in pipelines, remain a major problem. Seepage during non-pressurized hours is one major cause of decline in water quality. Testing and monitoring of water quality are regularly undertaken at anti-epidemic stations (AES) of the Ministry of Public Health. Though standards for water supply and quality are comparable to the WHO guidelines and the European standards, the AES lack updated and appropriate equipment and supplies, and their capacity is restricted due to lack of reagents. Moreover, laboratory conditions are worsening and the staff capacity to collect and store water samples is limited, as is their capacity for updated and relevant data analysis and interpretation.

In addition to technical improvements, operationally, enhanced coordination and information sharing between the AES /MoPH and MoCM will be critical to improving quality standards, water quality testing, synchronization and treatment.

Hygiene and sanitation

In the absence of baseline data, very little is known about hygiene practices in the DPRK. The 2004 NNA found that 80 per cent of mothers with a young child aged 0 to 3 years disposed of their children's stools using a containment method. Hygiene practices are likely to be compromised in urban areas that are most severely impacted by shortages in piped water supply. In rural areas, where human excrement is used as a fertilizer and regular washing is of utmost importance, hygiene is likely to be compromised by the shortages of water, soap and disinfectants.

Figure 19: Types of sanitation facilities



Source: CBS Report on the Baseline Assessment in Three Counties (January 2004)

Approximately 57 per cent of households have flush toilet systems and 43 per cent have pit latrines. In one quarter of the households, the facility is not within the dwelling.[76] The CBS baseline assessment in three counties found, however, that the majority of people relied on traditional pit latrines, which might be much closer to the 79.7 per cent of the population that relied on dug latrines in 1998.

The danger of transmitting vector-borne diseases, overflow and contamination is significant with dug and open pit latrines. The location and flooding of open latrines contribute to the seepage of sewage into water supply systems. In the early 1990s, the government made a concerted effort to replace dug latrines with flush toilets. However, water shortages have required the widespread change of flush toilets into pour-flush latrines. MoCM has introduced Ventilated Improved Pit (VIP) latrines with urine separation (ECOSAN latrines) which does not depend on water supply. As a simple technology that is likely to reduce the spread of infection, it presents an alternative to the simple pit latrine. The ventilation system in VIP latrines keeps them free from flies and ECOSAN technology provides urine and excreta separation. Therefore, excreta can be used as fertilizer after one year of composting.

The 1998 MICS noted that the condition of latrines observed in institutions was below the minimum standard established for such institutions. As with water systems, one can only suppose that the situation has continued to degrade in the absence of any systematic programme of rehabilitation.

People appear to be highly dependent on tap water and modern soap as a disinfectant. It remains unclear how the population is adapting to the shortages of both water and soap.

The preparation of an updated national hygiene strategy must be holistic and account for the real innovations in water supply technologies (such as gravity feed) and deep water hand pumps, as well as VIP latrines.

[76] ICN DPRK 2004: 70 Nutrition Assessment Report of Survey Results.

Changing strategies for development

Prior to the economic difficulties and natural disasters, the government prioritized expansion of water supply with no significant investments to renovate the inherited water systems, some of which were already three to four decades old. The government continues to regard water and sanitation as a priority. However, investment has suffered due to the economic hardships and has been highly inadequate. Until 2000, the overarching emphasis was placed on management of the humanitarian crisis and averting starvation. During this time, interventions were of a small scale with ad hoc responses, such as constructing public latrines to compensate for those that had been destroyed. The role of international donors in the sector was oriented towards provision of supplies (such as pipes and water containers) and small-scale repairs. However, the introduction of gravity-fed water supply schemes has presented a viable option.

Gaps in the capacity of central and local water authorities pose immediate challenges to rehabilitation. MoCM has identified several gaps in supplies, while recognizing that successful rehabilitation of water systems is contingent on systematic diagnostic assessment. Capacity building as a technical response to these assessments represents the most rational and systematic use of scarce resources. In the context of its current international cooperation, MoCM has defined the county as the appropriate level for assessment. The presence of key institutions, as well as the manageable average size of counties, makes them an appropriate focus for attention given the current resources and capacities. It also ensures the integration of water and environmental sanitation activities.

The sector still needs large investments of a scale presently unavailable. These might eventually come from bilateral donors, international financial institutions, or even the private sector.

MIDDLE CHILDHOOD AND ADOLESCENCE

3

Middle childhood is a time of increased mobility and independence for children. In most countries, the most intensive stages of socialization through formal institutions begin during middle childhood. For children in the DPRK, middle childhood represents a continuation of close and intense interaction with institutions. Whereas the early childhood institutions' primary objective is the guardianship and basic care of children, entry into education marks a more intense emphasis on learning and formal socialization.

It is during middle childhood and adolescence that children are taught and expected to behave according to customary gender roles. The socialized differences between girls and boys in every culture begin in early childhood itself. However, in middle childhood, these are reinforced and furthered by both formal and informal means. The socially defined duties and roles differ between men and women, boys and girls. The roles and duties of women and girls encompass a range of responsibilities associated with taking care of the home, nurturing and caring for the family, performing biological reproductive functions and, for women, involvement in public life and productive labour. Traditionally, men and boys are to contribute to household security through involvement in productive labour and public participation and, for men, in ensuring the social education of boy children. With its system of free and compulsory education, middle childhood and adolescence in the DPRK centre largely around school. The education system, along with its attendant social organization, the Kim Il Sung Youth League, represents one of the most potent channels of socialization and investment in children's capacities during these stages of life.

Education system

The education system in the DPRK comprises two main consecutive stages: 11-year compulsory education and post-compulsory education. The initial 11 years comprise: the upper class of kindergarten (the lower one being optional); primary school (four years); and secondary school (six years). Beyond compulsory education, there are higher specialized colleges (two to three years), and colleges and universities (four to six years). In addition there are 17 boarding schools in the country catering to the education needs of 4,610 orphans aged 7 to 17 years.[77]

[77] Central Bureau of Statistics.

Education in the DPRK encompasses experiential learning based on practical action and labour as part of a course of study. The education policy promotes socialist pedagogy and engenders participation in public life and production. A notable trait of the education system relates to the streaming of children into specific tracks that lead towards certain types of employment. This raises questions surrounding the method and appropriateness of such streaming. The link between education and employment is also reinforced by school club activities such as botany, electronics and handicrafts. Significant school time is allocated towards club activities. Moreover, the overwhelming majority of children participate in these activities that represent a valuable opportunity for introducing important educational components such as life skills etc. outside of the official curricula. However, the facilitation of these activities should respond to the concerns of the CRC Committee that children's participation should be respectful and conducive to eliciting the views of the child.

The curriculum is standardized throughout the country, with selected exceptions of some special schools. Education curricula are developed at the central level by the State Academy for Research in Education, and teaching materials are drawn up and edited by the educational publishing houses. The National Commission for the Revision of Textbooks is responsible for changes in textbooks, although the Ministry of Education must ratify amendments prior to publication. Revisions over the past years reported to UNESCO, but not involving international cooperation, include textbooks for civics in 1991–1994 and Korean language for the upper class of kindergarten and primary school in 1993–1994. Textbooks for natural sciences have also recently been rewritten.

Some aspects of school curricula for boys and girls differ. There is greater emphasis on physical education for boys and on home economics for girls.

The Ministry of Education coordinates the efforts of all educational research institutions. The State Academy for Research in Education, which has an academic staff of 400, undertakes research into teaching theory, the psychology of education and the content and methodology of general (primary and secondary) education. The Institute of Higher Education is responsible for research in post-secondary education. Specific research topics are not a matter of public record. However, the Ministry of Education has expressed interest in exploring new methods of curriculum planning and inter-active teaching methods.

Learning assessment entails discovering whether the students' education by the teacher (i.e. as regards content, teaching procedures and teaching methods) is properly conducted and whether the student has attained the objectives of the education process, as defined by the curriculum. This consists of regular question-and-answer sessions, checks on homework assignments and intermediate tests. Finally, there are examinations in selected subjects at the end of the semester and each academic year. Failure resulting in repetition in primary school is minimal. The final secondary examination is based on questions set by municipal or district education units. If students fail their final examination, they receive only a certificate of education, which means that they have to re-sit the exam the following year in the subjects in which they failed if they are to obtain the secondary education diploma.

Achievements and constraints in education

Enrolment and attendance

The DPRK has made impressive gains in education since 1945. Boasting universal literacy and 100 per cent official enrolment, the DPRK has successfully established an extensive primary and secondary school system as well as institutions for higher learning. The priority placed on education during the reconstruction effort resulted in the development of an extensive infrastructure. The establishment of some 1,600 primary and 26 secondary branch schools[78] for children in the most remote areas, including island communities, is indicative of this commitment. No child in the DPRK seems to have a great distance to travel to reach a school. Class size is relatively small for a developing country. The National Report on Education for All (EFA), 2000, reported that the mean teacher-student ratio in primary schools was 1:23 and in secondary schools was 1:21. Updated data from the Ministry of Education (MoE) show that although there has been a slight increase in the number of primary and secondary schools, the teacher-to-student ratio remains virtually unchanged from 2000 at 1:24 for primary school and 1:21 for secondary school.

[78] Second Periodic Report on the Implementation of the Convention on the Rights of the Child. Branch schools cater to extremely small numbers of children in remote communities, employing multi-grade teaching techniques.

Box 4: Number of schools, students and teachers

Primary school	
Number of schools:	4,904
Number of students:	1,644,410
Number of teachers:	69,000[79]
Secondary school	
Number of schools:	4,801
Number of students:	2,415,334
Number of teachers:	112,000[80]

Box 5 demonstrates the ongoing progress and underlying commitment towards establishing universal free education. Gains of universal literacy and enrolment have been sustained against the backdrop of successive natural disasters and economic hardship. The unmet challenge in education of DPRK rests in updating and improving its overall quality of the system and enhanced learning achievements.

Box 5: The evolution of policies related to education

Policy	Year
Compulsory primary and abolition of tuition fees	1956
Compulsory secondary and abolition of tuition fees	1958
Free education	1959
Compulsory 9-years education	1967
Compulsory 11-years education	1972
Law on Nursing and Upbringing of Children (codification of existing policy)	1976
Theses on Socialist Education (codification of existing policy)	1977
Education Law, adopted in 1999 (ensuring free compulsory education	1977
for 11 years, including for children with disabilities)	1999

With universal enrolment, the ratio between girls and boys is absolutely equal. "Despite these remarkable achievements in education, a number of recent issues have begun to challenge and even reverse some of the impressive gains of the past three decades. Increased household hardships over the past several years are having a negative effect on school attendance – particularly in some vulnerable families. Ministry of Education reports that fluctuating attendance is greatest in the north and north-east regions, especially during the winter months when the last of school heating prevents regular class activities in extreme weather. Field reports from international agencies confirm this. Overall, the national picture is of almost universal enrolment and very high attendance but a more detailed analysis is needed to identify the extent of the problem, especially for girls, who are known, by international experience, to suffer disproportionately in these types of situations and the context of hardship."[81]

[79] The ministry believes that the number of teachers has not changed, although it does not consider this figure to be updated.

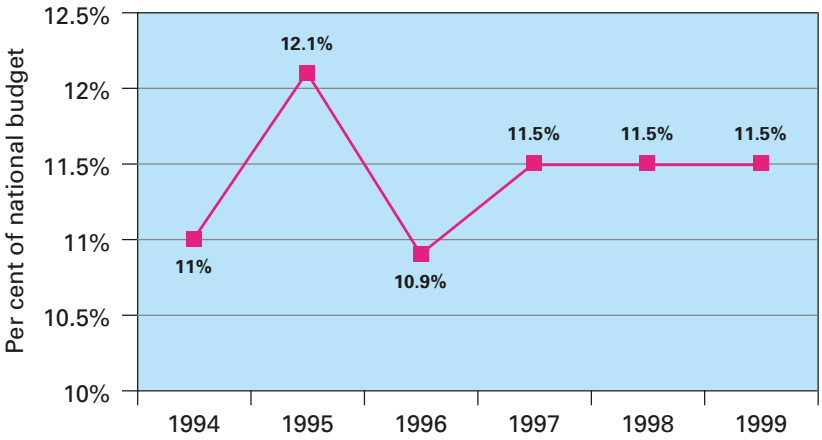
[80] The ministry believes that the number of teachers has not changed, although it does not consider this figure to be updated.

[81] DPR Korea Common Country Assessment, United Nations, 2002. p. 42.

Financing education

The condition of schools has deteriorated along with the downturn in the economy and the impact of natural disasters. Physical damage to the educational infrastructure was extensive in the 1990s. In 1995, 4,120 kindergartens and 2,290 primary and secondary school buildings were destroyed or damaged in the floods, and 346,200 textbooks (weighing 3,000 tonnes) were swept away. These damages were estimated at US$145 million. Additional significant damage occurred in the floods of 1996. The number of orphans increased causing further financial burdens on the State.

Figure 20: Financing in education, 1994–1999



Source: Second Periodic Report on the Implementation of the Convention on Rights of the Child 2002

The government managed to maintain spending on education, as a percentage of the national budget, throughout the latter part of the 1990s (Figure 20). However, this was an equal share of a diminished budget. Following the 2002 reforms, the State committed continued levels of funding to the social sector including education and made public its budget. The government further committed to "Increase state investment in education systematically, estimate budgets for education scientifically and ensure efficiency of the investment" in the 2004–2008 National Plan of Action (NPA) for implementing Education for All (EFA). It has been difficult to gain an idea of how and if financing to the education sector has changed in recent years. Continued reports of severe shortages and related scarcity in resources through 2004 suggest that conditions within schools and the education system have been further eroded.

"The overall result is a shortage of textbooks and basic school materials, run-down of school environment and reduced teacher training opportunities. Almost all the education budget is spent on staff salaries, leaving few resources for quality improvements – the Government's priority in education. For families, the costs of schooling are increasing…"[82] However, the government recognized the need for social assistance to education in its 2004 National Report on Education, where a key objective was "to make state organizations, enterprises cooperatives and social organizations sponsors of their neighbouring schools and other educational institutions for social assistance…"[83] The government is also seeking out alternative sources of finances for the education sector. The Korea Education Fund, inaugurated in January 2005, is a quasi non-governmental organization established to mobilize resources for the education sector. The government also mentioned international cooperation and exchange in its medium-term goals (2004–2008) of the NPA for implementing EFA.

Humanitarian assistance has also made a modest contribution, including through school feeding programmes.[84]

[82] DPR Korea Common Country Assessment, United Nations, 2002. p. 44.

[83] Ministry of Education June 2004: The Development of Education National Report on the Democratic People's Republic of Korea.

[84] WFP provides locally-manufactured biscuits to schools. At one time these were fortified with vitamins and minerals, provided by UNICEF, but shortfalls in funding and the priority given to the youngest children and pregnant and nursing mothers led to the abandonment of fortification. In 2001, China provided cloth for all school uniforms in the country.

Education quality

It is important to note that enrolment and attendance do not equate with learning achievements and outcomes. Studies undertaken in 60 different countries illustrate that only 5 per cent of primary school students surpassed the minimum level of learning achievement[85]. Whether or not the expanded educational opportunities translate into meaningful development – for an individual or for society – depends ultimately on whether people actually learn as a result of those opportunities. The focus on basic education must be on actual learning acquisition and outcome. It is therefore necessary to improve and apply systems of assessing learning achievement. The implications for the DPRK are thus to focus more closely on the highly visible accomplishments of its educational system and analyse them according to a higher standard of quality and learning achievement. This is indeed a concern of the government. In adopting the Dakar Framework of Action[86], the DPRK has identified two priority goals:

- To ensure that all young people and adults have access to appropriate learning and life skills programmes; and
- To improve the quality of education.

[85] UNESCO & Sheldon Schaeffer, Progress on Programme Priorities: Improving access to, and quality of, education, in Education Update: Curriculum and Learning (2000).

[86] This is the outcome document of the World Education Forum held in Dakar, Senegal in 2000.

Initial efforts to identify the minimum outcomes for Grade 3 have begun to pursue the assessment of learning achievement more seriously. However, there are multiple factors influencing quality. These include school readiness, gender-sensitive environment, appropriate curriculum content, and processes through which teachers use child-centred teaching approaches in well-managed classrooms and schools, and skilful assessment to facilitate learning and reduce disparities. The nation's approach already incorporates some of the elements essential to the framework of a quality education system. Recurrent training is mandatory and comprises 10-16 day courses taken every six months. This frequency of in-service training is higher than in most countries. This comes on top of a well-structured system of pre-service training, though the content and methodology of this training are still not fully clear. However, other key elements essential to cultivating analytical skills critical thinking as well as active learning and participation within classrooms are severely lacking.

Concerns on gender stereotyping have been expressed by both the CRC and CEDAW committees. The extent to which school curricula in general feed these stereotypes challenges the creation of a gender-sensitive environment that is essential to quality education. The practice of gender differentiated curriculum perpetuates traditional stereotyping.

Improving the quality of education will also imply more openness to: consider new ideas in pedagogy and teaching practice; focus more concertedly on real learning outcomes in terms of skills and aptitudes acquired by individual children, not only their retention of information; and admit children, their parents and communities as more active stakeholders in the education system, thus ensuring that schools become more accountable to the populations they are intended to serve. It implies too a greater concentration on early childhood development as the foundation for successful performance in education.

Box 6 summarizes some of the concerns expressed by the CRC committee in their Concluding Observations from July 2004.

Box 6: Concluding Observations on Education by the Committee on the Rights of the Child

The Committee remains concerned at the following problematic aspects with regard to education:

- Increasing absenteeism and seasonally low attendance rates of 60-80 per cent as a result of the prolonged economic hardship;
- Hidden costs for parents, which constitute a serious burden in sending children to schools;
- The quality of education, which requires further improvement;
- That political background, opinions and activities can have an influence on admission to higher education;
- That aims of education as stipulated in Article 29 of the Convention are not at the centre of the learning process; and
- That human rights, including child rights, are not fully integrated into the school curricula, but only constitute a part of "Virtue and Law" courses.

Vulnerability in middle childhood and adolescence

In most countries, increasing vulnerability to sexual exploitation and labour mark adolescence. In DPRK, there is no existing documentation of widespread sexual abuse of children and adolescents. Similarly there are no documented cases of abortions, pregnancies or sexually transmitted diseases amongst this group. The tight-knit social organization and lifestyles within the DPRK do reduce vulnerability from this perspective. Nevertheless, vigilance is essential, since continued economic hardships could, as in other countries, lead to the exploitation and wider abuse of children.

However limited the sexual vulnerability during this life stage is in the context of DPRK, inevitable vulnerabilities associated with the onset of puberty persist. In part, these vulnerabilities are compounded by limited information dissemination and knowledge. According to the UNFPA 2004 Reproductive Health Survey (RHS), about 15.4 per cent of the rural population and 49.3 per cent of the urban population sourced their knowledge and information on HIV/AIDS from schools. The same survey showed significant gaps in knowledge between never married women and married women surrounding reproductive tract infections. This in part suggests vulnerability related to knowledge gaps amongst younger women and adolescents.

In its concluding observations to the country's first report on the CRC, the Committee on the Rights of the Child expressed concern about widespread use of corporal punishment on children. In its second report, the CRC committee acknowledged the positive steps towards reducing corporal punishment through public campaigns but expressed its continued concerns surrounding the persistence of corporal punishment in schools, care institutions and families owing to traditional customs.

Senior government officials state that cultural values and norms associated with gender-based differences were reduced in tandem with reduced fertility and smaller family size. It appears, however, that the most significant form of vulnerability relates to the prospective marginalization of girls *from* or *within* the educational process. Underscoring that at present this is not a grave problem, it is an area that should be monitored in the future, in line with the observation of the Committee on the Rights of the Child regarding the development and use of disaggregated indicators to monitor the situation of children.[87]

Adolescence and middle childhood represent stages where children's capacity for decision-making and participation in social spheres is highly evolved. In the DPRK, children are organized at an early age and their participation mobilized through the Youth League and Children's Union. In spite of the commendable presence of fora within which children might freely express their views and participate in society, it is not clear that adequate respect for the diversity of children's views is encouraged, acknowledged or respected. The CRC committee in its second set of concluding observations also expressed a similar concern.[88]

Little is known also on mental health and how children and adolescents with mental retardation (and/or other disabilities) are approached in the DPRK. As in many other countries, chronic mental health problems are probably linked to institutions. However, especially for children and adolescents, community-based approaches and services can significantly improve the quality of lives.

There is an overall lacuna of data and understanding about this life stage. This is in part reflected in the concerns of the CRC committee about the insufficient attention that is given to adolescent health issues including developmental and reproductive health concerns.

[87] Concluding observations of the Committee on the Rights of the Child: Democratic People's Republic of Korea, CRC/C/15/Add.88, 5 June 1998, para. 22.

[88] Concluding observations of the committee of the rights of the child: Democratic People's Republic of Korea, CRC/C/15/Add.239 1 July 2004.

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ADULTHOOD | 4

Adulthood (18 years onward) is largely defined by reproduction and the associated roles and responsibilities of caregivers. This is the first stage of relative autonomy, during which knowledge, attitudes and practices have multiple impacts on the health and well-being of individuals, children and families. There is relative control over contact with and use of available services. There are, however, some key differences characterizing adulthood in the DPRK. The formal social organization around collective production and living is intense. Social services, care institutions and social cultural organizations are tightly woven together, therein encouraging conformity. Combined with a virtually homogeneous population, trends within adulthood are fairly uniform across the country, although individual vulnerabilities based on geographic location, household food security and gender are realities.

As a state party to CEDAW and signatory of the Plan of Action of the International Conference on Population and Development (ICPD), the DPRK is committed to gender equality and the realization of women's reproductive rights. In spite of the legislated equality both in the public and private spheres, gender differences prevail as a potent influence during this life stage. In the DPRK, women have a traditional responsibility for childcare and household management, in addition to their productive roles in the workplace. In most societies, there is a positive relationship between social and physical status. The DPRK represents something of an anomaly, where indicators of social status between men and women uphold the appearance of relative equality. However, the available data on women's physical status during the reproductive cycle suggest otherwise. Two valuable indices – the gender development index (GDI) and the gender empowerment measure (GEM) – are notably absent for the DPRK in UNDP's global Human Development Report, making comparisons between the two indices or with other countries in the region, and globally, impossible. Women's overall status in the DPRK is largely determined by their participation, access to and control over productive, reproductive and community/public functions. Since the equal enjoyment of rights, including reproductive rights, is based both on women's opportunities and the genuine capacity to claim and exercise rights, this chapter on adulthood overviews the social and health status of women. Attention is cast on the informed use, access and quality of care in the health sector given the particular relevance to reproduction at in this life stage. Most of women's mortality and morbidity in the DPRK is associated with reproductive health problems.

Status of women

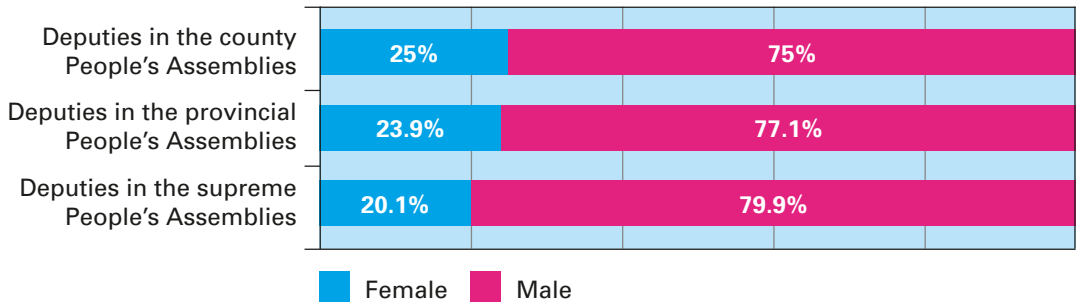
Progress towards promoting gender equality has been significant since 1946, when the equality of the sexes was first promulgated in the DPRK. This notable success might be attributed to the consistency of the national approach to gender equality. Gender equality has been proactively facilitated by reducing women's individual reproductive responsibilities for childcare, thereby enabling their effective participation in the productive and public spheres. Women are accorded equal social status and rights with men in the Constitution (Article 77).

This commitment is backed by a series of protective measures and entitlements, including maternity leave (up to the child attaining three months of age) and a reduced work regime for mothers of multiple children, for example. The other significant stream for promoting gender equality relates to the establishment of a network of maternity hospitals, nurseries and kindergartens, and other measures.

The DPRK made substantial gains in bringing women into the labour force; by 1993 women accounted for 40.4 per cent of the total labour force. This country is also one of the rare examples of complete pay equality between men and women. The government's deliberate attempt to feminize sectors, such as public health (67.3 per cent) and education, demonstrates the success of its effort, though there does still exist some gender hierarchy with men occupying higher-skilled (and thus more lucrative) positions than women, as well as the appearance of the housewives category with the emerging unemployment/under-employment.[89]

The trend in political decision-making is similar. The ratio of women to men decreases with the level of decision-making from the periphery to the centre. While noting that women make up approximately 20 per cent of the deputies to the 11th Supreme People's Assembly, and 30 per cent of the local People's Assemblies, the Committee on the Elimination of All Forms of Discrimination Against Women expressed concern over the relatively low numbers of women in decision-making positions in politics, the judiciary and the civil service, as well as low participation in the Foreign Service.

Figure 21: Political representation breakdown by sex

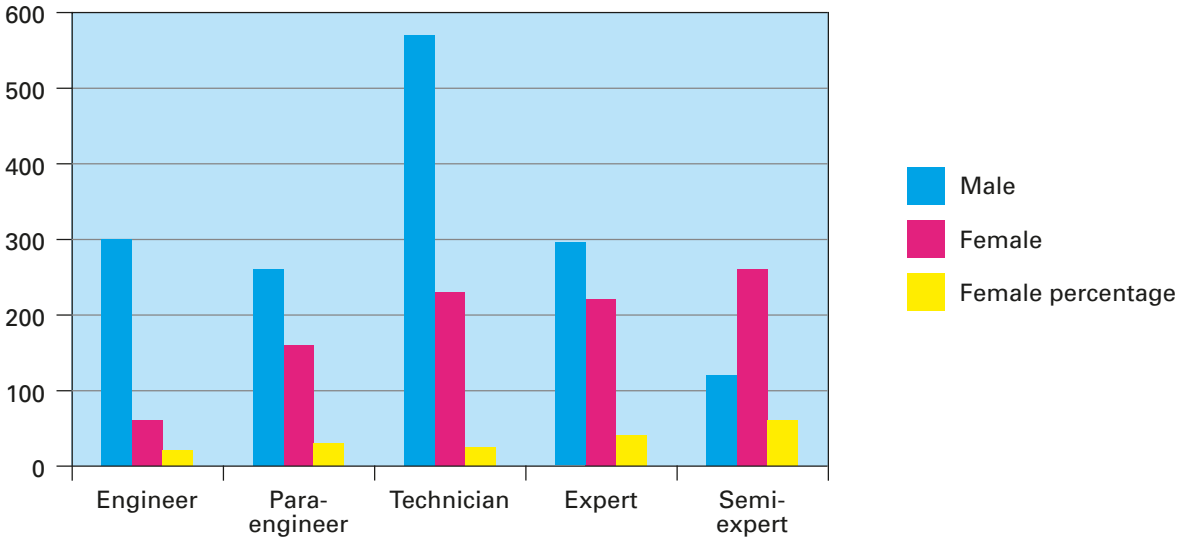


Source: Core Document forming part of the Reports of States Parties [to human rights treaty monitoring bodies], DPRK, 2000

The CEDAW committee also expressed concern regarding women's limited access to management positions and participation in public and social life as a result of their traditional obligations and duties surrounding the family.

[89] FAO/WFP (2004) Crop and Food Supply Assessment Mission to the Democratic People's Republic of Korea, 22 November 2004.

Figure 22: Breakdown of professional categories by sex



Source: Core Document forming part of the Reports of States Parties [to human rights treaty monitoring bodies], DPRK, 2000

Disparities occur too in enrolment in educational institutions. Although updated data are lacking, according to 1998 figures, girls comprised 48.7 per cent of students in primary and secondary schools. Their enrolment share declines, however, at university/college level to 34.4 per cent.

Both the social and physical status of women is closely determined by conventions, expectations and deeply ingrained personal and social traditions. The roles and responsibilities within the home, informal interaction among the community and between individuals are rarely the function of laws and policies. For example, in almost every society of the world, as an extension of their reproductive functions, women are responsible for food preparation, serving the family and cleaning up the kitchens. This often implies that women invariably end up eating last, and in the context of scarcity, make do with what is left over. The extent to which this is the case in the DPRK remains unconfirmed. However, it is key to understanding women's time use and social position, as well as their nutritional and health related condition.

Given the context of change within the DPRK, the protection and promotion of women's rights will be closely underpinned by the state's capacity for data collection to accurately gauge the de facto trends in the situation of women. The CEDAW committee has underlined the importance of sex disaggregated data as a basis for promoting equality.

Physical status of women

Some of the common indicators for the status of women are significant relative to both developing and developed nations. The total fertility rate (TFR), indicating the mean number of children born to a woman,[90] is 2. In 2004, the mean number of children born to married women was 1.91.[91] Although the legal age at marriage is 17 years for women and 18 years for men, the average age at marriage is 24 to 26 years for women and 26 to 28 years for men. These are suggestive of a good standard of reproductive management (see Figure 29, page 72).

The maternal mortality ratio (MMR), referring to the number of pregnancy-related maternal deaths per 100,000 live births, varies according to the source quoted. However, there is reason to believe that the MMR has reduced, between 1998 and 2003, from 105/100,000 to 87/100,000.[92] **The fact that MMR almost doubled between 1998 and the estimated level in 1993 is suggestive of the compounded impact that crises have on women's health and survival** (see Figure 23).

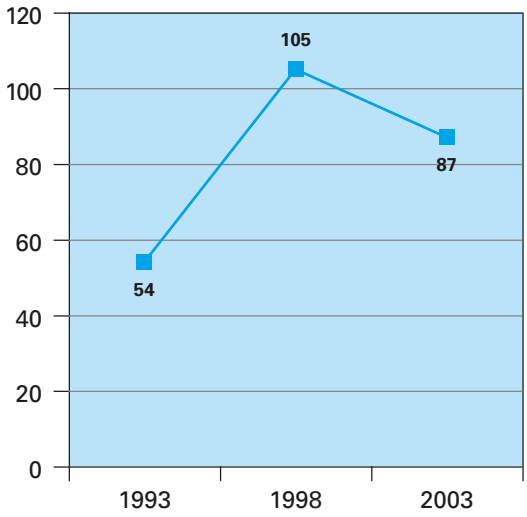
[90] Actually this indicates the number of children a woman would have during her reproductive life if she experienced the prevailing rates of fertility at each age.

[91] UNFPA/Central Bureau of statistics, DPRK [February 2005: p. 30] Report on the DPRK RH survey 2004 [draft].

[92] UNFPA [2003: p. 24] report on the evaluation of the UNFPA third country program in Democratic People's Republic of Korea [1998–2003].

The MMR in 2002 was still 87/100,000, higher than it was in 1993. This is a clear indicator of the intensely vulnerable health status of women.

Figure 23: Maternal mortality ratio (per 100,000 births), 1993–2002[93]



Whereas women's nutritional and health status improved steadily from 1946 to the early 1990s, many of these gains have been reversed over the past decade. The 2002 nutrition assessment found that one third of the mothers measured were malnourished (as measured by adequacy of mid-upper arm circumference) and a similar number were anaemic. The 2004 nutrition assessment showed no change in the situation, recording 34.7 per cent of women to be anaemic[94] (see Box 7). It is worth noting that there are multiple causes of anaemia that include inadequate absorption of dietary iron due to the largely cereal-based diet, frequency of infection and inadequate rest and care, particularly during pregnancy and lactation.[95]

Box 7: Select nutritional indicators for women

	2002	2004
Prevalence of anaemia among women	33.6%	34.7 %
Percentage of malnourished women with children less than two years old (measured mid-upper arm circumference]	32.0%	32.4%
Low birth weight (based on mother's recall)	6.7%	Not available
Percentage of smaller-than-average birth size and very small birth size (mother's recall)	Not available	24%
Percentage of women weighing less than 45 kg	16.7%	21.1%
Percentage of women experiencing night blindness during pregnancy	Not available	5.7%

Source: CBS ICN DPRK 2004 Nutrition Assessment Report of Survey Results

[93] Source: Nutrition Assessment 2002, except for the maternal mortality ratio, which is from a UNFPA-sponsored reproductive health survey in three provinces in 1997.

[94] This was based on blood tests that 59 per cent of 1,253 mothers participated in.

[95] See also Chapter 2 for more discussion on the implication of for young children of poor nutritional status of women.

"Maternal food intake was also associated with anaemia. Low intakes of rice and rice products, beans and bean products, poultry and meat and red / yellow vegetables were associated with higher prevalence of anaemia. Women receiving food assistance as part of their staple foods had higher prevalence of anaemia".[96] This suggests an ongoing and unmet need for the distribution of iron fortified foods.

In 2004, 5.7 per cent of women reported experiencing night blindness during their last pregnancy indicating vitamin A deficiency, a public health problem by international standards. Vitamin A deficiency also weakens the immune system and retards growth and development. These requirements increase during pregnancy and lactation in order to protect newborns.

Women's depletion is the most common explanation provided for problems relating to breast-feeding. Women themselves regard it as a practice that consumes valuable energy. Although scientifically this is not the case, the prevalence of such reports suggests that women themselves feel depleted. This perceived lack of energy is indicative of anaemia.

Maternal anaemia and protein-energy malnutrition are key contributing factors to child malnutrition as evidenced by the increased prevalence of stunted (22 per cent) and underweight (43 per cent) children amongst malnourished mothers. Anaemia is thought to increase the risk of babies being born with low birth weight. Both the 2002 and 2004 nutrition assessments showed the association between maternal malnutrition and increased prevalence in stunting.

There is strong consensus among experts that the nutritional status of women, and pregnant women in particular, should be improved in order to ensure their survival and good health, and as a means of circumventing the intergenerational pattern of malnutrition. Put simply, ensuring and promoting children's health begins well before their birth.

Since so many conditions related to MMR, healthy delivery and child survival are either caused or mediated through nutritional deficiencies, promoting women's nutritional status before they become pregnant, or as early into their pregnancy as possible, is key.[97]

[96] Central Bureau of Statistics/Institute of Child Nutrition, Democratic People's Republic of Korea [2005: 54]; DPRK 2004 in Nutrition Assessment Report of Survey Results.

[97] UNICEF [2003] *Strategy to Reduce Maternal Deaths*, East Asia and Pacific Regional Office, health and nutrition working paper.

Reproductive health

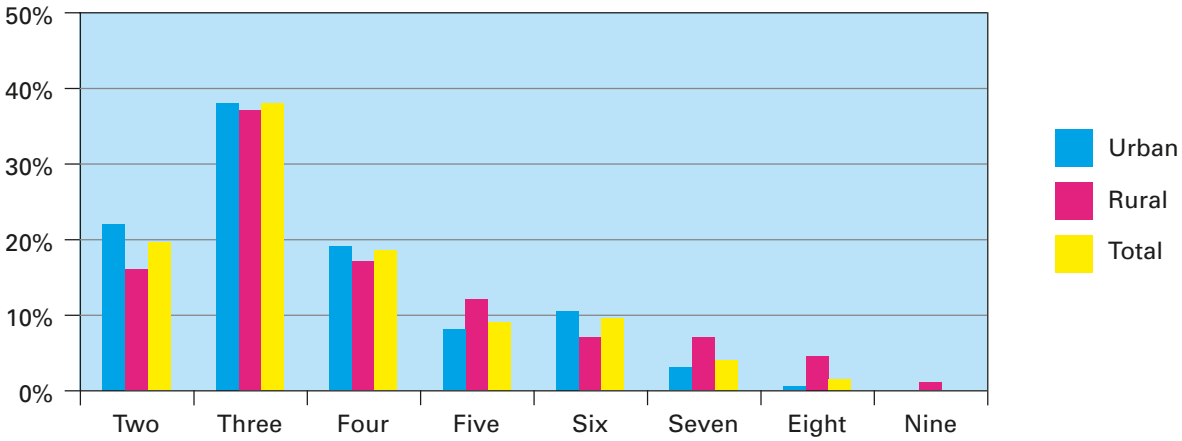
Reproductive health has been a concern of the government since the post-war rehabilitation and reconstruction phase. Underpinned by the goal of encouraging population growth, a large number of midwives were trained and sent to rural villages in the latter half of the 1950s and early 1960s. The emphasis on family planning grew in the mid-1970s alongside a focus on increasing women's roles in the workplace. Following the International Conference on Population and Development (ICPD) in 1994, in accordance with the programme of action, the government broadened its approach towards reproductive health. This involved the development of maternal and child health care, broadening the scope from the confines of obstetrics and gynaecology departments. There was a further recognition that men's roles and gender relationships are of great significance to the promotion of women's reproductive health. In the DPRK, reproductive health services are available through the regular health care system. In spite of the government's efforts, reproductive health-related problems, such as access to services, low quality of services, etc, remain the biggest cause of morbidity and mortality amongst women.

Antenatal care

The health system is characterized by both strengths and constraints with respect to care for women. According to information provided by the KDWU, all women receive the minimum of a monthly check-up by the section doctors. The system also provides for intensive antenatal care. Ninety-nine per cent of women with children under five years of age were registered for antenatal care, according to the 1998 MICS. This suggests that the system of antenatal care remained functional during the peak crisis period. Theoretically women receive 18 such check-ups – more than the standard international practice – for antenatal care. The 2004 Nutrition Assessment found that only 5 per cent of the women received less than the WHO recommended minimum of four antenatal care checks.[98]

However, according to the 2004 reproductive health survey (RHS), significant portions (41.6 per cent) make their first antenatal visit after four months of pregnancy and over. Overall, the percentage of antenatal visits in the first trimester is 6.4 per cent higher amongst urban women than rural women. Therefore, the quality of maternal and child health care can be vastly improved by ensuring that women get their first antenatal care visit within the first trimester,[99] particularly in the rural areas (see Figure 24).[100] Moreover, an updating of the antenatal guidelines to ensure consistency with international standards will further improve the quality of antenatal care.

Figure 24: Number of antenatal visits



Source: Adapted from Table 4-3: p. 31, UNFPA RHS 2004

[98] Central Bureau of Statistics/Institute of Child Nutrition Democratic People's Republic of Korea [for 2005]; DPRK 2004 in Nutrition Assessment Report of Survey Results.

[99] This conforms with the recommendations of the UNICEF [2003] *Strategy To Reduce Maternal Deaths*, East Asia and Pacific Regional Office, health and nutrition working paper.

[100] UNFPA/Central Bureau of statistics, DPRK [February 2005: p. 31]; Report on the DPRK RH survey 2004 [draft].

In spite of the provisions for antenatal check-ups for women during pregnancy, weight gain is not followed. Moreover, the laboratory facilities for checking haemoglobin levels or protein in urine are not widely available. In the past, there was a notable absence of systematic iron supplementation during pregnancy. Rather, iron supplementation was restricted to certain complications during pregnancy and given selectively post-partum. Similarly, post-partum vitamin A supplementation reaches only one third of mothers. Overall, 33.5 per cent of women received vitamin A post-partum. The coverage of maternal post-partum vitamin A supplementation varied considerably by province with the highest levels in Pyongyang. Almost 6 per cent of women reported night blindness during their last pregnancy. Towards meeting the critical nutritional needs before and during pregnancy, protocols on the supplementation of iron/folic acid before pregnancy and multi-micronutrient supplementation during the first three months of pregnancy were endorsed in 2004. Subsequently, in 2005, nationwide supplementation of iron/folic acid and multi-micronutrients began with external assistance. In spite of these attempts to address maternal malnutrition through supplementation, the quantity of fortified food consumed by women remains a major concern.

The 1998 MICS found extremely low levels of tetanus toxoid vaccination coverage for women in the reproductive age group, although estimated coverage suggests that tetanus toxoid vaccination coverage has consistently risen to virtually 100 per cent between 2002 and 2004.

The frequent contact with section doctors and health care personnel is meant to facilitate diagnosis and referral to provincial maternity hospitals. Internationally, it is estimated that 15 per cent of women have complications that require medical attention, the majority of which are neither predictable nor preventable but manageable by adequately equipped and skilled birth attendants.[101]

Emergency obstetric care (EOC)

The major causes of maternal death are post-partum haemorrhage, eclampsia, infection and toxaemia. A 2002 report by a UNFPA consultant on obstetric care, based on a survey of 32 hospitals in three provinces (South Hwanghae, North Phyongan and Pyongyang), noted a particular frequency in eclampsia and episiotomies.[102] Severe bleeding is also commonly reported as the prevalent problem during childbirth.

While the incidence and prevalence of maternal morbidity are not well understood, the direct causes are obstetric complications during pregnancy, labour, or the postpartum period due to interventions, omissions or incorrect treatment. Indirect maternal morbidity results from previously existing conditions or disease, aggravated by pregnancy; this type of disability may occur at any time and continue throughout a woman's life.

Ensuring that basic emergency obstetric care (EOC) needs are available at the *ri* level, where some 28 per cent of births take place, will require improvements in both the skills and the available medications/supplies such as prenatal antibiotics, oxytocin, magnesium sulphate and manual removal of placenta. A referral system for additional care and comprehensive EOC to county or provincial level hospitals is also key.

In the DPRK there are two specific areas where delays appear to be particularly harmful. The first rests with the diagnostic skills and capacity for early detection of risks and problems by the section doctors. The second area relates to logistical challenges to travel to points of referral particularly during the harsh winter months. Another factor concerns the quality of care available in the receiving referral institutions, including stabilization of patients at intermediary care institutions, given shortages of medicines and equipment. Besides the already updated blood centres in Pyongyang, South Hamgyong and North Hwanghae, blood transfusion services need significant improvement. The capacity to handle EOC is very limited due to the poor facilities for surgery at county level.

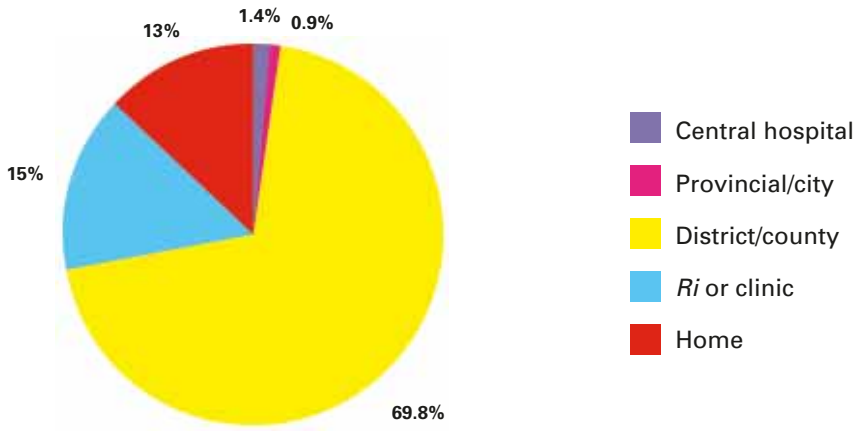
[101] Indicators to Monitor Maternal Health Goals, Report of Technical Working Group, Geneva, WHO, 8–12 November 1993.

[102] Obstetric Care in DPRK, Dr Ravindran Jegasothy FRCOG, Consultant, International Planned Parenthood Federation.

There are, however, profound data gaps surrounding both the causes and conditions of maternal mortality. The updated knowledge on maternal morbidity and mortality remains a glaring omission reflected both in the understanding and, naturally, the responses to related health care. The absence of an age-disaggregated analysis of infant mortality presents a significant gap, given that the number of deaths during the perinatal period (from 22 weeks of gestation up until seven complete days after birth) can be used as an indicator of the quality of antenatal and obstetric services. An assessment of training needs for strengthening reproductive health services was undertaken in 2004 by MoPH, UNFPA and WHO. The findings emphasize that updating skills and knowledge through technical support and training is essential for improving the quality of health services.

According to 2004 UNFPA RHS figures, in the surveyed area, 87 per cent of births were conducted at hospitals or clinics and 13 per cent at home; health workers assisted in 98.2 per cent of births. In the rural areas, more than half the births took place at the *ri* hospital/clinic level (56.6 per cent), while almost a quarter (24.4 per cent) took place in county hospitals. In the urban areas, the overwhelming majority of births took place in district hospitals (85.6 per cent), and only 0.5 per cent of births occurred at the *dong* level (see Figure 25).

Figure 25: Place of delivery

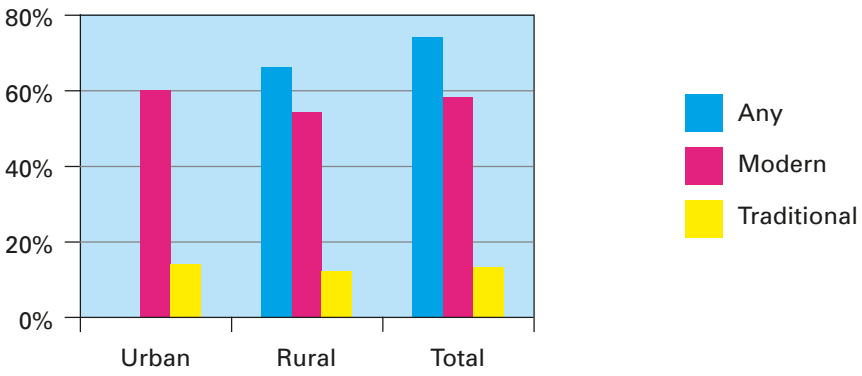


Source: UNFPA [2005], citation adapted from Table 4/9, p. 34

Contraception

The government places no restrictions on number, timing and spacing of children.

Figure 26: Family planning methods



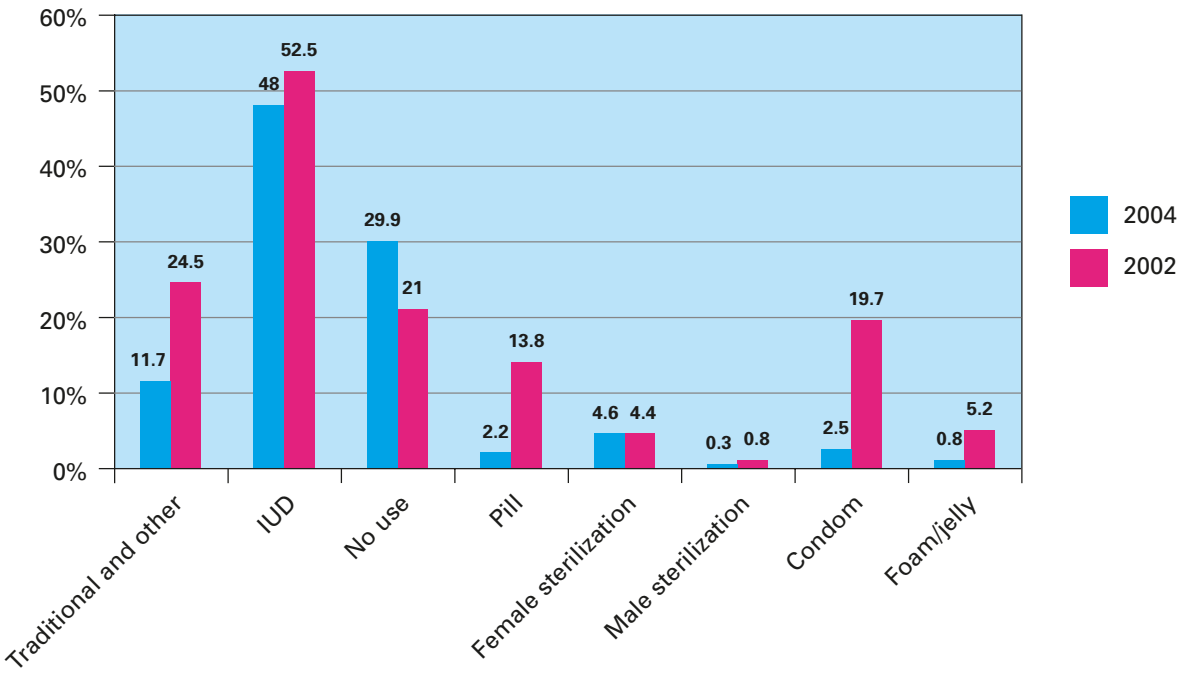
Source: UNFPA RHS 2004, adapted from Table 4-3, p. 31

According to the UNFPA RHS 2004, 70.1 per cent of married women in DPRK practise some form of family planning. There has been a steady but moderate increase in the adoption of modern methods reflected in the reproductive health surveys of 1997, 2002 and 2004. The modest increase between 1997 and 2002 was mainly attributed to women aged 45 to 49 years. Among other age groups, the contraceptive prevalence rate (CPR) in 1997 was actually higher than that in 2002. Modern method use increased by 2.1 per cent over this period.[103] According to the 2004 RHS, 58.4 per cent of women practise modern methods of family planning while 11.7 per cent rely on traditional methods. In both cases the urban population was slightly more inclined to practise family planning than the rural population. The family planning needs of unmarried women in the DPRK remain largely unknown and family planning services are not readily available for this group.

Contraceptive prevalence rates are indicative of the availability and to some degree the opportunity that both men and women have to exercise reproductive control. High CPR and the use of diverse methods generally reflect individual choice to some degree and "the capability to reproduce and the *freedom to decide* if, when and how often to do so" (ICPD Programme of Action 7.2). The CPR does not indicate if the family planning methods used are appropriate or of good quality.[104]

The 2004 survey shows a slight reversal from the diversified use of modern family planning methods that was seen between 1997 and 2000. The increased use of oral contraceptives and condoms between 1997 and 2002 was significant, while IUD use had notably declined.[105]

Figure 27: Contraceptive prevalence, 2002–2004



Source: UNFPA RHS 2004, adapted from Table 5-1, p. 37, and UNFPA RHS 2002, p.19[106]

The lack of readily available family planning devices, such as contraceptive pills and condoms, may be a contributing factor in reduced use. There have been worrying reports regarding both shortages and overstocking. Interviews with doctors in some hospitals indicated difficulties in predicting stock requirements.[107]

[103] WHO: DPR Korea and family planning: an overview. http://www.whosea.org.

[104] http://www.who.int/reproductive-health/publications/rhr_01_19/RHR_01_19_annex3p2.en.html#1.

[105] UNFPA report on evaluation of the UNFPA third country programme in Democratic People's Republic of Korea.

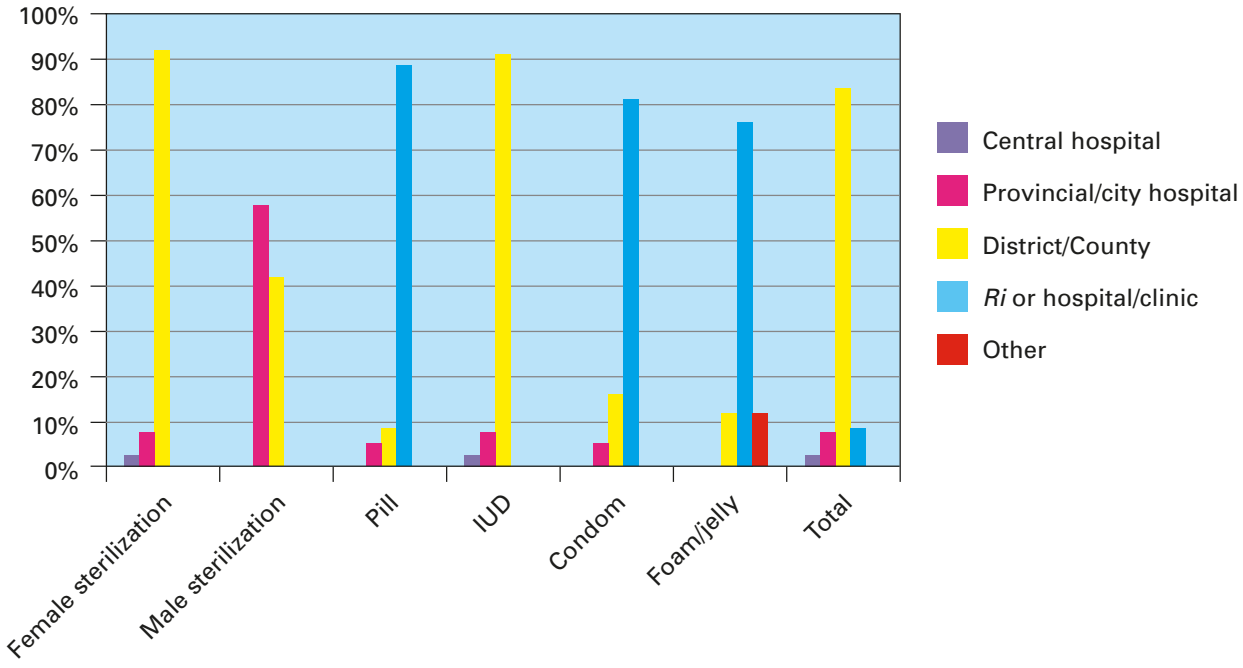
[106] There was a significant geographic disparity reflected in both the 2002 and 2004 survey results. Moreover, the 2002 survey reflected the end of the line results while the 2004 results were based on a baseline survey.

[107] UNFPA report on evaluation of the UNFPA third country programme in Democratic People's Republic of Korea [1998-2003, p. 23].

It appears that the unmet need for family planning services is decreasing. In 2002, it was thought to be 16.7 per cent for married women. The unmet needs related to adequate and available methods for spacing of births (6.3 per cent) and for limiting births (10.4 per cent). The overall unmet need has declined to about 9.2 per cent with the difference between urban and rural settings being more than double (7.3 per cent and 15.4 per cent, respectively) in 2004. Although, at a national level, 80 per cent of family planning needs were thought to be met, some disparities amongst communities persist. For example, higher fertility rates, combined with lower rates of contraceptive use, are evident in mining regions that are lacking contraceptive commodities and trained personnel.[108] The use of family planning methods is essential to both limiting and spacing of births. Spacing births three to five years apart is associated with the lowest risk for neonatal, infant, child and under-five mortality. In addition to promoting child survival, spacing births is likely to reduce MMR.[109]

Eighty-three per cent of family planning procedures were undertaken in district and county hospitals. For example, the majority of IUDs (90.7 per cent) were inserted at the district/county hospital level, similarly, female sterilization was predominantly undertaken (91 .5 per cent) at the district county hospital. While the majority of male sterilizations (57.1 per cent) were done at the province/city hospital level, the *ri* hospitals and clinics were the main sources of dispensing contraceptives pills (87.2 per cent), condoms (80.4 per cent) and foam jelly (75 per cent) (see Figure 28).

Figure 28: Source of contraceptives/family planning methods



Source: UNFPA RHS 2004, adapted from Table 5-3, p. 39

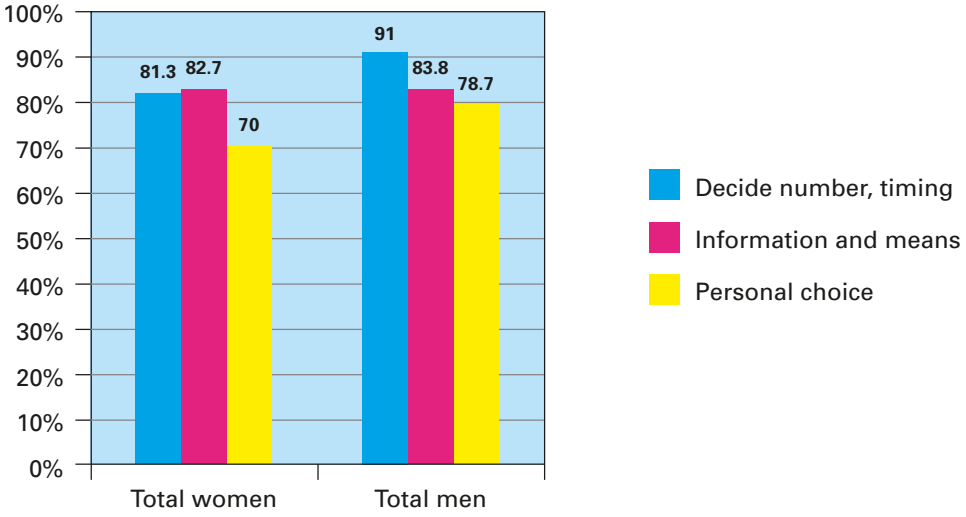
Abortion

The induced abortion rate has gradually declined since 1998. The 2004 RHS found that over the past five years (1 July 1999 to 30 June 2004), the abortion ratio was 0.19 in the surveyed areas. The 2002 RHS indicated that the majority of women (41.3 per cent) who had undergone an induced abortion did so in order to limit birth, while 33.3 per cent cited unwanted pregnancy, and an additional 7.9 per cent cited contraceptive failures as the reason for undergoing an abortion. In sum, about 85 per cent of induced abortions could be addressed through the adequate provision of family planning resource. The shortages of equipment and supplies and the context of the past crisis have eclipsed family planning education to some degree. Indeed, the country's extensive health service infrastructure bears tremendous potential to enhance the responsiveness and quality of national family planning services quickly, if the necessary resources are available.

[108] WHO: DPR Korea and family planning: an overview. http://www.whosea.org.

[109] Conde-Agudelo A. Effect of Birth Spacing on Maternal and Perinatal Health: A Systematic Review and Meta-Analysis. Report submitted to the CATALYST Consortium, October 2004.

Figure 29: Reproductive rights: Awareness in decision-making



Source: UNFPA RHS 2004, p. 23

The 1994 Cairo international conference on population and development embraced a broad definition of reproductive health to include physical, mental and social well-being, in addition to the absence of disease or infirmity relating to the reproductive functions and processes. Accordingly, reproductive rights encompass the right of all couples and individuals to decide freely and responsibly the number and timing of their children, and to have the information and means to do so. Figure 29 illustrates the portion of men and women that felt that they had the right and ability to decide the number and timing of the births, to make informed choices based on adequate information and available means, and finally the perception or confidence that they have real personal choice regarding their reproductive health. The 2004 RHS found levels of awareness around reproductive rights to be high amongst both men and women. The difference between men and women is disturbing when comparing issues of decision-making and personal choice, where the gender disparity is almost 10 per cent and 8 per cent, respectively. This suggests that men regard themselves as significantly more empowered in decision-making and having control over personal choices than women. This relatively high level of knowledge was supported by similar levels of practical knowledge on RTIs, complications during pregnancy and HIV/AIDS among men when compared with women. Promoting women's informed and genuine choice in the context of gender relations will in all respects also require the informed involvement of men in decision-making surrounding reproductive choices, and this represents an important avenue towards the promotion and protection of both men's and women's reproductive rights.

The CEDAW committee expressed concern about insufficient information on the impact of reproductive health policy in urban and rural areas and about the fact that the policy exclusively targets women. The protection and promotion of women's reproductive health rights is closely correlated with their social and physical status. Indeed, frail nutritional status and the tendency to conform to traditional roles compromise the potential for genuine choices and empowered decision-making.

Reproductive tract infections/sexually transmitted diseases

There is no updated data on prevalence of reproductive tract infections (RTI) and sexually transmitted diseases (STI). According to the RHS 2004, a large portion (65.4 per cent) of women had never heard of RTI. The awareness rates of married women were almost 30 per cent higher than never-married women. Awareness amongst urban residents was 6 per cent higher than rural areas. The significant knowledge gap demonstrated amongst never-married women is worrisome as it is likely to lead to unaddressed problems. Moreover, such a lack of knowledge reflects a gap in prevention at the primary health care level.

The RHS 2004 found that amongst the women who were advised or treated for RTI, only 43.9 per cent were satisfied with the quality of the care received, while 22.1 per cent were 'somewhat satisfied' and just over a third of the women (34 per cent) were 'unsatisfied' with the advice and/or treatment received. This raises serious questions regarding the overall perceived quality of advice, treatment and care surrounding reproductive health and broader health issues. It underscores the importance of building the capacity of health care providers in the areas of making information available, counselling, care and treatment.

HIV and AIDS

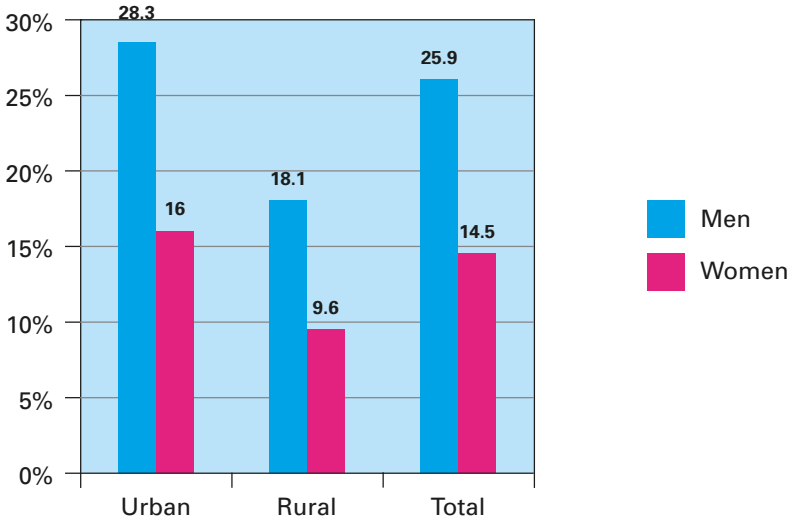
There are no documented cases of HIV or AIDS in the DPRK. Neighbouring China reportedly has a HIV infection rate of 0.11 per cent among the adult population (15 to 49 years of age) and the ROK has a marginal infection rate of less than 0.1 per cent. This is much better than other countries in the region, such as Cambodia, with an infection rate of 2.7 per cent and Thailand, with 1.79 per cent.[110] In 2003, the government recognized HIV and AIDS as potential health concerns by developing a national strategic plan of HIV/AIDS control and prevention 2003-2007.

"In DPR Korea, HIV/AIDS education is limited to the educational facilities for the professionals such as medical universities and colleges. Information Education Communications (IEC) activities for the public also contain limited information on HIV/AIDS and the things are same in counselling for clients attending the service delivery facilities such as hospitals and clinics. As result, there is little public awareness of HIV/AIDS and in case of health professionals who have completed the formal education, they are lacking knowledge of whole range of issues involved in HIV/AIDS".[111]

While there has been some improvement in HIV and AIDS awareness amongst policy makers and the general public, there is a general recognition that efforts need to be sustained given the current window of opportunity that exists and the growing epidemic in neighbouring countries.

Data surrounding knowledge and awareness related to HIV and AIDS show mixed conclusions. According to UNFPA, only 3.5 per cent of husbands were aware of four ways to transmit HIV: sexual intercourse, blood transfusion, from mother to child, sharing needles. Figure 30 shows the gender disparity between men and women's knowledge two ways to prevent the transmission of HIV and AIDS. It is worth mentioning that significant differences exist amongst categories of women; for example, only about 5.5 per cent of never-married women were knowledgeable about types of HIV/AIDS prevention. Compared with the 25.4 per cent married women for urban areas and 16.1 per cent for rural areas, this is extremely low. Indeed, the social assumptions surrounding marriage and vulnerability to HIV and AIDS are disturbing.

Figure 30: Knowledge about HIV/AIDS prevention



Source: UNFPA RHS 2004, adapted from pp. 22 & 27

[110] Infection rates taken from the UNDP, *2002 Human Development Report*.

[111] National Strategic Plan of HIV/AIDS Control and Prevention Activities in DPR Korea (2003-2007), p.2.

According to the UNICEF 2004 baseline assessment in three counties, 86 per cent of women had an awareness of HIV and AIDS and 88.9 per cent of them were knowledgeable about some preventive measures. According to this survey, 83.2 per cent of women were aware that the infection could be passed from mother to child during pregnancy, whereas in the UNFPA surveyed counties only 7.7 per cent of women were aware that transmission could occur from mother to baby. Allowing for a difference in definition (through pregnancy or through breast milk), this difference still seems quite significant. Noting that both these assessments/surveys were undertaken in counties where UNFPA and UNICEF are active, it is very likely that awareness and knowledge are significantly lower in the remainder of the country, and this is an area where further assessment is needed.

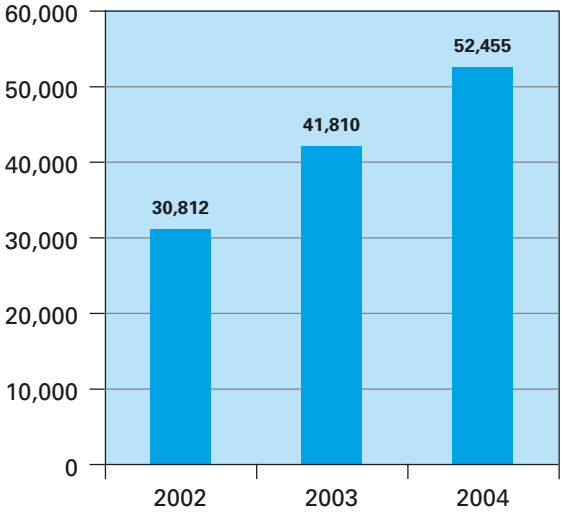
HIV/AIDS surveillance falls under the responsibility of health workers addressing communicable diseases in anti-epidemic facilities. HIV testing services are being provided in the central and 12 provincial HIV testing centres. However, there is a lack of surveillance in peripheral regions due to the shortages of equipment, reagents and supplies for HIV testing. The well-organized extensive network of the healthcare system represents a strong basis for preventing and controlling potential spread. However, the lack of an integrated HIV/AIDS prevention and control system, involving all the relevant government, non-governmental agencies and communities including MoPH, remains an unmet challenge in effectively preventing and controlling the spread of HIV and AIDS.

The highly organized and cohesive nature of the society is a clear advantage towards awareness raising in this endeavour. The development of a strategic plan signifies a valuable lack of complacency on the part of the government. However, there remains a window of vulnerability for preventing and controlling HIV and AIDS until the relevant gender, social and behavioural dimensions are fully recognized. The DPRK will not be able to avoid incidences of HIV and AIDS entirely, but it does have a golden opportunity to prepare for and limit their spread, especially by ensuring that its population is forearmed with the knowledge, attitudes and behaviours essential to its protection.

Tuberculosis

Tuberculosis (TB) represents a significant health concern for the overall population. The increase in TB incidence between 1994 and 2001 was dramatic, rising from 38/100,000 to 220/100,000. TB is cited as a leading cause of death in the overall population claiming some 2,300 lives annually. However, the introduction of the directly-observed treatment short-course (DOTS) through a phased expansion during 1998–2003 has been expanded to the whole affected population in the last year. The sputum conversion and treatment cure rates are high at 90 per cent and 87 per cent, respectively, in line with global targets.[112] Thus far, TB medication for the whole country has been provided through international assistance, but uncertainties surrounding the sustainability of the programme have emerged.

Figure 31: Reported cases of TB, 2002–2004



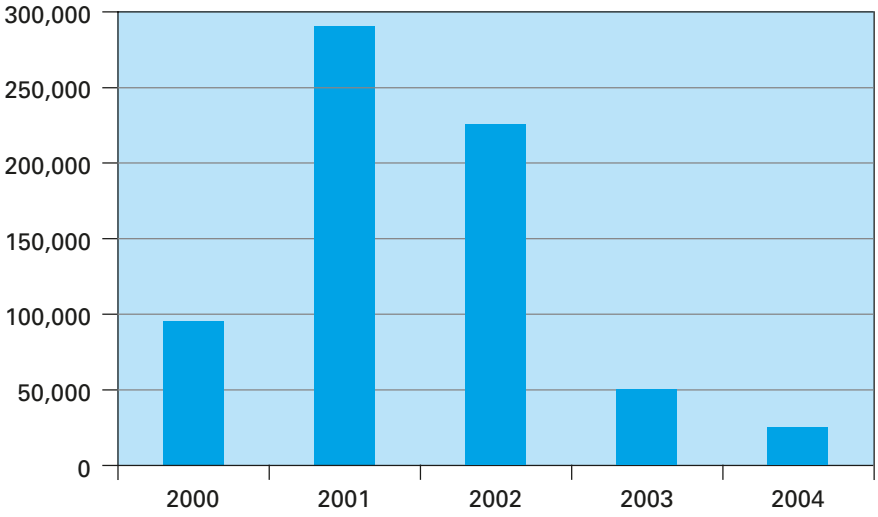
Source: WHO. CIDA support for tuberculosis control project with DPR Korea through World Health Organization [WHO] technical progress report for 2004 [10 June 2005]. Figures for 2004 provided by WHO: 2005

[112] WHO Democratic People's Republic of Korea [last updated: 27 July 2000 4] http://www.whosea.org and WHO: CIDA support for tuberculosis control project with DPR Korea through World Health Organization [WHO] technical progress report for 2004 [10 June 2005].

Malaria

Vivax malaria re-emerged in the Korean Peninsula during the late 1990s. This resurgence might be linked to some of the responses to the economic crisis and ongoing hardships. Changes in agricultural practices based on the reduced use of pesticides, as well as the adoption of less energy intensive irrigation methods of paddy fields, are thought to have increased the breeding of mosquitoes. The number of malaria cases reached epidemic proportions in 2001 with 297,000 reported cases.[113] According to MoPH, the reduction rate of malaria in 2002 was 81 per cent and 2003 and, subsequently, 25.1 per cent in 2003.[114]

Figure 32: Reported cases of vivax malaria, 2000-2004



Source: MoPH, December 2004

Although vivax malaria is not life-threatening, it is very dangerous to women during pregnancy, and to their unborn child, as it contributes to anaemia, maternal mortality, low birth weight and increased perinatal mortality through the mechanisms of blood loss and obstruction of placental arterioles. "Malaria is both more common and more dangerous for pregnant women through direct intensification of the disease as a result of reduced immunity in pregnancy and through the development of a more severe degree of anaemia."[115] Since it was all but eradicated in earlier times, there was an initial gap in the capacities of peripheral health workers to diagnose and treat malaria. During 2002–2004, there was a marked improvement in both the diagnostic facilities and the training of health workers. In short, in spite of the notable successes in containing new cases of malaria, there is a need to maintain vigilance and actively promote the use of insecticide-treated bed nets (ITN), and interest within the health sector.

[113] WHO [2004:2] Democratic People's Republic of Korea last updated: 27 July 2004.

[114] UNICEF 2003 Analysis of the Situation of Women and Children in the Democratic People's Republic of Korea and MoPH [2004]. Epidemiology and control of malaria in DPR Korea in country workshops on malaria control, Shanghai, China, 29 November–December 2004, PowerPoint presentation.

[115] UNICEF [2003] *Strategy to Reduce Maternal Deaths* East Asia and Pacific regional office health and nutrition working paper.

Health services

Access

The health care system in the DPRK demonstrates impressive outreach. The strength of the system is embedded in the government's commitment to the simultaneous development of health infrastructure and policy. The State guarantees universal and free health care in the Constitution (Article 72) and in the Public Health Law of 1980. The latter decrees a health system that is equally prophylactic and curative noting specifically deep concern and care for the protection of women and children (Article 10). The establishment of the public health care system was undertaken simultaneously with reconstruction efforts. Between 1970 and 1976, the policy on guaranteeing medical care focused on the shift of development and society at large from the growth-oriented to the balance-oriented through improving medical services for farmers and facilities of medical treatment in distant rural areas; in other words a policy of equity. Unlike most developing countries, urban-rural disparities are minimal, at least in terms of access.

There is a high ratio of doctors to population: 317/100,000, compared with 162/100,000 in China and 48/100,000 in Viet Nam.[116] At the *ri/dong* level, a "section" or family doctor serves about 130 households for all aspects of health development.

There is also an extremely high doctor to nurse ratio (1:1.1[117]), which suggests a bias towards medical treatment in hospitals over other care factors. However, the multiple roles of section doctors[118] encompass a range of responsibilities, including prophylactic and curative care, suggesting a more balanced delivery of health services outside hospitals. Hospital-based care would clearly improve with greater availability of nursing staff. Towards this end, the government has developed a national strategic plan for nursing and midwifery development, 2004–2010.

Health system capacity

The gains made in reducing morbidity and mortality remain fragile. Serious shortages in essential medicines as well as basic medical equipment and supplies persist. Estimates suggest that less than 50 per cent of essential drug needs are covered.[119]

The risk of epidemics, such as severe acute respiratory syndrome (SARS) that emerged in 2003, and the potential risks surrounding an epidemic of a human form of avian influenza highlight the extreme vulnerability of the health system. The depleted capacity of the health care system, which has been virtually devoid of new investment since the early 1990s, severely compromises the ability to deal with potential large-scale health problems. "The lack of adequate water and sanitation facilities, shortages of electricity and the lack of minimum physical facilities make it difficult to uphold proper hospital infection controls."[120] Surveillance and control of communicable diseases requires vast improvements. The Ryongchon Station train accident in April 2004 further indicated of the need for building disaster-response capacity.

Indeed, the quality of health care might be improved by reversing the limited contact and virtual isolation from external public health resources and international best practices. However, the improvement of the quality of health care is also embedded in tackling the problems of water supply and sanitation, as well as the limited electrical power supply.

For example, in spite of the significant advances in tracking problems related to reproductive health, strategies have not been adapted or applied in the local context. Although such problems remain the biggest causes of morbidity and mortality amongst women, a coordinated approach to promotion remains an unmet challenge.

Thus far, cooperation between the MoPH and international agencies has been based on a largely issue-by-issue basis to the detriment of comprehensive sectoral assessment and development planning. The persisting immediate and underlying needs within the health system remain grave in the context of dwindling donor and national resources.

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[116] Figures for China and Viet Nam taken from UNDP, *2002 Human Development Report*.

[117] MoPH [2004: 21] national strategic plan for nursing and midwifery development [2004-2010].

[118] These are the family health workers assigned to work teams and neighbourhoods. See Chapter 2 for more discussion on section doctors.

[119] Field observations by UNICEF as reported by heads of the health facilities.

[120] UNOCHA [2005:12] Democratic People's Republic of Korea: a framework for international cooperation in 2005.

CONCLUSIONS | 5

The situation of children appears to have improved incrementally over the past five years and modestly since the publication of the last situation analysis in 2003. This is evidenced by dramatic declines in malnutrition levels (particularly between 1998 and 2002) and a probable arrest of the upward trend in mortality. The economy is showing reticent signs of revival according to macroeconomic indicators. The DPRK continues to demonstrate a remarkable social cohesion. It maintains a commitment to the universality of services, including a complete set of entitlements for children and women, against a backdrop of severe and protracted hardships.

Progress has been accompanied by emerging pockets of vulnerability amongst select populations, affecting more urban rather than rural populations, for example. While malnutrition amongst children is decreasing, maternal malnutrition remains largely unchanged. Moreover, the results of the 2004 nutrition survey did confirm vulnerabilities in the north and north-east of the country.

At a national level, the existing gap between the legal and policy framework, guaranteeing protection and entitlements, and the actual status of children and women shows some disparities.

Due to the difficulties faced by the country and the absence of capital investment, over time, there has been unquestionable and obvious erosion in the quality and effectiveness of basic social services across all sectors pointing to the need for building human capacity.

The extensive and expansive systems of institutionalized care and services are frequently hailed as one of the major achievements of the State since the inception of the DPRK. However, the impact of the initial gains has been blunted as a result of three protracted problems:

1. There has been obvious damage to and degradation of physical infrastructure that has gone unaddressed leaving many schools, hospitals, other care institutions and water and sanitation systems in a marginal condition.
2. In addition to the damage to infrastructure, there has been protracted isolation from innovation. This refers to innovations associated with new technologies and their appropriate use, as well as to updating skill sets, methods and overall approaches (both diagnostic/analytical and curative/solution-oriented).
3. Efforts to improve the existing systems have had limited success largely due to the lack of evidence-based planning. The absence of planning, action and reaction informed by the availability and systematic analysis and use of relevant data for programme planning purposes (except the nutrition surveys) has detracted from both the efficiency and effectiveness of many institutions and institutional practices in the DPRK, and prevented the introduction of social development planning.

The context of the scale and extensiveness of the challenges faced by the DPRK, combined with the notable intergenerational pattern of chronic malnutrition and ill health, suggests that the most strategic and effective entry point is to continue focusing on early childhood development, inclusive of maternal care. This makes sense in order to ensure the best opportunities for survival, growth and optimal development of children, laying more solid foundations for their future well-being and learning capacity. In turn, this will lead to overall strengthening of the human capital essential for progress and development.

Early childhood development is particularly contingent on an increased emphasis on improving care practices for children and women. In particular, improving the physical status of women is essential to give children the best start in life, as well as ongoing care in their early years. This is contingent not only on health services but also tackling issues of women's workload, rest during pregnancy and lactation, and full exercise of their entitlements, including adequate access to and control over financial and other resources. It implies an increased effort to improve the quality of care within institutions and, particularly, family capacity for care, combined with an overarching emphasis on overcoming constraints in knowledge, practices and resources.

In this context, there is a need to revisit and review the role of childcare institutions. The institutions themselves suffer from resource constraints and eroded capacities. Over time, they have also substituted for, rather than reinforced, the capacities of children's primary caregivers: their parents and families, supported by the wider community. A more balanced approach that builds family and community capacity, involving them more closely in the operation of health and childcare services, as well as improving the quality of the institutions themselves, has been demonstrated as a highly successful strategy for augmenting the overall quality of care in numerous countries. Effectiveness will be contingent on the involvement of all stakeholders and integration of services that are critical for early child development.

For the DPRK to enhance its competitiveness, attention to the quality of education will be essential. Capitalizing on the already impressive quantitative achievements of the education system, it becomes crucial to pursue the current interest expressed by the Ministry of Education to address improvement of quality through initiatives such as piloting monitoring of learning achievement of students and introducing life skills education. Learning objectives and outcomes should be set and monitored with due regard to the ongoing aim of promoting full equality between girls and boys. Thus, disaggregated monitoring will be essential, the situation of girls' education being the key indicator.

Overall planning and upgrading management of services for children and women also need to be informed by the improved use of real evidence. Thus urgent attention is needed to build capacities for collection, analysis and use of data and information on the situation of children and women, and on the efficiency and effectiveness of programmes. This refers not only to technical capacities but also to the grounding of a culture of information sharing and use.

With the overall size of the national economy still a considerable limiting factor, the government will need to be strategic in its resource allocations. It should clearly, however, give greater priority to investments in the most basic social services in order to provide broad protection for the population, especially children and women. External cooperation should continue to support provision of both basic social services for children, as well as their longer term needs.

The way forward, however, is through greater engagement of, and with, the international community, tackling not only the immediate but also the underlying and structural determinants of child survival, optimal growth and development and the well-being of women. Should the scale of external resources remain constrained, these must be utilized in a highly targeted manner aimed primarily at improving human capacities as the basis for future development and at the planning and implementation of appropriate limited-scale models of more sustainable strategies for development for children and women. This approach can both help to inform social policy and strategic planning and prepare the way for larger scale development, once additional resources become available.

UNICEF DPRK
28 Munsudong
PO Box 90
Pyongyang
DPR Korea
www.unicef.org/dprk