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WHO Country Cooperation Strategy

Democratic People's Republic of Korea

2009-2013

World Health Organization
REGIONAL OFFICE FOR South-East Asia

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ACRONYMS

Acronyms	
CVC	core voluntary contributions
DOTS	directly observed treatment, short-course
DPRK	Democratic People's Republic of Korea
ENC	essential newborn care
EDL	essential drugs list
GHI	Global Health Initiative
GAVI	GAVI Alliance (formerly Global Alliance for Vaccines & Immunization)
GFATM	Global Fund to fight AIDS, Tuberculosis and Malaria
GMP	good manufacturing practices
GPW	General Programme of Work
HMIS	Health Management Information System
HRH	human resources for health
IDC	Italian Development Cooperation
IFRC	International Federation of Red Cross and Red Crescent Societies
IHR	International Health Regulations (2005)
IMCI	integrated management of childhood illness
MDG	Millennium Development Goals
MoFA	Ministry of Foreign Affairs
MoPH	Ministry of Public Health
MPT	mass primaquine treatment
MTISP	Medium-term Immunization Strategic Plan
MTSP	Medium-term Strategic Plan
NCD	Noncommunicable diseases
NGO	Nongovernmental organization
NPO	National Programme Officer
OECD	Organisation for Economic Cooperation and Development
PHC	primary health care
RO	Regional Office
RTI	reproductive tract infections
SOP	standard operating protocols
STH	soil-transmitted helminthiasis
STI	sexually transmitted illness
TB	Tuberculosis
UN	United Nations
UNSF	United Nations Strategic Framework
UNDP	United Nations Development Programme
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
WCHP	Improving Women’s and Children’s Health in DPR Korea: Framework for Multi-Year Assistance
WCO	WHO Country Office
WR	WHO Representative

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Foreword

Over the past few years, the World Health Organization and the Government of the Democratic People's Republic of Korea (DPR Korea) have actively collaborated to improve the health of the people of the country. During the period 2004-2008, the first Country Cooperation Strategy (CCS) guided WHO's work with the Government of DPR Korea to further national health development. This new CCS, covering the period 2009-2013 and developed in partnership between WHO, the Government and other health development partners, is the first to be signed jointly by WHO and the Government of DPR Korea. This joint signing further reinforces the degree of collaboration between the Government and WHO and reflects a common commitment to the national health agenda and improved health outcomes for the population in the country.

The Country Cooperation Strategy presents a medium-term vision for WHO-DPR Korea collaboration in priority health areas as identified through a consultative process involving WHO, the Ministry of Public Health and UN agencies, as well as other multilateral, bilateral and international partners. This vision is ambitious but realistic; focusing largely on strengthening the health system to further develop capacity for policy development and implementation and planning, and to improve service delivery. It is based on an analysis of national health priorities, challenges and opportunities, WHO's comparative advantage in the country, and other ongoing initiatives. Implementation of the Strategic Agenda will require various contributions from WHO, including evidence-based policy advice; technical support; monitoring and evaluation; capacity-building for resource mobilization; and, in some exceptional cases, funding to catalyse change and direct support to implementation. These contributions in turn will help to strengthen the health system to better respond to the health needs of the population.

The CCS Strategic Agenda is aligned to DPR Korea's national health priorities and, therefore, WHO and the Government are committed to ensuring that it is implemented effectively at both the central and local levels. The WHO Representative's Office in DPR Korea, the Regional Office for South-East Asia in New Delhi and WHO headquarters is committed to continue to provide the highest quality of technical support to the country. The WHO Secretariat and the Government of DPR Korea are confident that the implementation of this Country Cooperative Strategy will contribute towards ensuring significant improvements in the health and well-being of the people of the country.

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Executive summary

Between January and May 2009, the World Health Organization's Representative to the Democratic People's Republic of Korea (WR-DPR Korea) led a participatory process involving consultations with WHO (i.e. the three levels-Country, Regional office and head quarters), with the Ministry of Public Health (MoPH) and with partners working in DPR Korea. The purpose of this process was to review past cooperation of the World Health Organization with and in the country, and to develop DPR Korea's second CCS for the period 2009-2013. This second CCS would be aligned with the national health policy framework of the country and prioritize WHO's work with and in the country during this medium-term period.

This process involved the CCS team reviewing internal documents of the WHO Country Office in DPR Korea, national health policies and plans and the health sector profile, and undertaking an "in-house" review of WHO contributions and key achievements within and outside the scope of the CCS Strategic Agenda as well as of meetings with the Ministry of Public Health and interviews with partners. The latter was aimed at gauging "external" perceptions about the cooperation of WHO with and in DPR Korea.

This CCS document takes into consideration the outcomes of these review and priority setting processes, the United Nations Strategic Framework (UNSF) as well as the objectives articulated in the WHO Medium-term Strategic Plan (MTSP) 2008-2013, in addition to national, regional and global priorities for health development.

Health development context and health status of the population

The infrastructure of the health system in DPR Korea is extensive, including a 300 000-strong health workforce. In the recent past a number of sectoral strategies and plans have been developed and one GMP-certified pharmaceutical production facility has been established. With the support of collaborative partners, including WHO, DPR Korea has also achieved high immunization coverage, a high proportion of institutional deliveries and a palpable prevalence of breastfeeding, along with a significant reduction in the incidence of malaria and high coverage of DOTS.

However, the country still faces numerous health sector challenges. These include; need for medium to long term health sector plan, vertical program specific health information system, weak planning, management and supervision skills; and suboptimal quality of care due to an imbalanced skills mix, limited supply of medical equipment and basic medicines, and other logistic bottlenecks such as an unstable power supply. Some of the persistent health issues include: high maternal mortality and rates of abortion; high prevalence of low birth weight and childhood malnutrition; TB, malaria and hepatitis B. The persistence and re-emergence of these health problems have been largely attributed to supply constraints.

At the same time, noncommunicable diseases (NCDs) account for an increasing burden of morbidity and mortality, particularly cerebro- and cardiovascular diseases as well as cancers and respiratory illnesses. The high prevalence of smoking among the adult male population is also a major contributor to the NCD burden.

Tackling these challenges is compounded by the financial constraints facing the health and other sectors, and the country's vulnerability to harsh environmental conditions and natural disasters.

Partnerships

The aid flow to DPR Korea compared with other countries in the WHO South-East Asia (SEA) Region is minimal. However, since the 1990s the health sector in DPR Korea has received significant financial and commodity support from numerous resident and non-resident, multilateral, bilateral and nongovernmental organizations (NGOs) and partners. Under the United Nations Strategic Framework and within its existing corpus of support from donor-funded multi-year assistance; WHO has worked closely with United Nations Children Fund (UNICEF), United Nations Population Fund (UNFPA), World Food Programme (WFP) and Food and Agriculture Organization of the United Nations (FAO), as well as the International Committee of the Red Cross and various NGOs. Recent developments in the context of the country's partnerships suggest a shift from emergency collaboration to collaboration for sustainable health sector development.

Review of WHO cooperation with and in DPR Korea

During the CCS period 2004-2008, the support that was provided by WHO extended beyond the CCS Strategic Agenda. WHO has provided strategic technical support and, given the country's specific context, support to direct implementation – much of which has been critical to improving the health of the population. It has played a particularly important role in the production of guidelines, implementation of norms and standards, policy formulation and capacity-building of health sector staff. Specific examples include WHO's support to the Government and other health development partners as the health cluster lead; support for the development and introduction of several evidence-based guidelines; facilitation of overseas training; and provision of policy guidance for communicable and noncommunicable disease prevention. To meet the specific needs of the country, WHO has also provided substantial support to the renovation and equipping of health, laboratory and medical education facilities using, primarily, voluntary contributions (VCs) and seed funds.

The perceptions of the Government as well as other development partners, vis-à-vis WHO's contributions during this past CCS cycle, were overwhelmingly positive; and were facilitated by its key role and functions in the country and affiliation with the Ministry of Public Health through its staffing arrangements. Nonetheless, there remain areas in which WHO can improve its degree and magnitude of cooperation during this new CCS period of 2009-2013. These include the timeliness of its response in emergency situations and support to health systems strengthening.

Strategic Agenda

The Strategic Agenda is based on: WHO's core functions and comparative advantage as a key partner in the health sector; the ongoing contributions of other partners; the strategic objectives of the MTSP; and the UNSF underpinned by the Millennium Development Goals (MDGs). It is composed of five strategic priorities:

The first priority is to *strengthen the health system to further develop capacity for policy development and implementation and planning, and improve services delivery.* The focus of this priority is to support the development of a comprehensive Medium Term plan of development of health sector. The existence of medium term plan for health sector development will facilitate WHO's work to help address a number of health system bottlenecks to improved services delivery and quality of care.

The second strategic priority is to *address women's and children's health,* which is a key health priority area in DPR Korea. The focus in this regard is to facilitate the implementation of, and complement, ongoing activities by providing support to improve the quality of maternal and child health care. Specifically, WHO will provide support to improve the infrastructure, enhance the skill and expertise levels of the health workforce, as well as to bolster the process of surveillance, monitoring and evaluation.

The third strategic priority is to support the Government of DPR Korea to *sustain the achievements made* over the past five years, particularly in the area of prevention, detection and treatment of malaria and tuberculosis, *and further address communicable diseases,* including those such as SARS and avian influenza. To do so, WHO will focus on providing technical support and seed funds to improve surveillance, introduce new vaccines, facilitate implementation of IHR and emergency preparedness, and build national capacity.

The fourth strategic priority is to *address the risk factors that lead to an increasing prevalence of noncommunicable diseases,* particularly cancers, cardiovascular and cerebrovascular diseases, and diabetes. WHO will play a key role in supporting the MoPH with integrated planning, surveillance and coordination of partners to address numerous noncommunicable disease risk factors.

The fifth strategic priority focuses on *mitigating the health consequences of environmental and natural disasters*—the effects of which have severely compromised the health system's capacity to respond to the health needs of the population. Specifically, the priority is to *address the environmental determinants of health,* such as flood and drought, water quality and pollution, food safety and hospital waste management.

Implementation of the Strategic Agenda and its implications on WHO

Given the persistent health challenges that face DPR Korea and small number of partners working in the health sector, WHO will need to sustain, and in some areas, scale up the degree of support it provided during the duration of the CCS 2004-2008.

The Strategic Agenda will serve as a basis for developing operational biennial workplans. To ensure that the Agenda is effectively translated into practice, WHO will need to support capacity-building for resource mobilization; access high-quality international expertise (in a timely manner); and use the CCS to identify and allocate funding to the appropriate products and activities for these biennial workplans. Addressing these issues will enhance WHO's ability to deliver on the commitments articulated in the CCS 2009-2013.

1. Introduction

The World Health Organization's Regional Office for South-East Asia (SEARO) established a country office (CO) in the Democratic People's Republic of Korea in 2001. The first Country Cooperation Strategy (CCS)[1] for DPR Korea was developed in 2004 and concluded in 2008. Over this period, WHO has provided substantial support to national health development in the country. It has also done so according to the country's specific needs, and in response to a number of contemporary socio-political, environmental and economic changes in the country.

This new CCS reflects this changing contexts and is the result of a process undertaken to define WHO's technical cooperation with the Government of DPR Korea for the period 2009-2013. It takes into consideration the country priorities and health policy orientation, which are largely articulated in the following:

- The Women and Children Health Project (WCHP) and Global Alliance for Vaccine and Immunization Health System Strengthening HSS (GAVI-HSS) strategies and programme-specific national strategies and plans;
- WHO priorities outlined in the Eleventh General Programme of Work (GPW) and Medium-term Strategic Plan and Programme Budgets, including global and regional treaties and resolutions; and,
- the successes and constraints experienced during the implementation of the CCS 2004-2008.

The formulation of this CCS has also taken into account the challenges and actions outlined in the current United Nations Strategic Framework, the period of which has been extended till 2010, and the targets of and achievements made with the Millennium Development Goals (MDGs), which remain a core priority for the United Nations. Consistent with the principles of harmonization and alignment, this provides for more opportunities to ensure better coordination and effective implementation of programmes at the country level.

The primary purpose of developing a CCS is to define what WHO will do in and with a particular country within a defined medium-term period. It provides a framework to coordinate the strength of the entire WHO Secretariat (at the country, regional and headquarters levels), based on the Organization's core functions, to address the country's health priorities and challenges in an effective and responsive manner. With this objective and the above policy background in mind, this current CCS has been developed to enhance WHO's performance in the context of its increased levels of cooperation with the Government of DPR Korea and other partners engaged in that country.

The process for developing the CCS was inclusive, interactive and participatory. Under the leadership of the WHO Representative, all three levels of the Secretariat participated in the CCS development process, through a mission to the country (consisting of representatives from the Regional Office and WHO Headquarters) as well as regular email correspondence and teleconferences. The preparation process also involved a pre-mission briefing session at the

[1] The Country Cooperation Strategy is a medium-term framework for WHO's cooperation with a country and outlines a strategic framework for working in and collaborating with that country.

Regional Office and WHO Headquarters to understand the regional and global perspectives regarding the health issues and challenges concerning DPR Korea, and outline the work that has been undertaken in and with the country at both levels.

During the mission, the CCS team consulted national authorities and partners (including Specialized Agencies of the United Nations, bilateral agencies, ambassadors, and the International Committee of the Red Cross) to learn about their views and perceptions on:
(i) WHO's performance, including major contributions made and weaknesses observed over the last CCS cycle; and,
(ii) Key health issues and challenges facing the country.

Following these meetings, stakeholder consultations (first with the Government and then with the partners) were organized for the CCS team to present the preliminary findings on the country's key achievements and key challenges, and the areas where WHO proposed to focus over the next five years (i.e. draft strategic agenda). The Strategic Agenda with the five Strategic Priorities, as defined in this document, is the result of intensive interaction and detailed consultations with health development partners in the country by all levels of WHO.

This CCS document presents an analysis of health and development challenges, development cooperation and partnerships, and a review of WHO cooperation over the last CCS cycle. Based on the outcomes of these analytical and review processes, this document further outlines strategic priorities on which WHO will focus its technical cooperation during 2009-2013, and identifies their implications—in terms of technical, human, financial and logistic resources—on the work of the Organization at the country office, regional office and headquarters levels.

2. Country Health and Development Challenges and National Response

2.1 Demographics and geography

The Democratic People's Republic of Korea shares covers 123 138 square kilometres or more than half the total land area of the Korean Peninsula. The climate is temperate with extremely cold weather during the winter and high rainfall in the summer months, particularly in August. The country is geographically divided into 10 provinces, one major municipality and 210 counties, and further subdivided into smaller administrative units known as *Ri* (in rural areas) and *Dong* (in urban areas).

The population is estimated to be 24.05 million per preliminary results of Census conducted in 2008 though final data shall only be released by December 2009. Women are in a small majority, with the sex ratio at 95.1 males to 100 females. Women also outlive men by an average of 7.9 years; the average life expectancy being 72.8 for females and 64.9 for males. The crude birth rate is 14.9 per 1000 population, and the total fertility rate (TFR) per woman is 2.03. With 12.3% of the population aged over 60 years, DPR Korea has the oldest age structure in the WHO South-East Asia Region. Approximately 60% of the population is urban.

(Note: This section uses Government-approved data, although the figures are not always consistent with those from other sources such as the *World Health Statistics 2008*).

Demographic indicators	
Average life expectancy at birth	69 years
Male life expectancy at birth	64.7 years
Female life expectancy at birth	72.6years
Crude birth rate	14.9 per 1000 population
Crude death rate	8.8 per 1000 population
National population growth rate	0.61%
Total fertility rate	2.03 per woman
Population under 15 years	24.03%
Population 60 years and over	12.3%
Urban population	61%

Source: MoPH 2006 Annual Health Statistics

2.2 Socioeconomic and political situation

The country is committed to the people oriented *Juche* philosophy of the government, which prescribes independence, self-sustenance and self-defence. As such, DPR Korea has relied heavily on its own resources and capacity for development. Consistent with this philosophy, the health system is funded entirely by the public sector and it is the socialist health system. The *Juche* philosophy underpins the government's health policy and strategy—articulated in the Public Health Law adopted in April 1980—that defines the right to health as one of the basic requirements for ensuring people's well-being and makes policy directions to reduce health inequalities among the population.

Prior to the 1990s, DPR Korea had achieved an efficient and effective free universal health-care system accompanied by impressive health indicators. However, in the early 1990s the collapse of the Socialist Economy compounded by numerous natural disasters, including severe drought and flooding, that occurred in rapid succession at that time, limited international monetary support, and the consequences of economic sanctions. The gross domestic product (GDP) per capita dropped from US$ 991 in 1990 to US$ 463 in 2000. The period 2000-2004, however, witnessed a turnaround with the per capita GDP increasing by 4.9% annually.

2.3 Other determinants of health

Gender equality is a priority in DPR Korea, and the country has acceded to four of six international socio-political and human rights instruments of the United Nations: i) the International Covenant on Economic, Social and Cultural Rights (ICESCR) 1981; ii) the International Covenant on Civil and Political Rights 1981; iii) the UN Convention on the Rights of the Child 1990; and, iv) the Convention on the Elimination of All Forms of Discrimination against Women 2001.

Adult literacy is estimated to have reached 100% for both men and women. Similarly, school enrolment (for children aged 11 years) is 100% for males and females, and awareness of health issues is, consequently, high. However, the degree of success in the translation of this knowledge and awareness on health into practice has not been adequately studied.

Gender equity indicators	
Adult literacy ratio (females as % of males)	100
Primary school enrolment ratio (females as % of males)	100
Ratio of estimated female-to-male earned income	0.46*
Secondary school enrolment ratio (females as % of males)	100
Percentage of seats in Parliament held by women	20.1%

Source: MoPH Annual Report 2007; **http://hdrstats.undp.org/countries/data_sheets/cty_ds_PRK.html*

Periodic bouts of drought and flooding have turned vital determinants of health in the country. In 2007, United Nations Office for Coordinating Humanitarian Affairs (OCHA) reported that almost one million people were severely affected by widespread flooding and by land- and mud-slides during the year. More than 450 people were also killed and another 170 000 rendered homeless.

Over the last two decades natural disasters in DPR Korea have disrupted the agricultural and energy sectors, further compounding the economic situation and triggering food insecurity. Lack of food security has led to a high prevalence of malnutrition, particularly among women and children. Food aid and improved agricultural production more recently has, however, ameliorated the nutritional status of the population, particularly the urban population. A December 2008 joint report by the World Food Programme and FAO said around 40 per cent of the population, or an estimated 8.7 million people, would need food aid during that winter.

Similarly, the infrastructure too has been affected by the country's paucity of financial resources. The pressing problems include inconsistent power supply, the run-down water and sanitation system, and the degree of disrepair of the roads. Inconsistent power supply is a common problem, particularly at the county and *Ri* levels, and also particularly in the winter when heating is a necessity. The debilitating water and sanitation system has contributed to the high prevalence of diarrhoeal diseases and cases of malnutrition. In addition, lack of financial resources has interfered with the regular maintenance of roads throughout DPR Korea.

The Government has over the recent past also coordinated community activities to maintain the environmental quality of roads, rivers, forests and the soil; and promote the habit of "keeping homes, villages, streets and workplaces clean". In addition, 96% of the population is reported to have access to an improved water source; 82% to an improved drinking water source and 99.2% to an adequate excreta disposal facility.

2.4 Current health status

Prior to the spell of environmental and economic hardship that hit DPR Korea during the 1990s, the health status of the population and the responsiveness of the heath system were comparable with that in developed countries. However, morbidity and mortality indicators worsened following these crises, largely due to the consequent food insecurity and the impaired abilities of an under funded health system to respond to the health needs of the population. More recently, population health indicators have started to improve. Nonetheless, a multiplicity of challenges persist, particularly in the areas of *maternal, child and reproductive health; new and re-emerging communicable diseases; noncommunicable diseases (especially cancer and cerebrovascular diseases); and health policy development and implementation and planning.*

While vaccination coverage is high (mostly greater than 90%), maternal mortality—estimated to be 90 per 100 000 population—is also high, as is the proportion of low-birth-weight babies and childhood malnutrition. Supply of contraceptives (condoms and the contraceptive pill) is limited. Consequently there is a high abortion rate and thus an unmet need for family planning. Reproductive health knowledge varies substantially according to gender and marital status, with unmarried women knowing very little about family planning and sexually transmitted illness (STI) prevention.

Control of communicable and re-emerging diseases is one area in which the progress has been substantial. Tuberculosis re-emerged as a priority health concern in the late 1990s. However, over the last five years the expansion of the DOTS programme has brought sputum conversion and treatment cure rates in line with global targets. Similarly *plasmodium vivax* (P. vivax) malaria re-emerged in the late 1990s but mass primaquine treatment (MPT) reduced the number of malaria cases from 296 540 in 2001 to only 9353 in 2006. Now DPR Korea is faced with the challenge of optimum capacity development in order to sustain these achievements.

Noncommunicable diseases account for an increasing burden of morbidity and mortality. This is especially the case with cerebrovascular and cardiovascular diseases as well as cancers and respiratory illnesses. The high prevalence rates of smoking tobacco (54.5 % of the adult male population consumes tobacco) is also a major contributor to the burden of noncommunicable disease. Various degrees of disability also affect approximately 3.4% of the population, of which disability affecting the limbs makes up a substantial proportion. The majority of people affected by disability reside in rural areas (65%), and males slight outnumber females in this category. There is a higher prevalence of disability in the older age groups.

2.4.1 Services Delivery

Maternal and child health, including immunization

Maternal and child health are a key health sector priority in DPR Korea. Some improvements have been noted over the past few years with the indicators of health-related MDGs. The proportion of one-year-olds immunized against measles is high (99.2%); as is the figure for DTP-3 (91.7%); OPV3 (99.3%); BCG and tetanus toxoid (TT2+) coverage (both 96.9%). Almost all under-two-year-olds receive vitamin A supplementation. However, certain other areas have

not changed perceptibly, mainly because of the reduced ability of the health system to respond which was a consequence of the economic and environmental trials that the country faced over the past decade. For example, the infant mortality rate rose from 14.1 per 1000 live births in 1993 to 19.5 per 1000 in 2006; and the under-five mortality rate decreased from 48.2 live births in 1999 to 38.7 per 1000 in 2006.

While child mortality is low compared to many other Member countries of the SEA Region, high rates of malnutrition among children and maternal mortality persist. The three major causes of under-five mortality are preterm births, diarrhoeal diseases and pneumonia – all of which are largely preventable. Persistent child malnutrition has been attributed to the nutritional and physical status of women; the overall care environment and capacity of primary and secondary caregivers to provide adequate care; the vulnerability of children to infection as a result of depleted water and sanitation systems and health-care systems; and the limited quality and quantity of food available to meet the nutritional requirements for optimum growth and development of young children.

Diarrhoeal disease combined with malnutrition is a leading cause of death in children under five. According to the National Nutrition Assessment 2004, approximately 20% (or 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. Soil-transmitted helminthiasis (STH) – the majority of infections being caused by *Ascaris lumbricoides* and *Trichuris trichiura* – contributes to the already high rates of malnutrition, anaemia, malabsorption syndrome and chronic diarrhoea, particularly among school-aged children from rural areas. The prevalence of instances of stunting in children is 37%, and underweight children are 20% of the total.

Although the majority of children with acute respiratory infection (ARI) are taken for treatment, ARI is another major cause of child mortality. In the two weeks prior to the National Nutrition Assessment 2004, 12% of all children under five had ARI symptoms, 84.7% had both ARI and fever. The prevalence of ARI and ARI with fever was highest among children aged between six and 17 months.

Maternal health challenges include the following:
- high prevalence of anaemia in pregnant women (33%) and women with children under two years of age (34%);
- the high proportion of malnourished women with children less than two years of age (32% based on mid-upper arm circumference);
- the high proportion of women weighing less than 45 kg (21%); and,
- the proportion of babies (6.2%) weighing less than 2.5 kg at birth.

While the number of women receiving antenatal care is proportionately high, the quality of care is constrained by inadequate equipment necessary for antenatal assessment (e.g. testing for anaemia), staff skills, transport for referral, and access to emergency obstetrical care including safe blood.

Maternal and child health indicators	
Underweight (low-weight-for-age children aged under five years).	6.2%
Underweight children under seven years	20%
Acute malnutrition (wasting) in children aged 0-6 years	7%
Infant mortality rate	19.5 per 1000 live births*
Under-five mortality rate	38.7 per 1000 live births
Maternal mortality ratio	90 per 100 000 live births*
Antenatal care coverage	98%
Deliveries attended by skilled health personnel	99%
Newborns weighing less than 2.5 kg at birth	6.2%
Breastfeeding rates	95%

Sources: MoPH Annual Report 2007; * EPI Coverage Evaluation Survey 2008

Vaccines/supplementation (coverage)	
BCG	96.9%
DTP3 + Hepatitis B3	91.7%
MV (1 dose)	99.2%*
OPV3	99.3%
Tetanus toxoid (TT2+)	96.5%
Vitamin A (under two years)	99.9%

Sources: EPI Coverage Evaluation Survey 2008

3 Reproductive health

Since the end of the 1990s the fertility rate has stabilized at around 2.0. According to a recent reproductive health survey supported by UNFPA, the contraceptive prevalence rate is 69.1%. The majority of couples prefer modern methods (58.5%) of contraception over traditional ones (10.6%). Popular methods of contraception include the intrauterine device (48%) and periodic abstinence (9.4%). Condom use among couples is low (2.5%), and likely to be lower again where use is not for family planning purposes. This is, nonetheless, a marked increase from the 0.4% in 1997. Limited use of condoms and other supply-based methods including the pill is inevitable due to lack of availability and inadequate counselling.

Shortages of equipment and supplies is a major reason for the non-uptake of family planning services and, combined with access-to-information constraints, are likely to explain the high (21%) unmet need for family planning and the current abortion rate (121 per 1000 live births). According to a 2004 survey, 85% of these induced abortions could have been avoided with adequate provisions for family planning resources.

Reproductive issues-related health knowledge was found to vary substantially by gender and marital status. The study revealed men to be more knowledgeable about HIV and contraceptive methods than women. According to the UNFPA-supported Reproductive Health Survey, non-married women receive limited information about family planning methods or about HIV.

Method of contraception	Prevalence rates
IUD	48.0
Female sterilization	4.2
Male sterilization	0.2
Periodic abstinence	9.4
Condom	2.5
Pill	2.3
Foam/jelly	1.3

Source: MoPH report on the DPRK Reproductive Health Survey 2006

Although not limited to women and children, goitre (caused by iodine deficiency) is endemic in the mountainous regions of two provinces. In 2000 less than 2% of all surveyed households were using iodized salt. The 2004 National Nutrition Assessment 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 through its National Programme of Action for Children. The Government has also initiated the distribution of iodine capsules with assistance from the United Nations Children's Fund (UNICEF).

Communicable and re-emerging diseases

As evidenced above, DPR Korea has made substantial progress on immunization coverage and polio eradication. The country's polio-free status was confirmed in July 2001 following an International Acute Flaccid Paralysis Surveillance review. In 2005, the national Measles Laboratory, using the existing communicable disease surveillance system, initiated monthly reporting of measles and rubella serology (IgM) results to the Regional Office. This was followed in 2006 by the aggregate number of vaccine-preventable diseases and adverse events following immunization. An assessment in 2007 revealed that all infectious diseases are considered for immediate notification in case of an outbreak, and that there is a mechanism in place to facilitate this notification. Regular data collection is based on immediate, weekly and monthly reports from the *Ri/Dong* level to the counties and then to the provinces, and finally from the provinces to the central level. According to national health authorities, case definition is available at all levels.

The early half of the 1990s saw the prevalence of TB almost halved. However, following the economic and natural disasters of the late 1990s that led to an overall deterioration of the health and nutrition status of the population as well as of the public health services infrastructure, TB re-emerged as a conspicuous health concern. There was also a sharp increase in TB notifications: from 38 per 100 000 persons in 1994 to 220 per 100 000 at the end of 2002. In 2004 the number of reported cases reached 52 455, i.e. almost double the number reported in 2002.

Since 1998, the WHO-supported DOTS programme has expanded to cover almost the entire population of DPR Korea, with a successful record of reaching global targets for sputum conversion and treatment cure rates of 90% and 87% respectively. Although coverage is high, a representative national Annual Risk of TB Infection Survey in 2007 revealed that 2.6% of

tuberculosis patients remain unregistered. This may necessitate a nationwide active case-finding campaign.

While the expansion of DOTS has made significant inroads towards bolstering TB control, medicines have been provided through emergency assistance. This points to the issue of programme sustainability and highlights the need for DPR Korea to develop the capacity to produce its own medicines to prevent and treat TB.

Plasmodium vivax malaria re-emerged as the main public health problem in seven of the 10 provinces in the late 1990s, and continues to undermine the health of a large swathe of the population of the country. This may have been due to the effects of global climate change (e.g. floods creating suitable breeding zones for malaria vectors) along with the change in the irrigation system due to lack of energy resources. Mass Presumptive Treatment in the most endemic areas reduced the number of malaria cases from 296 540 in 2001 to just 9353 in 2006.

Despite the achievements made over the past decade, success in malaria elimination will require a combination of malaria control methods including radical treatment, chemoprophylaxis and vector control. In moving towards the pre-elimination of malaria, there are a number of financing and programmatic constraints that need to be addressed. In particular, these include interruption of basic utilities such as electricity and water supply to health facilities, limited communications infrastructure, inadequate staff capacity for programme planning, management and monitoring, and a weak and vertical Health Management Information System. To help address these barriers, the Government of DPR Korea in 2008 requested GFATM support (Round 8) for the use of light microscopy within cluster-based laboratories at the *Ri* level, and for the targeted scale-up of vector control activities, health promotion initiatives, operational research as well as monitoring and evaluation.

Re-emerging disease indicators	
Malaria prevalence	258 per 100 000 population at risk
Malaria incidence	39.1 per 100 000 population
Malaria cases	9353
Tuberculosis prevalence	218 per 100 000 population
Tuberculosis cases detected and cured under DOTS	88%

Source: MoPH Annual Report 2007 and WHO Regional Office for South-East Asia

To date there have been no reported cases of HIV/AIDS among the population, although 28 cases have been detected among foreigners in the country. Health promotion activities began in 1988 along with the establishment of an HIV testing centre. Since then testing facilities have been further improved, surveillance strengthened, and Information Education and Communication activities continued. However, little is known about sexual practices (to determine risk), and sub optimal national HIV surveillance and reporting system makes it difficult to assess the actual situation in the country. Combined with limited awareness of HIV transmission among the population, increasing cross-border travel and the fact that health services are not equipped to treat/manage people infected with HIV, these factors highlight the need for putting in additional efforts to target HIV prevention and management.

In addition to requesting for support for malaria control, DPR Korea has also applied to the Global Fund for five years of funding to support the TB programme and HIV prevention programme. As part of this application, of which TB and malaria proposals were accepted and approved by the Executive Board of the GFATM for support, funding will be disbursed shortly. The HIV proposal also received positive recommendations for resubmission to Round 9 of GFATM.

The high prevalence (estimated at 4.5% in 2003) of blood-borne hepatitis-related morbidity and mortality has long been recognized by the Government of DPR Korea, but the true prevalence of chronic hepatitis B infection is unknown. A vertical prevention and control programme exists from the central to the community levels. However, managerial and technical capacity within this programme is weak, and collaboration between this, the EPI and blood safety programmes is inadequate.

More effort is needed to ensure that children aged between 5 and 15 years are vaccinated as part of the "catch-up programme" to reduce the incidence of hepatitis B, and to move towards reducing the chronic hepatitis B infection rate to less than 2% among children aged under five years by 2012. This goal was set by the WHO Regional Office for the Western Pacific, where hepatitis B epidemiology is similar to that in the SEA Region.

Another issue of concern is the impact of inadequate running water and electricity on infection control in hospitals. Inadequate patient care practices (e.g. inadequate hand-washing and aseptic techniques) as well as inadequate cleaning and handling of contaminated instruments, blood, bodily secretions and tissues increase the risk of contamination and spread of bacteria and pathogens and trigger blood-borne virus transmission, particularly in operating theatres and patient wards. The relative lack of knowledge regarding disinfection and sterilization combined with inadequate cleaning supplies (due to absence of standardized manuals/guidelines) further compound these problems.

Noncommunicable diseases

Noncommunicable diseases comprise an important health sector priority in terms of the disease burden. In 2002, heart disease accounted for the major burden of noncommunicable disease, particularly heart disease caused by rheumatic fever, ischemic heart disease and other related ailments. Cerebrovascular diseases, cancer, chronic respiratory disease and neurological diseases were also prevalent. According to MoPH officials, these diseases account for approximately 60% of all causes of mortality. The three major causes of death in DPR Korea are ischaemic heart disease (13%), lower respiratory infections (11%) and cerebrovascular disease (7%).

Morbidity indicators	**Prevalence**
Cerebrovascular disease	17.8 per 10 000 population
Cancer	14.4 per 10 000 population
Chronic respiratory diseases	26.5 per 10 000 population

Source: MoPH Annual Report 2007

According to the MoPH, the Government is engaged in activities to prevent chronic disease, such as walking and exercises at intervals in the workplace.

Although typically overshadowed by maternal and child health, men's health also requires attention with a high prevalence of smoking among them despite the country having ratified of the WHO *Framework Convention on Tobacco Control* in 2005. The high rate of smoking in DPR Korea is one of the major contributors to the emergence and spiral of noncommunicable diseases.

Approximately 54.8% of all adult males smoke an average of 15 cigarettes per day; with the prevalence slightly higher among the "worker" population than the "farmer" population. The average age of uptake is 23 years. This highlights the need for health promotion initiatives to prevent uptake of tobacco among young adults. Additional efforts to target those who already smoke are also needed because the health system will not be able to cope with the health-care needs of smokers as the population ages. In addition, a high rate of excessive alcohol consumption (defined as consumption of more than one bottle, per sitting, per person (26.3% among males) has also been reported. It is thus important to prioritize men's health in tandem with the health of women and children.

Although limited data are available, disability services, services for the elderly, and injury prevention and trauma control are priorities for the MoPH. Although the basic infrastructure and space allocation are adequate and the number of doctors available is sufficient, there is a shortage of consumables (including oxygen and stable electrical power) and also human resource capacity is lacking. This impedes the timeliness and quality of delivery of emergency services and trauma care.

2.5 Health policy and health systems

Key policy principles, planning and financing

Policies and plans

Under Article 72 of the Constitution of the Democratic People's Republic of Korea, the State bears full responsibility for the life and health of all citizens and guarantees: 1) implementation of universal free medical care for the people; 2) that priority is given to preventive medicine; and 3) the establishment of a well-regulated health system from the central down to the *Ri* level, and a predominant section doctor system.

The country has an elaborate health policy, which is enunciated in the Public Health Law adopted in April 1980, and has formulated policy directions to reduce inequality in the health status of the population. At the core of the public health policy in DPR Korea is the directive to realize and adopt preventive medicine in all health activities and to strengthen the free universal medical care system. The government is committed to ensuring a more rational provision of health facilities to narrow down the regional differentials in primary health care (PHC), further strengthening international cooperation as well as exchanges between partners within the country, increasing activities to prevent common diseases and injuries, and strengthening the provision of resources and research on PHC. While there are integrated micro plans for household doctors at

the county level, a comprehensive medium term plan for development of health sector is being currently developed.

The *Improving Women's and Children's Health Project (WCHP) in DPR Korea: Framework for Multi-Year Assistance*; a programme developed by the Government of DPR Korea in collaboration with WHO and supported by the Republic of Korea in 2006- provides a broad framework for health system strengthening. Although it focuses on four health system issues, the document does contain a comprehensive HSS framework in line with WHO continued advocacy on development of medium to longer term health sector plan.

The programme is the biggest ongoing investment in the redevelopment of the health system in DPR Korea. The existence of a visible strategy to improve the health of women and children (and thereby strengthening the health system) has been well-perceived and has provided the opportunity for international investment to align with and co-finance its implementation. For example, GAVI HSS funding is helping DPR Korea to support and expand the management component of WCHP (planning, health information systems) and the national roll-out of the IMCI strategy. Finances from the Italian Development Cooperation (IDC) were also identified to support and expand the management of essential and referral neonatal care. Thoughtful collaboration with UNICEF and IFRC has also developed a coordinated strategy to provide essential drugs to various levels of the health system.

Proposed GAVI HSS activities are complementary to those of the WCHP in the areas of:
1) availability and sustainability of, and access to essential quality health services, especially for women and children;
2) improving the capacity of health facilities to deliver quality maternal and child health services;
3) promoting the involvement of individuals, families and communities in efforts to improve the health of women and children; and,
4) improving the health information system and strengthening management capacity for results-based programme management at all levels.

Finances

During the 1990s and the early half of the next decade, the total expenditure on health decreased from 7.6% in 1990 to 2.5% in 2004. However, total expenditure on health has also increased over the last five years, with the total health expenditure (THE) as a proportion of Gross Domestic Product in 2006 at approximately 6.3%, or nearly US$ 30 per capita. Private (out-of pocket) expenditure on health has, however, remained almost negligible: only 0.04% of THE, the lowest among the Member countries of the SEA Region.

Short planning cycles, and the need for financial information linked to Health Plan, poses challenges to predict government and donor commitments to health. This has important implications since increased maintenance and running costs cannot be met with the current level of expenditure. The development of a Medium Term Plan for health sector development should, however, facilitate the identification of funding gaps and help the Government and its partners to advocate for better coordination between health sector stakeholders.

Infrastructure and service delivery

DPR Korea has extensive health infrastructure, with 133 hospitals at the central and provincial levels, 601 at the county level (which provide secondary specialized care), and 6263 *Ri* clinics (which offer a range of essential medical and outreach services) and polyclinics (offering specialist services, traditional *Koryo* medicine, dentistry and surgery). This extensive infrastructure is indeed a positive and laudable feature of the health system of the country. However, there are indications of hospitals having more than the required capacity, with beds and human resources somewhat underused.

The poor quality of health services is also of significant concern as the damage to and degradation of physical infrastructure has left hospitals, sanitation and other systems in a reduced or marginal condition. Limited roads and communications infrastructure pose additional barriers to the optimum performance of the health system. This is of particular concern at the county and *Ri* levels and in relation to transport services as well as reliable electricity, heating and water supply. Principal constraints are lack of transport capital and financing of operational costs. This effects service delivery (e.g. patient referral, staff mobility and transportation of vaccines), as well as the operation of the waste management system. The situation of water and sanitation facilities poses challenging situation for hospitals to maintain the stipulated infection control standards.

Health system input indicators	
No. of Ri hospitals and polyclinics	7,237
No. of hospital beds	209,276
Population per hospital beds	114
Hospital beds per 10,000 population	187.6

Source: 11 Health Questions for 11 SEAR Countries; MoPH Key Facts 2007

Organization and structure of MoPH

The administrative structure of the MoPH offers opportunities for the comprehensive integrated HMIS given a number of mechanisms for monitoring the health system are already in place with ongoing efforts to integrate at the national level.

Surveillance of communicable disease, outbreak response and water quality monitoring is undertaken by the hygiene and anti-epidemic health stations – one at the central level, one in each of the 10 provinces, and 217 across the counties. Oversight of preventive health care and integrated disease surveillance are conducted by the Central Hygiene and Anti-Epidemic Institute (CHAEI) at the national and provincial levels. The CHAEI has a number of different "sections", including an information section, an epidemiology section which investigates outbreaks, microbiology and virology laboratories (polio, measles, influenza and avian influenza), and sections that support surveillance of malaria and parasitic diseases, as well as food safety. However, there are a number of gaps in the surveillance system. These include: the absence of disaggregated data, which limits identification/tracking of actual cases; non-standardized definitions and forms for data collection at different levels; and non-availability of threshold values for outbreak. The supervision system is weak and standard surveillance manuals are not available at all levels. Laboratory surveillance is also weak, compounded by the absence of epidemiological data in the laboratory forms.

Health workforce (see HRH Plan): Skill mix and training

DPR Korea has an estimated health staff of around 300 000. There is a medical university in each of the provinces from which these health workers graduate, and their physical numbers are robust at 32 per 10 000 population. The section doctor system (which provides integrated first line preventive and curative services) forms the basis of the health system in the country. However, there is an apparent shortage of nurses and midwives (physician-to-nurse ratio stands at 1:1.1). In addition, some medical practices and health standards are outdated due to limited access to new technologies and analytical and solution-oriented methods and approaches. Skills and methodologies in public health management and supervision for improved performance (microplanning and use of health information at the county level) are also not optimum or up to the mark. Additionally, these training institutions focus a disproportionate amount of time on knowledge acquisition rather than skills acquisition.

Human resources indicators	
Total no. of trained staff in health facilities	181 000
No. of physicians	75 609
No. of professional nurses	90 369
No. of midwives	6 743
Population per physician	314
Physicians per 10 000 population	032
Nurses per 10 000 population	038
Health workforce per 10 000 population	076

Source: Medium-term Human Resource Development Plan, DPR Korea, 2008-2010

Information for health planning and management

Health systems data are sub optimal in terms of accuracy and completeness, and the success of the health sector's efforts has been constrained by lack of evidence-based planning which may have affected efficiency and effectiveness of many institutions and institutional practices. Such a situation poses challenges for analysis of the health situation, identification of resource gaps, and development of an evidence base, which is critical for better health sector coordination. In addition, there is little or no disaggregation of data, particularly at the county level and below. Limited capacity for local-level analysis and use of data for decision-making compounds the situation further. This has constrained management and planning capacity to identify high-risk areas and appropriate corrective solutions.

Some efforts are, however, being made to address these and improve the use of health information and skills in health planning; particularly at the county level, where attention is most needed. Currently, the integrated Health Management System, Logistics Management Information System (LMIS)[2], and Health Information System are being developed through the WCHP and GAVI HSS. UNFPA, UNICEF and WHO also support the LMIS through the Central Medical Warehouse (CMW) and all provincial medical warehouses (PMW) (which will be expanded to county medical warehouses).

[2] for which development began in 2005.

In addition, operational research is perceived as increasingly important for facilitating implementation of public health activities in DPR Korea. As such, WHO is working closely with the National Institute of Public Health Administration (a designated primary health care (PHC) collaborating centre), including in areas of capacity-building for planning and management that incorporates in-service training, coordination of the baseline survey for MCH project, NCD risk factor survey, operational research, and initiating public health management courses since its designation as a WHO collaborating centre (WHO CC). Health research is an area of successful collaboration which can be built on further; and WHO is currently in the process of re-designating the National Academy of Traditional Koryo Medicine as a collaborating centre.

Medicines

The drug supply system is well organized to ensure the rational provision of medicines to all health facilities; and a computer network has been established by the MoPH to facilitate the management and use of medicines across all levels of the system. In addition, according to the Ministry, almost the entire population is able to access essential medicines from any point within a radius of 5 kilometres from their homes.

However, declining quality of care and subsequent underuse of hospitals and other health services has also been attributed as the reason behind chronic shortages of essential medicines, health equipment and laboratory reagents at all levels of the system. Since the early 1990s, local production of drugs has significantly declined and there are financial impediments in the way of import of medicines. Recent estimates suggest that less than 50 per cent of the total need for essential medicines is being met. In addition, about 260 drugs are registered as essential medicines and used across the health system, although a limited number (approximately 40) of drugs listed under the WHO Essential Medicines are used in urban polyclinics, people's hospitals in rural *Ri* and industrial clinics at the PHC level.

To date there has been limited financial investment in material and human resource support to strengthen capacity for the production of generic essential medicines and other supplies; and to ensure vaccine transportation and cold chain maintenance. International agencies provide substantial support for the import of essential medicines and for their limited local production. Approximately 70% of essential medicines for clinics and hospitals located outside the capital of Pyongyang are being provided by international organizations, particularly UNICEF and the ICRC.

DPR Korea has made headway in addressing these constraints since 2000 with support from WHO. A "joint-venture" pharmaceutical company was established through a twinning arrangement with a Swiss company. WHO provided technical assistance to ensure GMP compliance. Nonetheless, financial and capacity-building support is still needed.

Key health sector achievements and challenges
Achievements/strengths
▪ Extensive health infrastructure, from the primary to the tertiary care level. ▪ High immunization coverage. ▪ High proportion of institutional deliveries.

- Baby-friendly hospitals and high prevalence of breastfeeding.
- Significant reduction in malaria incidence and high coverage of DOTS.
- 300 000-strong corps of health workforce of different categories.
- Integrated health management, logistics and information systems being developed.
- One GMP-certified pharmaceutical production facility.
- Plans for institutional twinning arrangements.
- Development of sectoral strategies and plans (e.g. RH, TB, HIV, etc.).

Challenges

- Need for developing medium to long term plan for development of health sector.
- Weak planning, management and supervision skills at the county level.
- Fragmented health information system, resulting in limited and unreliable data; and correct analysis and use of data.
- Imbalanced skills mix of the health workforce.
- Limited resources for health promotion and primary prevention.
- Suboptimal quality of care at health facilities.
- Inadequate availability of medicines due to limited capacity of local production facilities that comply with GMP.
- High maternal mortality ratio; high prevalence of low birth weight.
- Limited capacity to respond to emerging and re-emerging communicable diseases.
- Risk factors for noncommunicable diseases, especially tobacco and alcohol consumption, and high blood pressure.
- Unstable power supply and inadequate heating in winter.
- Transportation (e.g. for referral and vaccines), and cold-chain maintenance constraints.

3. Development cooperation and partnerships: Technical assistance, aid effectiveness and coordination

Aid environment in the country:

DPR Korea currently does not have access to international financial institutions such as the World Bank, International Monetary Fund (IMF) or the Asian Development Bank (ADB). There are also very few international NGOs operating in the country and their cooperation with DPR Korea is under sustained international political pressure to the contrary. This is evidenced by OECD data, which show minimal aid flow to DRP Korea compared to other countries of the Region.

Moreover, estimates suggest that between 78% and 90% of all external assistance received by the country is of humanitarian nature, and thus possibilities for external funding remain fragile and unpredictable. As a result, sustainable development assistance is very limited. Combined with external cooperation being based on a largely issue-by-issue basis, this has been to the detriment of comprehensive sectoral assessment and development planning.

Despite limited technical and financial resources being received by the country, cooperation from WHO, other resident and non-resident UN agencies (UNICEF, UNFPA, WFP and FAO; and UNDP, UNIDO and UNESCO respectively), international agencies/NGOs (such as IFRC) and a handful of donors (such as the European Union, Sweden, Germany and the United Kingdom) has contributed conspicuously to national health development in the country. The exact magnitude of contribution over the years has not been estimated. However, a snapshot of financial resources provided by partners is presented in Table 1. The health sector has received a significant amount of financial support, second only to food security, which explicitly indicates the priority accorded to health by both the Government and its partners.

In addition, WHO is currently providing substantial financial and commodity support through a medium-term initiative-WCHP to improve maternal and child health as well as to the malaria control programme. In addition, GAVI-funded activities (US$ 4.8 million) are being implemented, and the GFATM has recently approved almost Euro 61 million to support activities targeting malaria and tuberculosis.

Table 1: Partners, areas of support and associated budget

Agency	Areas	Budget (US$, unless otherwise stated) 2009 (projected)
Resident		
WHO	Health Social determinants Environmental health	11.9 million
WFP	Food supplementation and fortification	324 million
UNICEF	Health Nutrition Education Water and sanitation	18 million
UNFPA	Reproductive health Census	1.9 million
FAO	Food and agriculture	3.2 million
IFRC	Health Water and sanitation Emergency preparedness	10.2 million
EUPS* 1	Health Food security	0.73 million 1.3 million
EUPS* 2	Health, water and sanitation, food security	2.7
EUPS* 3	Water and sanitation Livelihood security	2.4
EUPS* 4	Agriculture Forestry Water and sanitation Renewable energy	11-13
EUPS*5	Food security	3.12
EUPS*7	Health (people with disability)	N/A
US NGOs	Food assistance to two provinces Support to health institutions	N/A
Non-resident		
UNESCO	Education	223 000
UNIDO	Capacity-building for conformity assessment for export market access	7.06
UNESCAP	Regional and Economic Cooperation in NE Asia with focus on DPR Korea	0.5 million
Fred Hollows Foundation	Blindness control, especially cataract surgeries	N/A
Americares	Drug donation to selected health facilities	N/A
GAVI	Health systems strengthening, including development of sectoral plan, microplanning and public health education	3.2 million (over 5 years)
GFATM	Malaria Tuberculosis	16.3 million Euros (over 5 years) 44.8 million Euros (over 5 years)

*European Union Programme Support Unit

Alignment and harmonization as part of the principles of Paris Declaration

In the absence of a medium term plan for development of health sector, the WCHP has functioned as an "umbrella", facilitating the alignment of health programmes supported by other initiatives/agencies, and allowing donors to contribute in a coordinated and synergistic manner.

While there is no formal mechanism or partnerships platform for the coordination of external resources, collaboration between these agencies through more informal processes has enabled effective sharing of information and adoption of common strategies for the work of the partner community in the country. Any duplication or overlap could be mitigated if a donor coordination platform was formally established and a medium term plan for health sector development was in place.

Key highlights on the partner environment:

- MDGs 4, 5 & 6 provide an "umbrella" under which all partners are contributing to and coordinating their efforts.
- There exists a cohesive UN Country Team with active thematic groups and task forces.
- It appeared that there is a strong partner commitment to harmonizing UN and other programmes to avoid duplication and enhance complimentarity (Paris Declaration).
- The country is a good example of coordinated partner response—particularly to emergencies and epidemics such as the measles epidemic, avian influenza, drought and flood.
- The UN agencies have made joint efforts to mobilize resources for the health sector (e.g. GAVI, GFATM).
- WHO is credited as a health agency with a broad mandate and hence a good working relationship exists between WHO and other partners.
- Government agreement on the development/finalization of a Medium term plan for the development of health sector will help clarify the roles of different partners.

The United Nations

The United Nations System has been operating within the United Nations Strategic Framework—equivalent to the United Nations Development Assistance Framework (UNDAF) and focusing specifically on humanitarian assistance and the Millennium Development Goals. The UNSF is seen as a joint UN response to support the national development priorities of DPR Korea. Although envisaged as cross-cutting, health is not prominent enough in the current UNSF and is included within the social sector. The priorities identified in the subsequent section of this CCS should contribute to shaping the health dimension of the next UNSF to be developed next year.

These agencies coordinate their work within the UN Resident Coordinator System through various theme groups and task forces. Currently, WHO chairs the HIV/AIDS thematic group and the Maternal and Reproductive Health Taskforce. UNICEF chairs the health and nutrition, and

water and sanitation thematic groups; WFP the food security thematic group; and FAO the Agriculture thematic group. UNFPA chairs the task force on data and planning.

The role of WHO as the specialized agency for health is recognized within the UN country team. Agencies with health-related programmes – particularly UNICEF and UNFPA – seek technical advice and actively engage in partnerships with WHO. The proposed Joint Activities for 2009 Annual UNCT Workplan is a testimony to the degree of effective collaboration and coordination among UN agencies (see Appendix 1). Health development partners working in DPR Korea also identified a number of factors that make for viable cooperation in and with the country. A summary of this, along with partner perceptions of barriers to effective WHO cooperation in the current aid environment, is provided in Table 2 below.

Table 2: Stakeholder perceptions of strengths of and barriers to effective WHO cooperation in and with DPR Korea

Stakeholder perceptions of strengths of current cooperation in and with DPR Korea:
• Excellent coordination between WHO, Unicef and other partners: the situation in DPR K**orea** is very advantageous to good partner coordination. • The MDGs, for which WHO has a major stake, serve as an overarching umbrella for the UN programmes and help to harmonize the work of all the agencies/organizations. • Successful relationships with the Government provide partners with a good opportunity to achieve their goals. The Unicef measles campaign is a good example. • Development of a Medium Term plan of development of health sector will further facilitate a shift away from humanitarian assistance. • Having long-term staff in the Country Office ensures good institutional memory and understanding of country needs. • The partnership environment makes for a very tight-knit UN Country Team (UNCT).
Stakeholder perceptions of barriers to effective WHO cooperation in and with DPR Korea:
• WHO CO is understaffed and under funded. • There is some overlap between the work of WHO and UNFPA. • The different reporting requirements and administrative management systems are not aligned across all the UN agencies. • Staffing issues are a challenge for the UNCT. • The timeliness of WHO procurement has been an issue: emergency health kits provided by WHO during the 2007 floods arrived six months too late. • The Government and other development partners have expectations from WHO that go beyond it's normative work and mandate.

Implications of aid environment for WHO:

The recent initiatives (WCHP, GAVI HSS and Global Fund) suggest that long-term international partnerships and a shift from emergency to health sector development assistance are now feasible. Opportunities for mobilizing resources in the future for the health sector look promising. WHO thus has a key role to play in helping DPR Korea to mobilize additional resources, and sustain some of the improvements achieved through these (and other emerging) initiatives, since funding for both the WCHP and GAVI HSS ceases in the next few years.

Moreover, WHO has a key role to play in supporting Government-led health sector planning processes and health system strengthening initiatives that are responsive to country priorities.

WHO is also well placed to assist with the development of the Medium Term plan of development of health sector, which – among other things – will provide the Government with leverage for international investment; even more so given the developments around the concept of National Health Strategy validation.

WHO's support to the implementation, monitoring and evaluation of GAVI HSS and GFATM activities could promote further self-reliance to a greater degree by attracting national and international investment through the building of international partnerships.

4. WHO cooperation over the past CCS cycle

4.1 An overview of WHO cooperation

The office of the WHO Representative in DPR Korea (WR-DPR Korea) was established in 2001. Cooperation between the Organization and the Democratic People's Republic of Korea has been mutually beneficial and conducive since then. The nature of WHO's assistance in DPR Korea has adapted to the changing social and economic context in the country so as to address the health needs of the population.

WHO technical (and direct implementation) support has been critical to overall health development in DPR Korea. In more recent years, WHO has shifted its focus to health system strengthening through improving health services delivery, strengthening human resource development and disease surveillance, addressing maternal and newborn mortality, and enhancing the capacity of the International Health Division of the MoPH to further collaborate and partner with, and implement, donor-supported programmes.

WHO has also engaged actively with the Government and other partners to facilitate the implementation of large donor-funded programmes (e.g. WCHP and GAVI). Overall, WHO's key contributions have been consistent with the Organization's mandate as a lead technical agency, and with the Strategic Agenda jointly agreed upon with the MoPH in 2004. In addition, WHO has also supported the renovation of health infrastructure in the country.

WHO has successfully mobilized additional donor resources that have helped improve Country Office (WCO) capacity. Nonetheless, as WHO's role and scope of work continue to expand, WCO capacity needs to be further strengthened. In the context of the country's rapidly changing health development environment, the Country Office recognizes that the achievement of national health objectives, especially the health-related MDGs, will require substantial and coordinated efforts from WHO, the Government and its other development partners. To facilitate this (and consistent with its core functions), WHO needs to boost its role in coordinating with partners.

4.2 Operational aspects of the implementation of the Strategic Agenda

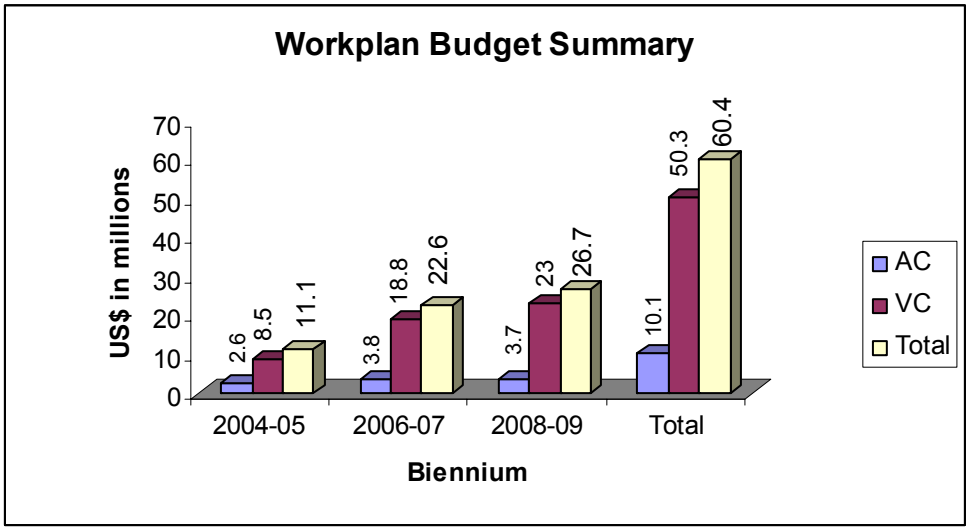
4.2.1 Resources: Budget, planning; staffing and infrastructure

As mentioned above, the WHO Country Office with a full-time WR to DPR Korea began functioning in Pyongyang in 2001 with two international staff, including an Administrative Officer. The international staffs were supported with staff seconded from the MoPH and the Ministry of Foreign Affairs (MoFA). As the Country Office was able to mobilize more resources for the health programmes in due course, three time-limited, project-tied international staff members joined to support major programmes in areas of women's and children's health, national capacity and systems for public health, control of communicable diseases including malaria, tuberculosis and HIV, and health emergency preparedness and response.

On an average the Country Office manages US$ 3 million under Assessed Contribution (AC) funds and between US$ 15 million and US$ 20 million under Voluntary Contributions (VC) made by various donors per biennium.

During the period 2004-2009, the planned budget totalled US$ 58.19 million. Assessed Contributions accounted for 17.3% (US$ 10.09 million) and Voluntary Contributions accounted for 82.7% (US$ 48.1 million).

The assessed contributions over the three biennium remained largely unchanged; however VC expenditures rose from US$ 8.5 million in the 2004-2005 biennium to approx US$ 23 million in 2008-2009 biennium. The country planning figure for the AC budget was US$ 3.72 million for the 2008-2009 biennia.



For the 2006-2007 biennium the planned cost for implementing the WCO workplans was US$ 18 777 519. Almost half of this figure (48%) was used to fund health system development. A further 38% was allocated to essential/priority health interventions. Only 6% was allocated to noncommunicable disease prevention despite the importance accorded to NCD risk factor reduction in the CCS. The remaining 7% was allocated to knowledge management and information technology as well as for WHO's core presence in countries (i.e. salaries of the WR and AO).

Although ACs accounted for 16.7% of the total budget, less than 16% of the Regular budget was allocated to priority health interventions (donor preferred) for communicable disease prevention and control as well as emergency preparedness and response, with voluntary sources contributing more than US$ 18.8 million of the US$ 22.6 million (83%).

Although the smallest priority in budgetary terms (US$ 450,000), almost 100% of the funds allocated to noncommunicable disease prevention, surveillance and management, were Assessed Contributions.

Health system development accounted for the largest share (48%) of the total budget. More than 88% of these funds were VCs, and although a substantial proportion of this share were funds for the WCHP, this has important implications for the sustainability of activities that will increasingly define WHO's work in and with the country.

Almost 100% of the US$ 1 million allocated to office management (i.e. knowledge management, IT and salaries, etc.) in the WCO was supported by regular ACs. However, in the 2008-2009 biennium, additional to the salary of core staff from ACs, operational funds were made available by the Regional Office using the AS and Core Voluntary Funds (CVC).

A total of 16 national staff (six National Programme Officers (NPOs), three support staff, five drivers, a gardener and a cleaner) are serving in the Country Office. All of them are seconded from the Government (MoPH and the MoFA). National staff works under a special arrangement between WHO and the Government, and as such have no direct contract with the WCO.

Given this limited capacity the Country Office relied heavily on technical assistance from the Regional Office and WHO headquarters. The nature of technical assistance varied according to the programme and mostly included training, dissemination of guidelines, introduction of WHO new tools, and review and assessment of ongoing programmes. Both the Regional Office and headquarters have prioritized Country Office needs to provide technical assistance, and the costs have largely been shared by different levels.

Recently the WCO has introduced a performance management and development system (PMDS) for the NPOs and support staff. However, staff turnover has constrained WHO's ability to strengthen its capacity to meet increasing demands.

The national staffs are not expected to have complete access to the newly introduced Global Management System (GSM) now, and at best will be given partial access in the future. This is likely to impact the Country Office's capacity for timely implementation. WCO is of the view that it may therefore needs to be strengthened with additional few key international staff; else the situation will remain a major impediment to optimum office performance.

The office itself is located in a building that was previously a private residence. As such, the space is limited and inadequate to comfortably accommodate all staff. Each staff shares a small office with another. Efforts are on to expand the office space and make it a more productive and conducive work environment. However, any changes can only be temporary since no permanent changes can be made to the current structure of the building.

Over the years, efforts have been made to obtain Government approval to set up satellite dishes in the homes of international staff and Internet connectivity in the office. Until recently, the WCO used UNICEF's EMC system to connect to the Internet, but the installation of a VSAT dish in February 2009 has improved the WCO's connectivity with headquarters, the Regional Office and other WHO offices through the Internet and GPN systems.

Outside of the Country Office, communication remains sub-optimal especially between international and national staff

4.2.2 Analysis of WHO contribution to health development through implementation of the CCS Strategic Agenda

Internal review

Discussions with the Country Office staff regarding WHO cooperation in and with DPR Korea over the last CCS cycle (refer to Appendices 2 and 3) revealed a good degree of alignment between the CCS and national priorities. Although a Medium to long term plan for development of health sector is yet to be developed, good communication between the MoPH (facilitated by the staffing arrangement whereby all NPOs are seconded MoPH or MoFA staff) has ensured that WHO collaboration over the past CCS cycle has been aligned with the Government's priorities. All strategic priorities are consistent with Government priorities—they reflect requests for support made by the Government to WHO. Subsequently, WHO has often provided support that extends beyond the scope of WHO's usual functioning in countries.

WHO's progress on the implementation of this Strategic Agenda

WHO cooperation over the past CCS cycle has been clustered around four strategic directions[3]. These include: 1) Reducing mortality and morbidity, especially among risk/vulnerable groups; 2) Promoting healthy lifestyles and reducing risk factors for health; 3) Health systems development; and, 4) Framing and enabling policy and creating an institutional environment for the health sector. Table 3 below summarizes the areas that WHO has contributed to over the past CCS cycle.

Table 3: Strategic directions and priority problems 2004-2008
1. Reducing mortality and morbidity, especially among risk populations *Control of communicable diseases* • malaria, • TB, • HIV, • immunization & vaccines, • disease surveillance and epidemic response, • maternal and child health.
2. Promoting healthy lifestyle and reducing risk factors for health *Control of noncommunicable diseases* • Tobacco control, • Integrated NCD surveillance and prevention (CVD, cancer, diabetes), • Community and mental health. *Blood and food safety* • Blood safety, • Food safety.
3. Health system development • Public health laboratories, • Essential medicine,

[3] "CCS priorities" were referred to as "strategic directions" in the previous CCS as per the first CCS Guide

• Koryo traditional medicines, • Technical and research capacity in public health and epidemiology, • Updating technical skills of health personnel, • Medical education, • Health care delivery to the communities.
4. Framing and enabling policy and creating an institutional environment for the health sector • Capacity of MoPH to work in partnership environment. • Capacity of WHO CO to provide support to the DPR Korea.

1) Priority 1: Reducing mortality and morbidity, especially among risk populations

WHO has provided technical support to strengthen knowledge and skills for diagnosis and treatment of malaria, surveillance and vector control. In doing so, WHO has helped to equip counties with microscopy facilities and anti-malaria drugs for all confirmed cases; to improve knowledge for early detection and treatment among health workers; and to improve laboratory capacity at the central level to facilitate diagnosis and quality-control training.

This has contributed significantly to the reduction of malaria incidence in the country. Since the introduction of selective and then subsequently mass chemoprophylaxis with primaquine on a yearly basis, DPR Korea has managed (despite programmatic constraints) to dramatically reduce yearly caseloads from that of 296 540 cases in 2001 to just 7436 cases in 2007, the latter being a 20.5% reduction from the 9353 cases reported in 2006. However, attention given to surveillance and integrated vector control has been much more limited, and insecticide has been difficult to come by.

Similarly, WHO's support to strengthening the DOTS programme contributed to achieving high DOTS coverage, especially through improvement of the quality of supervision of DOTS at the provincial level; establishment of culture and sensitivity testing and improvement in diagnosis and treatment of tuberculosis in children; technical guidance for programme monitoring; and the implementation of infection control measures. WHO's active involvement in the development of a successful proposal for TB and malaria funding through GFATM was another important contribution.

WHO has delivered on its commitment to support the development of national HIV/AIDS prevention strategies and facilitate collaboration between agencies for more coordinated implementation of the HIV programme. However, opportunities for WHO support to surveillance of STI and HIV infections has been more limited, and thus impeded the full implementation of this priority. WHO could also improve the degree of its contribution to health promotion activities.

As a key partner WHO has successfully delivered on its commitment (as evidenced by high immunization coverage) to strengthening EPI surveillance, the introduction of new vaccines (measles second dose), and strengthening the capacity of laboratories. However, lack of resources has affected its ability to improve EPI surveillance and contribute to ensuring sustainable access to vaccines. While WHO has provided laboratory equipment and reagents to three designated anti-epidemic institutes in the provinces, implementation of WHO's

commitment to strengthening disease surveillance and epidemic response has also been constrained by the non-availability of funds for the introduction of integrated disease surveillance in the whole country.

WHO's commitment to improve maternal and child health has been ambitious; however, it has succeeded in contributing to the expansion of Integrated Management of Childhood Illnesses (IMCI across 54 counties and its introduction into the curriculum of four medical universities through a pre-service package. WHO has also provided support to the development of guidelines on hospital care for childhood illnesses. Outside of the Strategic Agenda, WHO has also played a key role in facilitating the implementation of the WCHP, which has ensured a longer term commitment to addressing maternal, newborn and child health. Since 2003 WHO has supported the piloting of IMCI in two counties, and its expansion since 2006. By the end of 2008, in-service IMCI was operational in 56 counties (out of 165 accessible counties) and activities to expand to 27 more counties are ongoing in 2009. In addition, pre-service IMCI was expanded to five medical universities of the total of 10. IMCI will be expanded to another two universities in 2009.

Consistent with the National Reproductive Health Strategy (2006-2010) an Emergency Obstetric Care training package (for different levels of doctors) was developed, and more than 1000 doctors have been trained by 2008. WHO in partnership with UNFPA has reviewed and updated the training package and facilitated appropriate integration to promote competency-based learning and upskilling.

To address high rates of neonatal mortality, essential and referral newborn care packages were introduced for the first time, and the package for referral care for sick newborns was developed and expanded across the entire province of Kangwon in 2008. Discussions with university faculties and the MoPH have also paved the way for strengthening newborn care education in pre-service medical and nursing programmes in the coming years.

2. Priority 2: Promoting healthy lifestyles and reducing risk factors for health

Over the last CCS cycle WHO has provided support, primarily normative, to noncommunicable disease control (specifically, tobacco control and risk reduction of major noncommunicable diseases), as well as food and blood safety.

Specifically, WHO has provided technical support to adapt the Framework Convention on Tobacco Control and subsequent policy guidance to the drafting of tobacco control legislation and strategy, as well as evidence for and support to the development of improved health promotion initiatives to raise awareness about the detrimental effects of tobacco consumption. Again, surveillance proved a challenge, and impaired WHO's ability to fully deliver on this priority. Data on tobacco use is unreliable, and data on supply unavailable.

WHO has, however, made a notable contribution to strengthening NCD and risk factor surveillance through the introduction of the WHO STEP method for NCD risk factor survey and completion of a pilot survey. An NCD infobase for data management has been established and support provided to national capacity-building for data management and analysis. The use of survey results and data from this management system were, however, not apparent.

In terms of blood safety, WHO has delivered on its commitment to provide support to the formulation of a national blood safety policy. It also provided technical support, guidelines and standard operating procedures (SOPs) to enhance capacity for the use of blood safety technologies and injection practices at the central and provincial levels. Additionally, WHO facilitated resources for strengthening the blood transfusion services through blood centres and storage centres at provincial and county hospital levels.

On the other hand, WHO has made less than desired progress in implementing its commitment to strengthen managerial and technical skills for food inspection and monitoring. It has contributed to the development of a national food safety policy as well as in bringing about improvements in norms and regulation of food safety. It has, however, not provided training or support to strengthen managerial and technical skills for food inspection.

WHO has provided technical support, tools and guidelines to build national capacity for data management and analysis to improve NCD control (e.g. through the provision of guidelines for management of psychosis and epilepsy), and to inform prevention efforts. Given the need for a multisectoral approach to NCD prevention, WHO could have provided leadership and partner coordination to foster the same approach for NCD prevention and control. Views expressed during interviews with partners confirm a reliance on WHO for assistance in this priority area, along with partners such as EUPS 7. WHO's monitoring function can be applied once noncommunicable disease surveillance is improved.

3. Priority 3: Health system development

The CCS 2004-2008 orients WHO's contribution to health system development towards health workforce/human resource development; health system analysis (e.g. care needs and the system's capacity to respond to them); and the establishment of a health information system, analysis and planning process. However, WHO's contributions have extended far beyond these areas to include: a) public health laboratory strengthening; b) support to traditional Koryo medicine; and c) health-care delivery at the *Ri/Dong* level, for which it has provided technical support, guidelines and SOPs to improve the technical capacity of the national public health laboratory. WHO has also played a major role in advocating and building capacity for the local production of GMP-compliant essential medicines, and actively engaged with other agencies for the provision of these medicines.

Through the continuous support provided to strengthen the National Regulatory Authority and the National Control Laboratory, WHO has also provided assistance in reviewing and updating national drug policy and drug laws and regulations; defining norms and standards; developing an effective licensing system for pharmaceutical products, manufacturers and distributors; providing technical training to pharmaceutical inspectors to assess GMP implementation, and also to the post-marketing quality surveillance system and the independent quality control laboratory, among others. A joint arrangement was recently agreed upon with an international Swiss company that is now operating in one factory (PyongSu) to locally produce pharmaceuticals that conform to the GMP.

WHO support to the Ministry of Public Health's local manufacturers is helping promote accessibility, quality and affordability of essential medicine on the Essential Drugs List (EDL) for the population of DPR Korea, especially the women and children. In addition, every year WHO has provided raw material and the necessary ingredients to produce basic medicines on the EDL at the factory that was upgraded by the joint venture. The medicines produced are distributed to the MoPH's health facilities to treat the population free of cost. UNICEF and IFRC, the biggest medicine donors in DPR Korea, have also started to procure some locally produced medicine since the factory was GMP-accredited by a WHO consultant in 2008.

Additionally, WHO has provided supplies and technical support to the physical upgrading of national reference laboratories; and assisted with research in the area of traditional Koryo medicine to support integrated use of traditional and modern medicine in clinical practice at the primary care level.

Within the Strategic Agenda, contributions to institutional development (i.e. improving technical, research and planning capacity in public health) have mainly been through training and fellowships. These include the funding and facilitation of six MPH fellowships for NPOs, as well as fellowships for an epidemiology training programme, and funding and facilitation of DPR Korea's participation in inter-regional/international meetings on public health policies.

Training of national staff has been provided on different services such as IMCI for building institutional capacity through training; and financial support has been extended to renovate existing health facilities, including through WCHP initiative. In particular, WHO has facilitated the rehabilitation and renovation of *Ri* and county hospital operating theatres, delivery and emergency rooms, as well as public health and clinical laboratories. The 30 county hospitals that WHO helped upgrade in 2006 have since recorded a 9% increase in the number of surgical interventions annually, a 58% decrease in post-operative infections and a 46% decrease in the average referral rate.

Technical skills of the current health workforce has also been updated through the development of several standard medical textbooks (e.g. obstetrics, paediatrics and nursing) in Korean as well as WHO publications including the printing and dissemination of guidelines/manuals such as *Essential Surgical Care at the District Hospital.* Additionally, WHO-facilitated strengthening of the Grand People's Study House, or the central public library, to upgrade it into a depository library for WHO publications and internationally accepted medical and nursing textbooks. WHO has also provided technical support, guidelines and standards to improve the technical capacity of national reference laboratory staff to rapidly, and accurately, identify the causative agent of disease outbreaks.

Although not in the Strategic Agenda, WHO has supported the Government in the area of emergency response and preparedness. In response to the devastating floods of 2007 WHO together with other partners reoriented their support efforts to preparedness rather than response. Specifically, WHO has focussed on building the capacity of the MoPH for emergency preparedness, and has assisted with the development of the Emergency Health/Nutrition Preparedness Plan which is updated regularly to reflect lessons learned. WHO also provided technical assistance to the situational analysis and development of the Emergency and Trauma Care Strategic Plan, which includes referral system and injury prevention for improved safety in

health facilities during emergencies and improved emergency preparedness awareness at the community level.

Efforts to strengthen public health capacity for policy development and implementation, planning and management have been challenging in the prevailing situation. However, in the current environment WHO has made substantial progress on the implementation, monitoring and evaluation of this priority.

4. Priority 4: Framing and enabling policy, and creating an institutional environment for the health sector

Consistent with its core functions, WHO has worked to strengthen: a) the capacity of the MoPH to work in a partnership environment; and b) the technical capacity of the WCO for a timely and adequate response to country needs as well as its ability to attract more donor resource by building a credible country presence. To deliver on these commitments, WHO sought to: recruit more technical international and national staff to work in the areas of epidemiology, maternal and child health, and health systems development; and improve communication and information technology in the WCO.

Through improved collaboration with the MoPH, as well as thematic groups and joint activities (e.g. information sharing), WHO has been successful in improving coordination between partner agencies/organizations resident in DPR Korea and facilitating collaboration between these agencies and the MoPH.

Over the last CCS cycle, the WCO's ability to better respond to country needs has improved due to increased technical and financial management capacity among both international and national staff. Communication and access to information has also improved substantially since the Internet facility was available in the Country Office. However, the number of staff is not commensurate with the ever-expanding programme needs and associated budget.

Consistent with, but outside of the Strategic Agenda, WHO has been contributing to the creation of an institutional environment for the health sector by facilitating the implementation of several donor-funded projects in addition to the WCHP. These include GAVI-HSS, the "Partnership for Improving Child Survival"; "Meeting essential medicine needs of the vulnerable population" and "Strengthening disease control and surveillance in DPR Korea".

Consistency between CCS strategic priorities and the biennial workplan

The mapping of the Strategic Agenda in the CCS to Strategic Objectives in the MTSP and an analysis of workplan activities over the 2004-2008 period corroborated this review by showing that the biennial workplans focussed largely on strengthening health systems to respond to emerging and re-emerging communicable diseases, reduce maternal and child mortality and morbidity, and be able to tackle the challenge of noncommunicable disease control.

Specifically, WHO worked with the MoPH to: improve access to and availability of services including essential drugs and medicines, and enhance the quality and utilization of services. Skilled attendance at birth, initiation of newborn care and strengthening provision of

emergency obstetric care along with IMCI as core child health strategy contributed to early gains in addressing maternal, newborn and child health. Notably, the workplans also included strengthening of disease surveillance systems, building capacity to sustain high immunization coverage, and DOTS coverage.

Collaborative activities – and more generally WHO's technical support – were clearly demand-driven, responsive to the country's changing needs and based on jointly agreed assessments, plans and monitoring in which the role of the MoPH was integral (see Appendix 3).

In responding to these evolving needs, WHO supported priorities that were additional to those articulated in the CCS. These priorities were included in the workplan, reflecting the changing and evolving nature of programme implementation. The most significant was providing policy advice to the Government or country partners. One of the notable contributions was WHO's leading role in supporting, advising and coordinating "emergency preparedness and response". Activities were initiated in several other important technical areas that included review and further development of the health management information system, supportive supervision and quality assurance, laboratory services, safe abortion services, RTI/STI guidelines and adolescent health.

Among the other significant roles of WHO was providing technical assistance to support government preparation of various international proposals (e.g. GAVI HSS and the Global Fund). In addition, WHO participated in collaborative UN initiatives, such as the development of the UN Strategic Framework, UN Health theme group activities and joint programmes with other UN and international agencies, all of which may fall outside of WHO workplans.

Key highlights of WHO core functions:
▪ WHO technical (and direct implementation) support has been critical to health development in DPR Korea. In many areas, it is the only health development partner with the capacity and mandate to support the Government. ▪ WHO's contributions have been in the form of norms and standards (guidelines), guidance to policy formulation, and training. By the end of 2008, 27 evidence-based guidelines on maternal, newborn and child care, blood safety, laboratory services, emergency surgical procedures and public health management had been introduced. Teams of Master Trainers were established and cascade training of the health staff nationwide is now ongoing. WHO equipped training centres in four provinces and arranged overseas fellowships (maternal, newborn, child health and public health) for a number of national staff. ▪ WHO has successfully played the role of the health cluster lead by supporting other development partners, as well as through the development of guidelines, standards, technical assistance and training to build national public health capacity. Technical support to priority health interventions and health system development has been areas where WHO provided the comparative advantage. ▪ WHO has provided policy guidance in HIV prevention; technical support to strengthen the capacity of laboratories for EPI surveillance, and well as norms, guidelines and tools for the scale-up of DOTS and IMCI, along with technical

support for the local production of GMP-compliant medicines, all of which have been particularly notable.

- WHO has also engaged actively in partnerships with the Government and other partners by facilitating the implementation of WCHP and other partner-funded initiatives such as GAVI HSS. By the end of 2008, 7 million people including more than 600 000 children aged under five years and almost 140 000 pregnant women benefited from the first cycle (2006-2007) of the WCHP and the "Partnership for Improving Child Survival" (2008-09).
- WHO's contributions in terms of monitoring and evaluation have been more modest, due to the HMIS challenges and a high number of commitments outside of the Strategic Agenda.
- Outside of it's six core functions, WHO has supported the rehabilitation of 400 and equipped another 1,200 *Ri* health facilities, the provision of 6000 household doctors' bags, and the rehabilitation and equipping of 60 county hospital operating theatres and delivery rooms, 20 county hospital blood departments, four provincial/central blood centres, 20 county laboratories, four provincial training centres, six nursing and midwifery schools, as well as the emergency sections in 60 county hospitals.

External review

In addition to a critical review and discussion undertaken by the whole Country Office, a number of key partners and stakeholders were interviewed (see Appendix 5). The CCS team interviewed seven partners, including UN Agencies, one international organization, one embassy and one bilateral development agency. Their knowledge of WHO's contributions was in the context of their own contributions to health development, and partners were mostly aware of the broader and encompassing role that WHO has played as the lead health agency in DPR Korea. For example, where the partner worked in the area of nutrition, they were aware of WHO's contribution to this area but not the specifics of such contribution outside of this area. Their ability to provide the CCS team with specific insights was consequently limited. However, partners shared common perspectives on a number of issues vis-à-vis WHO's contributions. Partner perceptions confirmed those expressed by the Country Office staff during discussions and provided additional "external" insight with implications on how to improve WHO's cooperation in and with the country over the next CCS cycle.

Effective WHO contributions

Overall, WHO was perceived very positively by all partners working in DPR Korea. WHO was perceived as having "a lot of credibility and an excellent relationship with the MoPH" as well as other partners; its key contributions being in areas consistent with its mandate as a lead technical agency and its Strategic Agenda, as well as outside of these in terms of support to infrastructural renovation, specifically through the RoK Initiative and provisions of emergency relief supplies.

The technical capacity of WCO staff, national and international alike was considered to be very good by almost all partners. They, however, expressed that given the current volume and scale of

operations of WHO, it needs to further bolster its Country Office with necessary support from the Regional Office and headquarters. A number of partners also turned to WHO for guidance on health issues that their own work had implications for (such as the medium term plan for development of health sector, reproductive health strategy, national TB and malaria strategies, etc.) and guidance at the policy level. A number of partners mentioned WHO guidelines and protocols as key contributions that helped facilitate their own work as well as build national capacity.

Given the small number of partners currently working in the country, WHO's roles were multifarious and its comparative advantages many. WHO was described as a lead partner in and contributor to the area of communicable disease prevention and control — an area receiving only limited support, if any, from other partners (e.g. malaria, in which only one other partner is making a small contribution) — and technical support to proposal development, for which the capacity was described as "excellent". Successful applications for TB and malaria funding to GFATM was used as an example by a number of different partners. WHO's contributions outside of its mandate (traditional areas support) was also positively recognized by partners; and WHO was considered a collaborative and cooperative partner "willing to share information", and working closely with the MoPH and other partners from within and outside of the UNCT.

Contributions that could have been more effective

With a view to improve future WHO cooperation in the country partners also identified a small number of key areas where WHO's contributions or way of working could have been more effective. First, a number of partners articulated concern regarding the amount of time WHO took (six months) to procure emergency supplies (i.e. kits) during the 2007 floods. This was perceived as inadequate and suggestions were made for the use in future of procurement systems of other UN agencies.

The need for WHO to enhance support for the updating of policy and guidelines and facilitate adaptation to country context was also identified as an area for increased WHO assistance, and a contribution that would significantly facilitate/guide the work of partners in DPR Korea. Concern was also articulated regarding WHO requests to a donor for "no cost extensions". This is something that WHO should aim to minimize during the next CCS. Although not unique to WHO, better awareness of other partners' specific contributions to health development was also suggested. Better awareness of *exactly* what different partners are doing will also assist with resource mobilization and advocacy, as donors are increasingly focussed on the successful implementation of the Paris Declaration principles. The need for WHO to maintain a strong and visible presence as a key health adviser, particularly during crisis situations, was also highlighted.

Future collaboration with partners (based on internal and external review)

Successful contributions during the next CCS cycle will depend heavily on continued collaboration with the MoPH to ensure alignment with national priorities and continued effective communication with other partners regarding WHO contributions, in order to facilitate a more strategic division of labour between WHO and other health development partners. Closer collaboration with all partners will assist with the establishment of an integrated HMIS, the

generation of more reliable data, and the fostering of a more horizontal approach to health development across the whole sector.

Partners requested that WHO use its privileged position to negotiate with the MoPH for intensified and more horizontal collaboration between partners as well as the MoPH itself. Focus on maternal and child health is one priority area that can provide a starting point for scaling-up collaboration between partners, and there is scope for enhanced collaboration between WHO and the WFP in adolescent nutrition (including nutrition of women of the child-bearing age). Training of section doctors is another area where WHO needs to continue its collaboration with other agencies.

More generally, WHO's contributions outside of its traditional role and mandate were widely appreciated by the MoPH and other partners. Currently in the early stages of facilitating the Medium Term plan of development of health sector and sharing information on health financing options for different country contexts, WHO will need to provide continued support (such as infrastructural renovation, medicines and supplies) outside of its core functions.

Lessons learnt

This review highlighted WHO's unique position as the key collaborator and neutral adviser to the Government as well as partners. Partner perceptions highlighted the need for a Medium Term plan of development of health sector around which health development partners could organize their work, limit duplication and enhance complementarity for more strategic health sector contributions, as national capacity continues to develop.

Review of WHO collaboration in and with DPR Korea revealed/highlighted the following, all of which have important implications for the implementation of this CCS:

- WHO needs to anticipate and circumvent challenges associated with the use of different administrative and managerial systems by different UN agencies, to ensure that commitments can be honoured in a timely and responsive manner. WHO procurement and other management system issues must not be allowed to compromise the Organization's responsiveness to country needs where the MoPH has requested technical support or supplies.

- Consistent with its core functions, WHO needs to boost its partner coordination role to improve communication between health development partners to ensure that each partner is aware of *exactly* what other partners are doing (even outside of their own scope of work), and how they might be duplicating or could complement each others' contributions. This will prove particularly valuable in the context of developing the next UNSF in 2010.

- Similarly, given that WHO is the only agency working with the Government in many areas of health, the Organization needs to focus on providing support in these areas, and identify ways to enhance its contribution to other priority areas through collaboration with relevant partners.

- The WCO team is of the opinion that its capacity to meet country needs in a timely and responsive manner will be greatly enhanced by the addition of long-term international staff, with increased backstopping from the Regional Office and headquarters as necessary. This will also boost the ongoing collaboration with the MoPH based on trust and mutual accountability. Continued high turnover of technical staff could undermine the transfer of skills and sustained capacity development.

- Additional efforts should be made by WHO to implement donor funds as planned so as to minimize the need for "no cost extension" requests.

- Given the rapidly changing health development environment in the country, WHO should continue recognize that the CCS is a dynamic document. It must be prepared to modify the document to accommodate the country's changing priorities and partnership environment as required.

The internal WHO review and external review by partners suggests that the World Health Organization has made important contributions to health development in DPR Korea through the implementation of the 2004-2008 Strategic Agenda. However, the degree of achievement of certain goals was constrained by administrative and managerial processes and staffing within WHO. Achievement of national health objectives, especially the health-related MDGs, will require substantial and coordinated effort on the part of the Government and development partners. This CCS would provide a platform for coordination and the development of a comprehensive medium term plan for the development of health sector, as well as to shape the health dimension of the United Nations Strategic Framework.

5. Strategic Agenda for WHO cooperation in and with DPR Korea (2009-2013)

Many gains have been made in the field of health in the Democratic People's Republic of Korea since 2001. As stated in the earlier sections, enormous challenges, however, remain in the continuing quest to improve health services and the health status of the population. The Strategic Agenda for 2009-2013 defines what WHO will do to support the Government's efforts to address these challenges. The Agenda reflects, and is based on, the following:

- the key health and development issues/challenges facing the country, as analysed by WHO in consultation with national authorities and other partners;
- the MoPH policy and strategy orientations (health as a fundamental right and universal free health care);
- priority interventions that require WHO support, consistent with the Organization's core functions[4];
- the identified challenges and gaps in health development cooperation, especially keeping in mind the resource constraints specific to the current context of the country;
- "the unfinished agenda" (where relevant) of the CCS 2004-2008, based on the review of WHO's cooperation during this period;
- WHO's comparative advantage and contributions to the health sector, being made by other partners; and,
- the WHO General Programme of Work, the Medium-term Strategic Plan, and global and regional resolutions, orientations and priorities.

WHO's work will be guided by its core functions. As a technical agency with limited financial resources, WHO is less equipped to support the Government in tackling many of the challenges related to infrastructure, water and sanitation, medicines and supplies than some of the other partners working in the country. These partners will need to continue supporting the health sector based on their mandates and roles.

Given WHO's comparative advantage in DPR Korea, the role of the Organization between 2009 and 2013 will largely be to provide evidence-based policy advice, technical assistance, monitoring and evaluation, funding for a catalytic effect, resource mobilization and, in some cases, direct implementation as the country continues to develop its own capacity for implementation. In doing so, WHO will orient its contribution to build capacity (human resources and material) for sustainable health development and away from consumption-/supply-oriented activities. It will work in collaboration with bilateral and multilateral partners, international NGOs and other stakeholders.

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1) Providing leadership on matters critical to health and engaging in partnership where joint action is needed.

2) Shaping the research agenda, and stimulating the generation, dissemination and application of valuable knowledge.

3) Setting norms and standards, and promoting and monitoring their implementation.

4) Articulating ethical and evidence-based policy actions.

5) Providing technical support, catalysing change and building sustainable institutional capacity.

6) Monitoring the health situation and assessing health trends.

The Strategic Agenda identifies five strategic priorities for WHO's cooperation with the Government of DPR Korea:

1. Strengthening the health system to further develop capacity for policy development and implementation and planning, and improve services delivery.
2. Addressing women's and children's health.
3. Sustaining achievements made and further addressing communicable diseases.
4. Addressing the risk factors leading to increased prevalence of noncommunicable diseases.
5. Addressing environmental determinants of health.

Under each strategic priority, the Organization will focus on certain areas based on its core functions, and identify a strategic approach to address each of these areas. These approaches are consistent with the recent external review of the WCHP, which recommended that WHO: i) assists with the identification of an additional international financing source for the provision of essential medicines and equipment; and for the implementation of the human resource development plan; ii) initiates a structured planning process to prepare for the development of a Medium Term plan of development of health sector; and, iii) increases the number of WHO Country Office staff to provide support to the MoPH to bolster its capacity for monitoring, evaluation and research.[5]

1. Strategic Priority: Strengthening the health system to further develop capacity for policy development and implementation and planning, and improve services delivery

As described in the previous sections, DPR Korea faces a number of health system bottlenecks in the way of improved services delivery and quality of care, and ultimately, better population health outcomes. To support the MoPH in addressing systemic-level constraints, WHO will provide technical support and facilitate financial assistance in the areas of health policy and planning, health workforce development, partnerships for health, and the production of GMP-compliant medicines over the next five years.

1.1 Main focus: Development of an inclusive and comprehensive Medium Term plan of development of health sector.

> *1.1.1 Strategic Approach:* Provide technical and policy support for a comprehensive assessment of the health sector to inform the development of the Medium Term plan of development of health sector.
>
> *1.1.2 Strategic Approach:* Facilitate the stakeholder consultation process for the development/finalization of the Medium Term plan of development of health sector.

1.2 Main focus: Strengthening national capacity for international cooperation in health a*nd resource mobilization.*

[5] The Nossal Institute for Global Health is part of the Faculty of Medicine, Dentistry and Health Sciences at the University of Melbourne, Australia.

1.2.1 Strategic Approach: Provide technical and financial support to enhance MoPH capacity to work in a "partnerships environment", especially to engage, coordinate and improve international health development cooperation.

1.2.2 Strategic Approach: Facilitate Government efforts to mobilize resources to address health sector financing needs.

1.3 Main focus: Strengthen national capacity for the local production of generic medicines, vaccines and other medical supplies.

1.3.1 Strategic Approach: Assist MoPH in reviewing the existing policy and developing a comprehensive national medicine policy and programmes, including maintaining an essential medicines list.

1.3.2 Strategic Approach: Provide technical advice, tools and guidelines to support local production of GMP-compliant generic medicines and vaccines.

1.3.3 Strategic Approach: Provide technical and policy support to strengthen the national regulatory authority, including quality control of medicines and equipment through procurement and safe handling in central and provincial warehouses and the like.

1.3.4 Strategic Approach: Facilitate MoPH to advocate for resource mobilization to support capacity strengthening for GMP compliant local production and facilitate availability of essential medicines in collaboration with other international agencies.

1.4 Main focus: Strengthen the comprehensive, integrated and sustainable health management information system (HMIS).

1.4.1 Strategic Approach: Provide technical assistance and necessary equipment to support to the integration of vertical health information systems (currently being piloted in one province) for a comprehensive horizontal HMIS.

1.4.2 Strategic Approach: Engage with the MoPH and other relevant ministries to agree on practical steps for integrated disease surveillance for the generation of reliable and disaggregated disease-specific data.

1.5 Main focus: Further development of the health workforce, especially for mid-level health managers and primary health-care providers, to achieve free universal coverage.

1.5.1 Strategic Approach: Provide technical support for in-service training to build capacity for health planning and management.

1.5.2 Strategic Approach: Provide support to analyse the current health workforce skills mix (production, composition and distribution) and management.

1.5.3 Strategic Approach: Provide technical support to strengthen ongoing efforts to improve pre-service medical and nursing education.

1.5.4 Strategic Approach: Engage with the MoPH and national institutions to support further development of public health education, including the provision of short- and longer-term courses.

1.6 Main focus: Support the development of implementation of quality standards from the central to the household doctor level to improve quality of care.

1.6.1 Strategic Approach: Provide technical advice, up-to-date guidelines, tools and manuals/material for health promotion and prevention, diagnosis, treatment and infection control through patient safety and essential and emergency hospital care.

1.6.2 Strategic Approach: Provide support (technical/financial or measurement tools) for supervision and quality assurance at all levels of the health system.

1.6.3 Strategic Approach: Provide support to strengthen capacity of health facilities, laboratories and blood centres, both in terms of equipment and diagnostics including use of innovative approaches such as telemedicine network.

1.7 Main focus: Strengthen capacity for research, and use of the results of this research to inform evidence-based policy, planning and decision making.

I.7.1 Strategic Approach: Provide technical support for health systems research to inform the development of national plans and programmes and integration of the different health information systems.

1.7.2 Strategic Approach: Build capacity through technical support/training for operational and clinical care research.

2. Strategic Priority: Addressing women's and children's health

The health of women and children is a key priority in DPR Korea, and an area currently receiving a substantial amount of financial support, particularly through WCHP; Partnership for Improving Child Survival; the "Strengthening Local Action for Improving Child Survival"; and GAVI HSS.

Over this CCS period WHO will facilitate the implementation of, and complement these ongoing activities by providing support for, capacity-building and institutional strengthening; and will endeavour to improve the quality of maternal and child health care. Specifically, WHO will support the improvement of infrastructure, enhancing the skills of the health workforce, as well as the bolstering of surveillance, monitoring and evaluation.

2.1 Main focus: Support efforts to improve maternal health, emergency obstetric care and neonatal care, and reduce mortality and achieve the MDGs 4 and 5.

2.1.1 Strategic Approach: Provide support to improve infrastructure (through the WCHP and other initiatives) for better maternal, newborn and child health.

2.1.2 Strategic Approach: Provide support to increase opportunities to improve skills for safe delivery, essential and specialized newborn care, and referral care.

2.1.3 Strategic Approach: Provide technical support to Government/partner-led initiatives addressing micronutrient deficiencies among women to improve maternal health and reduce the number of low-birth-weight infants.

2.1.4 Strategic Approach: Provide technical advice, tools and guidelines for the prevention and management of malnutrition in children and promotion of appropriate infant and young child feeding practices.

2.2 Main focus: Support efforts to further improve the integrated management of childhood illnesses (IMCI) at the primary care and hospital levels.

2.2.1 Strategic Approach: Provide support to expand IMCI at the hospital level and further improve the quality of child health services.

2.2.3 Strategic Approach: Provide technical support to strengthen supportive supervision, monitoring and evaluation of IMCI implementation and other child health interventions.

2.3 Main focus: Provide technical support towards the implementation and further development of the National Reproductive Health Strategy.

2.3.1 Strategic Approach: Support surveillance and screening of diseases contributing to reproductive morbidity and engage with the MoPH to agree on steps for the surveillance of maternal and reproductive morbidity.

2.3.2 Strategic Approach: Engage with the MoPH and partners in addressing the unmet need for family planning services and assist the MOPH in expansion of safe abortion services.

2.3.3 Strategic Approach: Provide technical support to assess and facilitate the availability of services to prevent and treat reproductive cancers, sexually transmitted illnesses (STIs) and reproductive tract infections (RTIs).

2.3.4 Strategic Approach: Engage the MoPH and other relevant ministries/stakeholders in addressing and developing adolescent and youth health and development strategies and programmes.

3. Strategic Priority: Sustaining achievements made and further addressing communicable diseases

As described above, DPR Korea has made considerable achievements in health over the last decade, particularly in the prevention and treatment of *P. Vivax* malaria, the detection and treatment of TB, and in vaccination coverage. The challenge now is for DPR Korea to sustain these achievements while addressing new and emerging communicable diseases. Over this CCS cycle WHO will provide technical support and facilitate financial support to improve surveillance, introduce new vaccines, facilitate implementation of IHR and emergency preparedness, and build national capacity.

3.1 Main focus: Provide technical support to build capacity for the strengthening of integrated disease surveillance.

3.1.1 Strategic Approach: Engage with different departments within the MoPH to agree on practical steps for integrated communicable disease surveillance.

3.1.2 Strategic Approach: Provide support to the MoPH to ensure the availability of standard surveillance material at all levels.

3.1.3 Strategic Approach: Provide technical support to assist the MoPH to obtain disaggregated data.

3.2 Main focus: Provide technical and financial support to sustain high immunization coverage, improve coverage (particularly of the Hepatitis B vaccine), and introduce new tetravalent and pentavalent vaccines.

3.2.1 Strategic Approach: Assist the MoPH with resource mobilization and build government capacity for management, implementation and monitoring of GAVI (ISS and New and Underused Vaccines) funds.

3.2.2 Strategic Approach: Provide continued support to improve capacity of the vaccine and medicine laboratories in meeting GMP standards and improving diagnostic capacity and treatment.

3.2.3 Strategic Approach: Facilitate twinning arrangements with the vaccine production laboratories in other countries (already started with Switzerland and Indonesia).

3.3 Main focus: Support the implementation of International Health Regulations (2005) (IHR (2005)) and national preparedness for emerging diseases (e.g. SARS and avian influenza)

3.3.1 Strategic Approach: Engage with the Government to increase awareness of the IHR (2005) among staff in all ministries concerned.

3.3.2 Strategic Approach: Provide technical assistance to the MoPH and other ministries to develop a plan that defines the responsibilities of each ministry and requirements for effective implementation.

3.3.3 Strategic Approach: Support in building core technical capacity for the implementation of IHR (2005), including collaboration for IHR (2005) surveillance, reporting, notification, verification, and response activities (through a train-the-trainer initiative).

3.3.4 Strategic Approach: Provide tools, guidelines and technical support to build capacity for emerging communicable disease emergencies.

3.4 Main focus: Provide further support to capacity-building for sustained high DOTS coverage.

3.4.1 Strategic Approach: Facilitate MoPH efforts to obtain drugs for DOTS until funds from GFATM are received.

3.4.2 Strategic Approach: Build local technical capacity for the implementation of the dual component of the Stop TB Strategy, including childhood TB.

3.5 Main focus: Provide further support to capacity-building for the elimination of malaria (through cross-border collaboration).

3.5.1 Strategic Approach: Provide continued technical support and expertise to all activities aimed at eliminating *P. Vivax* malaria.

3.5.2 Strategic Approach: Facilitate inter-regional collaboration by capitalizing on WHO's role as a neutral partner and as the only UN specialized agency working with the Government to eliminate malaria.

3.6 Main focus: Support Government efforts in HIV prevention and health promotion, and the prevention and treatment of other communicable diseases.

3.6.1 Strategic Approach: Provide support to develop, implement, monitor and evaluate HIV prevention initiatives including information, education and communication, and behaviour change strategies.

3.6.2 Strategic Approach: Extend support for the introduction, strengthening and expansion of quality HIV testing and counselling services, and youth-friendly health services.

3.6.3 Strategic Approach: Provide support to develop, implement, monitor and evaluate health promotion initiatives for communicable (including parasitic) diseases such as STH.

3.7 Main focus: Provide support to build the capacity of health institutions to provide services for prevention, diagnosis and treatment of hepatitis.

3.7.1 Strategic Approach: Provide support to develop a national strategic plan for the control of hepatitis.

3.7.2 Strategic Approach: Assist the MoPH to: i) sustain support from international organizations for the supply of Hepatitis B vaccines; and, ii) maintain high immunization coverage.

3.7.3 Strategic Approach: Provide technical support to improve hepatitis surveillance and improve laboratory capacity for diagnosis.

3.7.4 Strategic Approach: Support the development of traditional medicine for the treatment of hepatitis through continued collaboration with the Academy of Koryo Medicine.

4. Strategic Priority: Addressing the risk factors leading to increased prevalence of noncommunicable diseases

The increasing prevalence of noncommunicable diseases (particularly cancers and cardiovascular and cerebrovascular ailments) is another significant health challenge facing the country, as well as an important health priority. WHO will play a key role in supporting the MoPH with integrated planning, surveillance, and coordination of partners to address numerous noncommunicable disease risk factors.

4. 1 Main focus: Strengthen NCD surveillance and support the development of a national action plan for integrated prevention and control of NCDs.

4.1.1 Strategic Approach: Advocate for and support the development of the multisectoral national action plan for integrated prevention and control of NCD, addressing risk factors for NCDs such as diabetes, cardiovascular disease and cancer.

4.1.2 Strategic Approach: Engage with the MoPH to build capacity for implementation of this plan and other multisectoral NCD policies and programmes.

4.2 Main focus: Support the ministry of health to scale up tobacco control through implementation of the MPOWER policy package**.**

4.2.1 Strategic Approach: Provide technical support to the MoPH to finalize the draft tobacco control legislation.

4.2.2 Strategic Approach: Provide support to the MoPH to develop/update the implementation plan of the tobacco control policy as well as health promotion materials, and raise the levels of tobacco surveillance.

4.3 Main focus: Provide technical support to, and assist MoPH in their coordination of partner efforts in the area of, injury prevention and trauma care.

4.3.1 Strategic Approach: Provide technical support to MoPH and work with European Union Programme Support Units (EUPS to scale up prevention activities for and improve treatment of injury and trauma.

5. Strategic Priority: Addressing environmental determinants of health

Since the early 1990s DPR Korea has been affected by numerous environmental determinants that have compromised the national health system's capacity to respond to the health needs of the population. As health development partners have shifted their support to development and away from humanitarian assistance, environmental determinants of health have become a key area for WHO contribution. Over this CCS cycle WHO will support the Government to build awareness of the relationship between environment and health, and bolster operational capacity for preparedness and response to environmental emergency as well as national capacity to address other environmental determinants of health.

5.1 Main focus: Preparedness and effective response to emergencies (e.g. floods, droughts).

5.1.1 Strategic Approach: Support the Government to further build existing capacity for emergency preparedness and response at all levels.

5.1.2 Strategic Approach: Continue to provide support to the development of norms and standards for strengthening national emergency preparedness plans and programmes (including safety in health facilities during emergency) to ensure a timely response to natural and other disasters.

5.2 Main focus: Testing and monitoring of water quality and measuring and monitoring pollution.

5.2.1 Strategic Approach: Provide technical support, equipment and training to laboratory personnel to build local capacity for testing and monitoring water quality.

5.3 Main focus: Provide support to improve current waste management practices in hospitals.

5.3.1 Strategic Approach: Provide training, guidelines, tools and manuals to enhance understanding of the technical aspects of hospital waste management among authorities and health personnel concerned.

5.4 Main focus: Engage with the MoPH in its efforts to raise awareness of the health consequences of climate change and other environmental factors.

5.4.1 Strategic Priority: Engage with the Government and other partners to raise awareness of the health consequences of climate change.

5.4.2 Strategic Priority: Provide technical support and training to strengthen capacity for analysis of the impact of different environmental factors on the health of the population.

5.5 Main focus: Strengthen capacity to ensure food safety.

5.5.1 Strategic Approach: Provide necessary equipment to strengthen the capacity of the central laboratories to detect threats to food safety (i.e. test for pesticides, other chemicals and toxins; conduct microbial analyses; and undertake surveillance of food borne diseases).

5.5.2 Strategic Approach: Provide technical support and training to increase national standards for food safety (Codex Alimentarius) *and* supply rapid response kits for food poisoning and other food safety issues.

6. Implementing the Strategic Agenda: Implications for WHO Secretariat, follow-up and use of CCS at each level

The Strategic Agenda identified in the CCS, though ambitious, will be part of a collaborative response to the enormous health challenges currently facing the country. WHO will have to sustain and consolidate the current technical cooperation in the areas of maternal and child health, TB and malaria control. It will need to increase its levels of cooperation to build capacity for health policy, planning, and management by supporting, for example, facilitating medium term plan for the development of health sector, integrated HMIS and integrated disease surveillance, the local production of generic medicines, improved quality of care through renovation of infrastructure, the provision of equipment/supplies as well as health education and health promotion. WHO will need to continue to provide direct implementation support during this CCS period for initiatives such as WCHP, GAVI and GFATM, until national capacity is full developed.

The existing Country Office capacity and competencies, including the back up from the Regional Office and headquarters, was reviewed to identify gaps, if any, to adjust the current arrangements for implementation the CCS Strategic Agenda more effectively.

Human resources

Additional technical support is required to more effectively address the strategic and technical role outlined in the Strategic Agenda. Some of the current staffing constraints which need consideration in the biennial workplans are:

1. International technical expertise, short- or long-term, in the area of health systems, particularly with health planning development, health information systems and human resources for health.

2. Short-term international expertise on noncommunicable diseases, especially that of an epidemiologist for the development of a national strategy and plan, and institutional development in the area of NCDs.

3. Strengthening country office capacity to support programme planning, monitoring and evaluation. For example, appointment of one fixed-term international staff in addition to the WHO Representative (WR) and the Administrative Officer (AO) preferably with AC funds since VC funds are not reliable enough for being earmarked for a long-term post.

4. Provision for enough ACs under Strategic Objectives 12 and 13 for the management and operation of the Country Office. During the 2008-2009 bienniums, there has been no AC allocation for the Country Office except against the salaries and duty travels of the WR and AO. If possible, such a provision should be initiated in the 2010-2011 biennium.

As the Country Office is seen as the key health sector adviser to the Government, it is important for it to be engaging with other sectoral ministries to address the social determinants of health and continue to play an active role among a broader set of partners and stakeholders. This will enhance coordination and synergies between the activities of different partners. The Country Office shall use its privileged position to foster closer and more horizontal collaboration between partners as well as the MoPH. Facilitating partnerships and performing coordination roles are the key approaches that the Country Office shall pursue to fulfil the CCS agenda. To fulfil this role effectively, it is important to ensure that Country Office staff has the necessary skills in areas such as advocacy, sectoral approaches and resource mobilization.

It is suggested that an assessment (through various means such as organizing a retreat) be undertaken to determine the specific skill sets required and formulate a realistic implementation plan in this regard for inclusion in the workplan for 2010-2011.

Support from the Regional Office and WHO headquarters may be solicited for advocacy on modifying or up-scaling staffing arrangements. United Nations Country Team (UNCT) discussions are on regarding potential negotiation with the Government for exploring direct payment of a small number of seconded national staff to allow for better staff flexibility, professional development and GSM access. UNDP re-established its presence in the country mid-2009 in accordance with their agenda.

The working environment

The available office space is currently limited due to the configuration of the building in which the Country Office is situated. There are plans to expand this space and make it a more productive work environment conducive to the necessary degrees of collaboration between Country Office staff. Efforts are on to improve communication and facilitate collaboration with other levels of WHO as well as partners outside the country, and the approval of the Government is being sought to set up Internet connectivity in the private residences of international staff.

Implications for the Regional Office and headquarters

Given the type and volume of technical support required to implement the Strategic Agenda, the recruitment of technical staff for the Country Office does not preclude the need for continued back up from the Regional Office and WHO headquarters. The required technical support will be identified and agreed upon with the Regional Office at the beginning of each biennium during the workplan development and "country days". The Regional Office will also need to facilitate inter-regional multicounty collaboration; particularly in the areas of IHR (2005), environmental determinants (e.g. testing water quality), food safety, educational fellowships, traditional medicine, malaria and other communicable diseases. Additionally, efforts will need to be made across all levels to address financial, supply/procurement and IT issues that will constrain the implementation of this Strategic Agenda.

In addition, the Country Office will work together with partners working in the country to implement the Strategic Agenda. Table 4 summarizes the major type and nature of back up required from other levels of WHO and collaboration from partners.

Table 4: Back up and collaboration required for successful implementation of the key areas of the Strategic Agenda.

Strategic Agenda	Back up	Collaboration
1. Strengthening health systems: • Medium term plan for development of health sector • Capacity development for international cooperation • Health Information Systems • GMP standard production of medicines locally.	HSD/SEARO, HSS/HQ PPC/SEARO, PUN/HQ HSD/SEARO, MHI/HQ HSD/SEARO, HSS/HQ	External institutions, GAVI HSS Global Fund HMN, UNFPA UNICEF, IFRC
2. Addressing women's and children's health: • Improve Emergency Obstetric Care and neonatal care • Improve IMCI services at primary and hospital level • surveillance and screening of diseases contributing to reproductive morbidity • Sustain high coverage of immunization and introduce new vaccines.	FCH/SEARO, FCH/HQ FCH/SEARO, FCH/HQ FCH/SEARO, FCH/HQ IVB/SEARO, FCH/HQ	UNICEF, UNFPA, IDC, ROK, WFP UNICEF UNFPA UNICEF, GAVI, IFRC
3. Sustaining achievements made in communicable disease control: • Integrated disease surveillance • Implement IHR (2005) • Sustain high coverage of TB and malaria control • HIV prevention • Preparedness and effective response to avian influenza.	CDS/SEARO, HTM/HQ CDS/SEARO, HSE/HQ CDS/SEARO, HTM/HQ CDS/SEARO, HTM/HQ CDS/SEARO, HSE/HQ	IFRC, UNICEF, FAO Global Fund, UNDP Global Fund, UNDP FAO, UNICEF, WFP, UNFPA
4. Addressing the risk factors leading to increasing prevalence of noncommunicable diseases: • National action plan development • Scale-up of tobacco control.	NMH/SEARO, NMH/HQ	Handicap International and other partners working in this area.
5. Addressing environmental determinants of health: • Preparedness and effective response to emergencies • Water quality monitoring	EHA/SEARO, HAC/HQ	UNICEF, UNFPA, WFP, FAO, OCHA, IFRC, UNDP

• Awareness on climate change • Food safety.	EHA/SEARO, HSE/HQ EHA/SEARO, HSE/HQ NMH/SEARO, MH/HQ	UNICEF UNICEF, WFP, FAO

Resource mobilization

During the biennium 2008-2009 WHO has successfully mobilized important voluntary contributions for donor-preferred priority disease interventions in the case of tuberculosis and malaria (from GFATM), and vaccines and immunization (from GAVI). Additional resources mobilized have approximated US$ 20 million per biennium.

To achieve the ambitious agenda of this CCS, additional resources will need to be mobilized for the Country Office, the Government and CCS priority areas. This will be a challenging task in the context of the global financial crisis of 2008-2009 and the Regional Office and headquarters will need to support the country team to develop capacity to mobilize resources drawing on lessons from GAVI HSS and GFATM experiences as well as through new and innovate methods. The Country Office will need to provide necessary support to the Government not only to build their capacity for mobilizing resources but also their capacity for coordinating external resources for effective and efficient use of the external resources mobilized.

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Appendix 1: Joint activities for 2009 Annual UNCT Workplan

Joint activities for 2009 Annual (UNCT) Workplan					
Major joint activities	**Year 2009**				**Partner agency**
	Q-1	**Q-2**	**Q-3**	**Q-4**	
National Nutrition Survey 2009	X	X			WFP
National Multi-Indicator Cluster Survey				X	UNICEF
Implementation of "section doctor" package			X	X	WHO/UNICEF/UNFPA
Prepare/update Inter-Agency Contingency Plan for Disaster Preparedness and Response	X	X	X	X	WHO/UNFPA/WFP
Emergency obstetric care (Emoc) and newborn care	X	X	X	X	WHO/UNFPA
Establish Pyongyang Maternity Hospital as the "centre of excellence" for EmoC and newborn care	X	X	X	X	WHO/UNFPA
GAVI application for the introduction of new vaccine		X	X		WHO/UNICEF
Revise EPI multi-year plan			X	X	WHO
Support training institute to enhance quality of training	X	X	X	X	WHO/UNFPA/UNICEF
Logistics management at Central Medical Warehouse and Provincial Medical Warehouse		X	X		UNFPA/WHO
Promotion of exclusive breastfeeding and complementary feeding	X	X	X	X	WHO/UNFPA/UNICEF

Appendix 2: Past cooperation

Country Cooperation Strategy, DPR Korea 2004-2008: Achievements and constraints

Strategic Direction 1: Reducing mortality and morbidity, especially among risk population

1. Control of communicable diseases

Priority problem	Challenges	Opportunities	WHO priority	Expected results from WHO collaboration	Achievements	Constraints
Malaria	· Early diagnosis and appropriate treatment of malaria cases · Availability of anti-malaria drugs · Knowledge on malaria epidemiology and vector control	· There are only reported cases of *P. vivax* · High government commitment · Approval of GFATM Proposal for 2009-2013	· Strengthen knowledge and skills of diagnosis and treatment of malaria · Knowledge of malaria epidemiology, surveillance and vector control · Improved access to malaria diagnosis and treatment at the community level · Increase partnership with other agencies on Rollback Malaria (RBM)	· More effective malaria control, particularly in case detection, case management and vector control · Reduction of malaria transmission	• Most of the malaria epidemic counties have been equipped with microscopy facilities. There is the availability of anti-malaria drugs for all cases confirmed • Improved knowledge on the early detection and prompt treatment of cases among malaria health workers • Dramatically reduced malaria transmission Improved laboratory capacity at the central level for facilitation of laboratory training on malaria diagnosis and quality control	• Relatively less attention on surveillance and integrated vector control Difficulty in getting appropriate insecticides for IRS
Tuberculosis	Expansion of detection	• Very good participation	• Strengthen and expand	• Improved TB	• The quality of	• No funding source committed

Priority problem	Challenges	Opportunities	WHO priority	Expected results from WHO collaboration	Achievements	Constraints
	and DOTS services throughout the country. • Shifting from institutional case management to ambulatory treatment • Availability of anti-TB drugs **New challenges faced during implementation** Sustainable funding source not ensured The level of diagnosis on sputum smear test not equalized at all levels under the QA system Supervisory activity implemented in unplanned way Not all *Ri* clinics are involved in implementation of DOTS strategy. Appropriate measures not taken to stop transmission of TB by undetected or hidden TB cases	and good health infrastructure • Very effective drugs • Multi-year support from GFATM/GDF **New opportunities** ARTI Survey 2007 provided baseline data of DOTS programme along with a somewhat realistic picture of TB epidemic GFATM offered DPR Korea to apply for R8 grant Routine supervisory activity from lowest level to referral level systematized and needs assessment for solution of problems of NTP by WHO/GDF Joint Monitoring Mission available on annual basis Household doctor system already in place for expanding DOTS programme GDF already committed another one-year grant on exceptional basis for DPR Korea Patient-wise kit introduced	the scope of treatment of TB • Strengthening of management of DOTS programme • Improving quality of supervision at provincial level • Establishing culture and sensitivity testing • Diagnosis and treatment of tuberculosis in children **Emerging priorities** Assist in ensuring funding source sustained for DOTS expansion programme. Build up in-country technical capacity across the health-care system in order to implement newer component of Stop TB Strategy Enhance Quality Assurance system between TB microscopic centres in hospitals under the supervision of QA laboratory centre in central TB preventive institute Ensure Anti-TB drug supply in patient-wise kit Strengthened recording and reporting system and routine collaborative supervisory activity with WHO for finding immediate, on-the-spot solutions and taking	detection and cure rate • Improved coverage of DOTS services • Reduction of TB transmission **Additional expected results** Long-term commitment made by external funding sources to bridge the gap in TB control programme financing Technical guidelines for introduction of newer interventions and technology being available for effective and efficient control of TB epidemic QA system fully operational and effective and culture and drug-susceptible testing facility to be placed in central TB institute for identification of MDR-TB pattern and initiation of MDR-TB management programme	DOTS implementation is sustained and improved. • Existing health-care system fully mobilized for controlling TB epidemic • Improved laboratory services supported by QA system culture • Drug-susceptible testing available in DPR Korea for applying for GLC and effective management of MDR-TB cases. • Programme monitoring plan in place in which WHO/DPR Korea and NTP jointly collaborated for giving appropriate on-spot guidance to remedy faults • Reporting and recording system is fully computerized and networked with NTP/MoPH as the hub >95% of TB care settings have infection control measures taken and all health staff are aware of protective measures	for implementing five-year strategic plan of TB control • Prospect of getting GFATM R8 grant is uncertain due to pending nomination of PR and delayed negotiation process • One third of TB microscopic centres are not fully functional due to breakdown of facilities and lack of reagents • Culture and drug-susceptible testing centre in central TB Preventive Institute not functional due to unmet need of facilities. • Training and supervisory plan not fully carried out due to lack of funds Though 10 computers have been provided to the provincial TB preventive institute for data management, more input is required for networking these computers with the central hub in NTP/MoPH

Priority problem	Challenges	Opportunities	WHO priority	Expected results from WHO collaboration	Achievements	Constraints
			immediate remedial action Hospital infection control measures to be ensured in all health settings with special attention to the settings where MDR-TB cases are handled	Patient-wise kit utility generalized down to *Ri* level Strengthened recording and reporting system ensured by computer-based network being available and supervisory activity in place on routine basis with the involvement of WHO/DPR Korea country office. Guideline for hospital infection control in TB care settings to be developed and health facilities to be equipped with infection control measures	against MDR-TB	
HIV/AIDS	• Shifting strategy from blood tests of travellers to surveillance of STI • Promotion of condom use **New challenges faced during implementation** HIV/AIDS prevention programme is less prioritized despite the alert of increased epidemic in	• Good access to communication **New opportunities** Strategic plan for HIV/AIDS prevention adopted in 2008 National AIDS Committee revived for closer intersectoral cooperation	• Development of national HIV/AIDS prevention strategies • Improve surveillance of STI and HIV infections • Advocacy for better access to and use of condoms at the community level • Improving knowledge and skills for prevention and management of sexually transmitted diseases • Strengthening	• Improved national strategies for HIV AIDS prevention • More effective and sensitive HIV/AIDS and STI surveillance and management • Better coordinated interagency support **Additional**	Testing and counselling services are available and health staff are fully trained on the technique of counselling HIV/AIDS prevention programme is implemented in collaboration with other sectors Reporting format is	Coordination body between UN agencies weak Lack funds allocated for provision of reagents Less training and IEC campaign for counselling and proactive involvement of general population in the counselling and testing Monitoring and reporting less systematized

Priority problem	Challenges	Opportunities	WHO priority	Expected results from WHO collaboration	Achievements	Constraints
	neighbouring countries Poor facilities for HIV testing and inadequate infrastructure to systematically undertake quality testing and counselling Annual budget available for the programme is not sufficient to even cover the annual need of HIV testing reagent though there are many donors with an expressed interest in supporting the HIV/AIDS control programme Less degree of cooperation observed between concerned sectors other than the MoPH for effective implementation XXXXXXXX There is a lack of coordination for linkage between the HIV/AIDS programme and the TB control programme Inadequate education on HIV prevention measures among risk populations		interagency and intersectoral coordination **Emerging priorities** Enhance local capacity for undertaking newly adopted interventions Effective coordination with other UN agencies whose interest lies in the HIV/AIDS prevention programme to ensure sustainable funding sources Assist in developing policy document and technical guidelines which contribute to easy and complete implementation of strategic plan Promote and develop joint actions with relevant disease control programmes Reporting system to be strengthened	**expected results** Testing and counselling services available in 90% of all counties Annual workplap being adopted in intersectoral consensus workshop TB/HIV collaborative action plan in place for both programmes to be cobenefited by interventions taken by each programme Reporting system enhanced by the availability of quarterly report at the central level	formulated and widely utilized at the county level and collected on a quarterly basis by the central level	
Immunization and vaccines	· Sustaining high Immunization coverage, good cold chain system · Effective surveillance for all EPI diseases · Introduction of new vaccines	· Extensive health Infrastructure and community participation · Good AFP/polio surveillance	· Strengthening routine EPI surveillance, building on AFP/polio surveillance · Phased introduction of new vaccines · Strengthening of national regulatory authority and national	· Improved EPI disease surveillance · improved quality of laboratory diagnosis for EPI disease · New vaccine	• Strengthened EPI surveillance system including AFP surveillance • Successful introduction of second dose of measles	• Lack of resources to improve EPI surveillance system through introduction of integrated disease surveillance system • Lack of GMP compliance of local vaccine manufacturing units

Priority problem	Challenges	Opportunities	WHO priority	Expected results from WHO collaboration	Achievements	Constraints
			control laboratory · Ensure sustainable access to EPI vaccines	introduced	immunization • Strengthening of immunization programme through health system strengthening • Improved technical capacity of laboratory for EPI diseases	• Poor physical and technical capacity of national control laboratory for vaccine
Disease surveillance and epidemic response	· Functional disease surveillance system · Improving capacity of hygiene and anti-epidemic institute on disease surveillance and epidemic response	Extensive network of hygiene and anti-epidemic institutes	· Update case definitions of the main epidemic and emerging diseases · Strengthening capacity on epidemiology, disease surveillance and epidemic response for anti-epidemic Institute staff · Ensure availability of basic laboratory equipment and reagents at anti-epidemic institutes	Effective disease surveillance system and response to communicable disease outbreaks	• Designation of three provincial anti-epidemic institutes for pilot introduction of integrated disease surveillance system Provision of laboratory equipment and reagents to three designated provincial anti-epidemic institutes	• Non-availability of funds for introduction of Integrated Disease Surveillance Programme in the whole country • Lack of country capacity on epidemiology, disease surveillance and epidemic response
Child and maternal health	• Recent rise in maternal mortality and morbidity • Limited access to early treatment services for the major childhood illnesses **New challenges faced during implementation** Limited access to early treatment services for major childhood illnesses and to tertiary care at the referral level	• Commitment to the provision of essential health care to mothers (including safe motherhood) and children (including IMCI) **New opportunities** Commitment for provision of essential health care to children	• Improving health-care providers and quality of care, especially, nursing and midwifery services • Strengthening emergency obstetrical care services • Strengthening national capacity in management and referral of the major maternal, newborn and child health problems • Introduction of evidence-based clinical guidelines for common	• Increased access to treatment for maternal and child health problems • Improved quality of child and maternal care • Improved health	• IMCI expanded to 54 counties. • IMCI pre-service package expanded to four medical universities • Guidelines on hospital care for childhood illness developed	Lack of expertise on health of children aged 5 to 17 years Lack of comprehensive monitoring and supervisory tool for child health programme

Priority problem	Challenges	Opportunities	WHO priority	Expected results from WHO collaboration	Achievements	Constraints
	Less attention to adolescents of the age group of 10-17 years		diseases in childhood through IMCI • Support monitoring and supervision systems for maternal and child health • Improving evidence-based knowledge and skills of health-care providers on family planning services **Emerging priorities** Expansion of IMCI into child health-care service Expansion of IMCI into pre-service training Improved management of particular diseases, i.e. diarrhoea and ARI, in combination with interventions of nutrition and hygiene Improving quality of tertiary/hospital care for childhood illnesses Advocacy on health of children aged 5 to 17 years Strengthened monitoring and supervisory capacity on child health programme	status of children/ reduction of morbidity and mortality of childhood diseases		

Strategic Direction 2: Promoting healthy lifestyle and reducing risk factors to health

2. Control of noncommunicable diseases

Priority problem	Challenges	Opportunities	WHO priority	Expected results from WHO collaboration	Achievements	Constraints
Tobacco control	High prevalence of cigarette smoking among men Limited data on surveillance of smoking	The Government's commitment to tobacco control DPR Korea's participation in the WHO Framework Convention on Tobacco Control • No mass media advertisement of tobacco in the country **Other opportunities** Strong health education system 100% adult literacy rate	• Support in developing the comprehensive National Tobacco Control Policies and Strategies • Adaptation of the WHO Framework Convention on Tobacco Control for the development of a legislative framework for tobacco control • Initiation of tobacco surveillance • Development of education programmes to raise awareness on the detrimental effects of using tobacco **Emerging priorities** Updating and amending tobacco control legislation and implementing strategy Tobacco surveillance Improve education programmes on tobacco control	• Legislative framework for tobacco control. • Reduced levels of smoking in public building, including hospitals • Increased awareness of the detrimental effects of tobacco use • Reliable data on tobacco use and supply **Additional expected results** Updated tobacco control legislation and implementing strategy Strengthened surveillance capacity and system Improved awareness on risks of smoking Reduced smoking rate	▪ Draft legislation on tobacco control ▪ Tobacco Control Strategy ▪ Improved health education activities through various kinds of IEC materials and approaches	▪ Weak surveillance system for tobacco use ▪ Insufficient reliable data on tobacco use ▪ IEC activities to be strengthened on a large scale using various approaches
Integrated NCD	Increased burden of mortality	• Increasing awareness of high	Strengthening NCD and		WHO STEP	No national surveillance

Priority problem	Challenges	Opportunities	WHO priority	Expected results from WHO collaboration	Achievements	Constraints
surveillance and prevention (CVD, cancers, diabetes)	and morbidity of NCDs Control NCD risk factors Early diagnosis and management of NCDs. **New challenges** Poor surveillance system for NCDs and risk factors No multisectoral approach for NCD prevention and control Access to inadequate health services for NCDs such as cancers and cardiovascular diseases	burden of NCDs • Good practices with physical activity and less prevalence of unhealthy diets • Extensive networks of health facilities **Other opportunities** Improved national capacity for the establishment of the national NCD and risk factor surveillance system Institutional capacity including human resources for data management for NCD prevention and control programme Increased awareness on prevention and control of NCDs among the general population	risk factor surveillance **Emerging priorities** Strengthening national capacity for NCD prevention and control programme Development of IEC material on NCD prevention and control Support to the establishment of multisectoral approach for the prevention and control of NCDs Support to improve the health services for NCDs, including cancer and cardiovascular diseases	**Additional expected results** National NCD and risk factor surveillance system established National capacity for NCD prevention and control programme strengthened Knowledge levels on NCD prevention among the general population improved Multisectoral cooperation on NCD prevention and control initiated Access to improved health services for NCDs, including cancer and cardiovascular diseases, ensured	method for NCD risk factor survey introduced Pilot project for NCD risk factor survey initiated NCD infobase for data management established National capacity for data management and analysis for NCD prevention and control improved	system for NCD prevention and control established No multisectoral approach for prevention and control of NCDs Lack of medicines and medical supplies for treatment and management of NCDs, including cancer and cardiovascular diseases
Community and mental health	Shifting of institutional mental health care to community mental health services Availability of psychotropic drugs **New challenges** Integration of mental health services with general health care, including primary health care	Good community participation and health infrastructure **Other opportunities** Well-functioning health service system, including institutional mental health care system	• Strengthening knowledge and skills on community mental health care • Initiate community-based management of psychosis and epilepsy • Guidelines for the management of psychosis and epilepsy • Promotion of mental health in adolescents	• Improved effectiveness of mental health care • Reduction of hospital beds and cost of care • Improved case management of psychosis and epilepsy **Additional expected results** Community-based mental health services generalized	Guidelines for the management of psychosis and epilepsy in primary health care developed Health workers trained on the management of psychosis and epilepsy in the primary health	No national mental health strategic plan available Lack of adequate psychotropic drugs

Priority problem	Challenges	Opportunities	WHO priority	Expected results from WHO collaboration	Achievements	Constraints
			Emerging priorities Improving knowledge and skills on community mental health care Generalize community-based management of psychosis and epilepsy Support to procure adequate psychotropic drugs	Knowledge and skills of health workers on community mental health care improved Access to adequate psychotropic drugs ensured	care centres Community-based management of psychosis and epilepsy initiated	

3. Blood and food safety

Priority problem	Challenges	Opportunities	WHO priority	Expected results from WHO collaboration	Achievements	Constraints
Blood safety	• Universal blood safety services in all health facilities • Mandatory blood screening for HIV and hepatitis B & C **New challenges** QA not in full practice Blood component transfusion not in place Supply of blood bags depends on external funding assistance	High levels of commitment of the Government on blood safety services in all health facilities **Other opportunities** Several sessions of training on QA provided at the provincial level and technical references distributed QA document formats were standardized Local staff were trained in Thailand on blood component transfusion Three WHO STCs recommended blood	Formulation of national blood safety policy • Strengthening capacity on blood safety technology and services at national and provincial levels • Strengthening safe injection practice **Emerging priorities** Improved QA system for safe BTS Local production of blood bags Improved blood transfusion practices in remote areas Ensure 100% of blood donors and products undergo HIV, HBV	National blood safety and safe injection policy established • Improved blood transfusion services • Improved practices and services on blood safety **Additional expected results** Quality of blood products released from blood banks of all levels must meet the standard SOPs are available in the whole process of blood transfusion Supervisory activity of the central level is strengthened to identify faults to be remedied on the spot	• >95% of blood products are of standard quality • 100% of blood banks with SOPs and supervised under QA system • Routine report on quality of blood products available on quarterly or annual basis • More than 85% of blood products have undergone quality testing	• QA labs are not available in the central blood centre • Laboratory facility not available for testing the quality of blood products released from blood banks at all levels • Production facility for blood serological grouping reagent and blood bags is not in place

Priority problem	Challenges	Opportunities	WHO priority	Expected results from WHO collaboration	Achievements	Constraints
		bag production facility in the country with technical guidance for their establishment	and HCV testing	with more focus on remote areas		
Food safety	National food safety policy and legislation	National commitment to improve nutrition and food safety	Strengthen managerial and technical skills for food inspection and monitoring	• National Food Safety Policy established • Improved regulations and practice of food safety in the country	• National Food Safety Policy established and norms and regulations improved	• Limited capacity of national food safety laboratory • Lack of appropriate strategy and plan for sustainable development of food safety programme

Strategic Direction 3: Developing and improving health system

Priority problem	Challenges	Opportunities	WHO priority	Expected results from WHO collaboration	Achievements	Constraints
Public health laboratories	· Proper functioning of national public health laboratory · Availability of equipment and reagents	Good health infrastructure	• Establishment of a national public health laboratory • Strengthen the capacity to diagnose cases and outbreak of epidemic-prone diseases	• More accurate and rapid diagnosis of causative agent of disease outbreak • Prompt and appropriate control measures undertaken	• Physical upgrading of national reference laboratories at the central level • Improved technical capacity of the national reference laboratory staff to accurately and rapidly diagnose causative agent of disease outbreak	• Not ensuring uninterrupted supply of reagents to the laboratories • Lack of rapid laboratory test kits and reagents to support disease laboratory surveillance system
Essential medicines	Sustainable availability of adequate and good-quality essential medicines **New**	Government's commitment to revive the national capacity to increase local production of essential medicines **Other opportunities**	**Emerging priorities** Strengthening the institutional capacity of MoPH for drugs legislation, policy and	**Additional expected results** Enforced National Regulatory Authority and National Clinical Laboratory with Good Laboratory Practices	Logistic Management Information System (LMIS introduced in the central and three provincial levels Local production of good quality essential medicines initiated	Poor physical capacity of the NCL Paucity of resources

Priority problem	Challenges	Opportunities	WHO priority	Expected results from WHO collaboration	Achievements	Constraints
	challenges Ensuring the quality of local production of essential medicines Capacity-building of the NRA and NCL for essential medicines	Strengthened LMIS for management and delivery of essential medicines at central and provincial levels Reinforced infrastructure for local production of essential medicines including injectable drugs	planning Establishing national regulatory authority functions and upgrading physical capacity of national control laboratory Building capacity within the country for good manufacturing practices Strengthening LMIS system	for essential medicines Improved local production of essential medicines Strengthened management and delivery system for essential medicines	Management and delivery system for essential medicines improved	
Koryo traditional medicine	Integration of traditional medicines into allopathic medicines in routine clinical services **New challenges** Standardization and promotion of traditional medicines in routine clinical services	Government policy for the promotion of traditional medicine • Community acceptance of use of traditional medicine • Locally available and produced **Other opportunities** Institutional capacity for the research and standardization of traditional medicines Long history and popularity of the application of traditional medicine into clinical practices	Strengthening operational research on the use of traditional medicines and dissemination of its results • National guidelines on the use of traditional medicines • Redesignation of WHO Collaborating Centre for Traditional Medicine **Emerging priorities** Development of guidelines on the rational use of traditional medicine Designation of WHO Collaborating Centre on Research and Standardization of	Improved standardized use of traditional medicines and their integration with modern medicines **Additional expected results** Improved standardized and rational use of traditional medicines and their integration with modern medicines in clinical practice Active participation in international meetings and intercountry cooperation on traditional medicine	Operational research on traditional medicine institutionalized Integration of traditional medicine with modern medicine in clinical practices, specially at the primary health-care level	Poor communication on traditional medicine between national institutions and WHO Regional Office and other countries

Priority problem	Challenges	Opportunities	WHO priority	Expected results from WHO collaboration	Achievements	Constraints
			Traditional Medicine Support for multicountry cooperation in traditional medicine in and out of the Region			
Technical and research capacity in public health and epidemiology	National capacity on public health, epidemiology and research methodology **New challenges** • Limited national capacity on policy development, especially in public health, epidemiology and research methodology, and health planning and management	Well established national anti-epidemic centres **Other opportunities** Increased recognition of the need of technical and research capacity in public health and the commitment of the Government to the same Openness of the MoPH to formulate new public health policies and review existing ones Increasing thrust on health planning and management	Fellowships for International Master of Public Health and equivalent courses, including Field Epidemiology Training Programme (FETP) • Use of health indicators in programme planning • A stronger degree of participation by DPR Korea in intercountry meetings and international meetings on public health policies • Improving skills in research methodology, applied epidemiology and biostatistics • Strengthening DPR Korea's institutional collaboration with international and regional research institutions **Emerging priorities** Strengthening DPR Korea's institutional collaboration with reputed public health institutions in the Region	Improved public health planning, implementation and research methodology • Improved epidemiological information and its application **Additional expected results** Improved collaboration with planning and efficiency in implementation of pooled resources.	• Ongoing dialogue on important public health policies • Some new public health policies formulated, e.g. National Breastfeeding Policy	• Limited capacities and reliance on one Public Health Law as reference document • Lack of comprehensive policy framework and health sector strategic plan for strengthening public health capacity, including policy development, planning and managing of public health project, research methodology, etc.

Priority problem	Challenges	Opportunities	WHO priority	Expected results from WHO collaboration	Achievements	Constraints
Updating technical skills of health personnel	Up-to-date knowledge and skills for health personnel in public health and disease control **New challenges** Up-to-date curriculum in medical education and nursing education	Improved proficiency with English among medical officers **Other opportunities** More funds to Human Resources for health development (MCH project, GAVI HSS, and others)	-Fellowships to other countries for all categories of health personnel, with the focus on public health - Supporting in-country, skills-based in-service training - Supporting the National Institute of Public Health and Administration (NIPHA) -Supporting WHO publications in the Korean language - Supporting the development and printing of standard textbooks, technical guidelines and training material in Korean	Standard textbooks and reference books/guidelines published in the Korean language Improved quality of health-care practices and disease control **Additional expected results** Improved capacity of National Institute of Public Health and Administration Improved medical and nursing education Strengthened managerial capacity for HRH	• Some standard textbooks on obstetrics and paediatrics developed • Some guidelines/training packages developed and printed • Database on HRH established • Model e-library established • Some in-service training centres upgraded or strengthened • Some nursing schools strengthened in terms of teaching facilities/QA for nursing education established	• Insufficient managerial capacity on HRH/shortfall of coordination mechanism on HRH • Financial constraints to the development of standard textbooks for pre- and in-service education/training • Insufficient electronic connectivity for disseminating information/knowledge of medicine/medical science • Outdated guidelines on health planning and management at all levels • Insufficient capacity of NIPHA for providing regular public health administration training and supervision/monitoring/assessment and evaluation
Medical education	Up-to-date curriculum in medical, nursing and midwifery school teachings	•	Development of the curriculum for medical, nursing and midwifery schools Improving access to international reference books and other information resources in major areas of medicine and nursing Updating textbooks and training material in medical, nursing and midwifery schools	Graduate medical doctors, nurses and midwives with up-to-date knowledge required for effective national health development Better access to international health and medical information resources	Not available in new document	

Priority problem	Challenges	Opportunities	WHO priority	Expected results from WHO collaboration	Achievements	Constraints
Health-care delivery to the communities	Universal access of good-quality health services at the community level	Good community participation and health infrastructure **Other opportunities** More concern for the community Assured funds till 2010 through the MCH project Good degree of community participation and health infrastructure, including household doctor system	Advocacy for better access of the population to essential medicines • Interagency cooperation in improving health care at the county and *Ri/dong* levels through support and promotion of appropriate external assistance • Improving basic diagnostic and laboratory services **Emerging priorities** Improving basic medical care facilities at the county and *Ri* levels through the provision of essential equipment kits for operating theatres, delivery rooms, laboratories, blood transfusions and emergency sections, and minimal physical rehabilitation in combination with training programme Strengthening the household doctors system at the *Ri* level Advocacy for better access of the population to essential medicines Health promotion of the community	Increased access to good-quality health care at the community level • Reduction of cost of health care in hospitals Increased access to good-quality health care at the primary health care level/community levels **Additional expected results** Increased awareness of the community on public health issues.	• A certain proportion of county and *Ri* level health facilities upgraded • Household training package developed • County and *Ri* hospital medicine kits being provided through other international organizations such as UNICEF, IFRC	• Financial constraints from 2010 onwards

Priority problem	Challenges	Opportunities	WHO priority	Expected results from WHO collaboration	Achievements	Constraints
			through IEC activities			

Strategic Direction 4: Framing and enabling policy and creating an institutional environment for the health sector

Priority problem	Challenges	Opportunities	WHO priority	Expected results from WHO collaboration	Achievements	Constraints
Capacity of the MoPH to work in a partnership environment	• Effective coordination with partners for national health development	• Increasing interest of theMinistry of Public Health to address other factors that affect health development	• Strengthening the capability and capacity of the Ministry of Public Health to work in a partnership environment • Advocacy for resource mobilization to the health sector in DPR Korea • Promote foreign language training	• Improved planning and efficiency in implementation through pooled resources	• Improved collaboration with the MoPH through collaborative meetings • Strengthened language training centre for improved training • Improved coordination of resident agencies through theme groups and joint activities including the sharing of information; and greater acceptance of this by the MoPH	• Different geographical focus and work modalities of different agencies
Capacity of WHO Country Office to provide support to country	• Increased technical and financial support for health development in DPR Korea	• Established WHO Country Office • Excellent coordination among UN and international agencies	• Strengthening the WHO country technical and administrative capacities for a better response to country needs • Improving communication and information technology in WHO Country Office, i.e. the Internet to	• Improved efficiency and technical support in response to country needs • More resources are mobilized	• Increased technical and financial management capacity with three Technical and one Administrative Professional staff to support the WR. • Qualified and experienced national Technical staff along with administrative and financial support	• Number of staff still not commensurate with the level of expansion of programme and budget • Limited IT infrastructural support hampers the pace of work and limited support from ISM in SEARO to

			increase levels of access to up-to-date health information		• Additional resources mobilized (approximately US$ 20 million per biennium) • Donor relationships strengthened and programme further expanded • All staff on LAN and access to the Internet, with the wherewithal to access all updated information including AMS, etc.	upgrade the systems • Computer system needs to be updated and prepared for need management system

Appendix 3: Future cooperation

Country Cooperation Strategy, DPR Korea, 2004-2008
New Areas: Challenges, opportunities, results and learning

Priority problems not listed in the CCS, DPR Korea, 2004-2008

A: Support for health policy development and implementation and legislation development

Priority problem	Challenges	Opportunities	WHO priority	Expected results from WHO collaboration	Achievements	Constraints
Health information system and evidence for policy	Limited infrastructure to set up fully operational system of health information Vertical and fragmented HMIS primarily of individual disease control programmes Different data collection formats and reporting by regions and individual disease control programmes Limited capacity for compilation, analysis and reporting of data	WHO supported development of policy documents of national Health Information System (HIS), including for integrated HMIS Pilot project of integrated HIS in one province in process Local workshop to agree upon uniformly formulated formats of data collection at different levels across the country WHO support towards computerization for HMIS Increased support for capacity-building	- Support to update and impart training in national health information system policy - Support for integration process of HIS and pilot in one piloted province for further expansion and replication in other provinces - Better management and utilization of database to provide evidences for improved health policies and interventions - Building capacities for using data for decision-making	- Guidelines for integrated national health information system updated - Computer-based health information system in one province, including all its counties, are connected with the MoPH - Improved capacity of data collection and analysis to provide the necessary evidence to MoPH for making the right decisions and taking timely action	• Guidelines for integrated health information updated and training imparted at the central level • E-facilities provided to one province and its county to pilot the project of integrated HIS • General awareness of the importance of integrated HIS raised at the policy-making level • WHO support for translation of WHO documents on HMIS, including regional strategy	• Less sensitization of need for integrated HIS observed at the peripheries • Computer-based information network confined to one area and not yet generalized • Health planning and health information not well coordinated, resulting in plans not being adequate based on or validated by information and evidence from the field • Lower capacity for analysis and utilization of data

B: Resource mobilization, donor coordination and partnerships for health development

Priority problem	Challenges	Opportunities	WHO priority	Expected results from WHO collaboration	Achievements	Constraints
Resource mobilization and donor coordination in health sector development	• Limited number of donors • Shrinkage of overall resources • Mostly humanitarian aid and limited developmental assistance • Vast need for infrastructure strengthening (construction, rehabilitation and renovation), which is not a priority with most donors	• Multi-year assistance framework to improve women's and children's health • Support mobilized for some priority diseases such as TB and malaria • International partnerships such as GAVI and PMNCH • Other International donors such as Global Fund for HIV,TB and Malaria • Multilateral agencies playing a facilitative role for optimal utilization of funds from donors such as SIDA, Italy, Norway, etc. • Availability of UNCERF funds	• Increasing resources to build further capacity of MoPH to work in a partnership environment • Strengthening partnerships and collaboration with existing agencies and institutions and fostering new ones • Increased advocacy for resource mobilization to meet the needs for WHO and MoPH strategic areas	• Improved relations with donors and expanded donor base • Increased resource availability for priority programmes • Increased capacity of WHO and MoPH to respond to donor needs	• Expanded donor base with increasing efforts at mobilizing resources • Increased availability of donor funds • Fostered new donor relations including Global Fund and GAVI • Joint efforts with UN to foster relations with donors	• Competing donor priorities (e.g. health versus food aid) • Limited funds for construction/rehabilitation activities • Donor priorities versus actual country needs • Economic sanctions
Public/private/NGO/volunteer collaboration and partnerships	• Collaboration is primarily with the Government as there is no private sector in the country • Limited number of	• UN Strategic Framework includes joint activities • Direct work interaction with	• Support MoPH to work ably, effectively and efficiently in a partnership environment	• Fostering new partnerships and joint programme activities	• MoPH capacity to work with other partners increased • Theme group on health and nutrition and several task	• Limited number of agencies, including resident NGOs • Limited number of national NGOs with no mandate to work directly

Priority problem	Challenges	Opportunities	WHO priority	Expected results from WHO collaboration	Achievements	Constraints
	national and international NGOs, especially in the health sector • NGOs have their own framework and fairly limited working scope/experience/opportunity with UN agencies	the MoPH and institutions results in closer monitoring and supervision • Limited number of players in health results in effective and efficient collaboration and partnerships			forces established within UN and international agencies to address joint activities	with international agencies or UN

C: Health systems development

Priority problem	Challenges	Opportunities	WHO priority	Expected results from WHO collaboration	Achievements	Constraints
Quality assurance.	Establish QA system in all essential components of medical care services including patient safety	Increased awareness on the importance of QA/QC in health sector New initiatives for patient safety	Further expanding the established quality assurance system Patient safety initiative (surgery procedure, sterilization, etc.)	Improved quality of some particular services and practices	• QA established in nursing education • Initiated QA in laboratory practice • Established QA in blood transfusion services	• Financial constraints to establishing new or further expanding already established quality assurance systems/sustaining quality assurance system

D: Interventions for priority health problems – Communicable diseases

Priority problem	Challenges	Opportunities	WHO priority	Expected results from WHO collaboration	Achievements	Constraints
International Health Regulations (2005)	Country core capacity for implementation of IHR (2005)	Increased awareness of government officials on being involved with IHR (2005) implementation Commitment from other ministries, including the Ministry of Agriculture	Building core capacity to implement IHR (2005)	Core capacity under IHR (2005) including surveillance, reporting, notification, verification, response and collaboration activities; and activities concerning designated airports, ports and ground crossings, developed	• Increased awareness of the bodies and experts concerned, including the ministries involved	• Limited capacity to implement the IHR (2005) and lack of collaboration between ministries concerned

D: Interventions for priority health problems – Others (2)

Priority problem	Challenges	Opportunities	WHO priority	Expected results from WHO collaboration	Achievements	Constraints
Health and environment	Technical capacity of MoPH staff for more effective programme coordination and implementation Understanding of the technical aspects of health-care waste management	High degree of Government commitment to securing a healthy environment Many UN agencies and international NGOs in the country committed to creating a healthy environment	Improving technical capacity of the MoPH staff for better implementation of the programme Enhancing understanding of technical aspects of health-care waste management	Water quality and environmental pollution surveillance system established Enhanced capacity on medical waste management	• Improved technical capacity of MoPH staff for proper planning and optimum implementation of the plan to establish the water and environmental surveillance system • Good understanding of medical waste management among officials and authorities concerned	• Lack of Strategic Approach to improve the water and environmental surveillance system • Lack of programmatic approach to medical waste management

Priority problem	Challenges	Opportunities	WHO priority	Expected results from WHO collaboration	Achievements	Constraints
Emergency preparedness and response	- Strengthen the existing capacity for emergency preparedness at all levels - Strengthen emergency management capacity at all levels - Logistic support is required for emergency preparedness and response	Strong and well-organized hierarchy of health systems under the centralized guidance of the Ministry of Public Health and the strong commitment of the Government Health authorities understand the importance of capacity-building for emergency preparedness and response National commanding post is functional within the MoPH WHO technical support is available	Norms and standards developed, capacity built and technical support provided to Member States for the development and strengthening of national emergency preparedness plans and programmes - Norms and standards developed, capacity built and technical support provided for timely response to disasters associated with natural hazards and to conflict-related crises	- Health sector plan for emergency preparedness and response - Preparedness plans developed in public health areas - Guidelines for best public health practices in emergencies reviewed, updated, adopted and disseminated to countries with the relevant staff trained -Enhanced capacity of Member States to launch appropriate public health interventions	- Five-year National Strategy for Disasters/Emergency Preparedness developed with WHO technical support - National commanding post has been established with logistic support from WHO - Four doctors have been trained abroad in emergency hospital management - Focal points for emergency management at the national and provincial levels were trained by a WHO TIP - Health managers at various levels have acquired some experience in dealing with floods over the past several years	Not enough funds for: 1. Training, both in-country and overseas; 2. Health education; 3. Logistic support for the expansion and functioning of the National Emergency Centre

Priority problem	Challenges	Opportunities	WHO priority	Expected results from WHO collaboration	Achievements	Constraints
Road safety and trauma management	Lack of adequate IEC material on road safety Poor institutional and referral capacity for emergency and trauma management	Institutional regulations and rules for prevention of road traffic accidents Systematic National Health Service System for emergency and trauma care	Development of national emergency and trauma care strategic plan Increasing public awareness levels on road safety Access to improved trauma care at different levels of the health system Strengthening the existing network of institutions involved in the exclusive provision of emergency and trauma care	Increased institutional capacity to plan and manage emergency and trauma care services Improved capacity of the health system and workforce to deliver quality emergency and trauma care services Mortality and morbidity due to road accidents decreased	Institutional capacity for emergency and trauma care services at the community level have improved partially	Lack of adequate data on road traffic injuries and trauma Lack of a comprehensive strategic plan to address road/other injuries and trauma Lack of resources

D: Interventions for priority health problems – Others (3)

Priority problem	Challenges	Opportunities	WHO priority	Expected results from WHO collaboration	Achievements	Constraints
Nutrition	Recent baseline data on micronutrient deficiency unavailable Lesser degree of collaboration and fragmented efforts being made on disease control programmes by UN agencies	National Nutrition Policy formulated with the promotion of wider involvement of other sectors including UN agencies	Assist in building up local capacity for conducting survey of Urinary iodine Estimation UIE Support survey in collaboration with interested UN agencies Technical assistance in introducing new interventions to improve the nutritional status of the young population	Baseline data available that reflect the severity of micronutrient deficiency Appropriate action plan to remedy the problems faced during cooperation with related agencies	• More data available to update National Nutrition Policy • Strengthened local capacity to conduct UIE-based survey on a routine basis	Lack of knowledge of UIE and inadequate infrastructure to conduct the survey.

Priority problem	Challenges	Opportunities	WHO priority	Expected results from WHO collaboration	Achievements	Constraints
Laboratory	Clinical laboratories of hospital setting are not fully monitored for their performance Quality of laboratory practice are not in line with global standards No data available to ensure the quality performance of laboratories	National guidelines for QA system for clinical laboratories available National reference laboratory in Pyongyang Medical University Hospital established	Ensure QA system is fully operational between National Clinical Reference Laboratory (NCRL) and clinical laboratories Technical assistance in routine recording and reporting of the QA process in all laboratories Supervisory activity strengthened down to the county level hospitals for QA purposes	All provincial-level and >70% of all county-level laboratories have QA-related documents verifying the efforts at assuring quality services	• Quality laboratory services being made available in all provincial-level and some county-level laboratories	• NCRL not yet fully equipped to steer national QA system • Tools for monitoring and supervision not available • Local capacity to ensure quality laboratory performance still lacking • Knowledge of laboratory doctors confined to outdated and inefficient technology
Intestinal parasitic infections	About 40% of school-age children in the country infected with helminthic infections	High degree of Government commitment as evidenced in the massive annual school deworming campaign targeting all schoolchildren in the country Extensive collaboration for school deworming campaign between WHO, UNICEF and other organizations engaged in the country	Strengthening technical capacity to prevent and control Soil Transmitted Helminthic infection Enhancing public awareness through extensive IEC activity	Effective approach to prevention and control of soil-transmitted infection	• Improved technical capacity of health staff to prevent and control of STH • Enhanced awareness on STH infection among schoolteachers and parents	• Heavy reliance on external support to procure medicines for school deworming programme

E: Interventions for priority health problems – Other areas (1)

Priority problem	Challenges	Opportunities	WHO priority	Expected results from WHO collaboration	Achievements	Constraints
Health promotion	Poor knowledge on Behaviour change communications BCC among the general population Lack of adequate health education material on BCC Vertical health education programmes for various health topics	The Government's policy is preventive medicine which includes health promotion programme Adequate human resources for implementation of the health promotion programme Systematic resource mobilization for health education programme	Development of the integrated health promotion programme Development of health education material on BCC Building up the national capacity for the development and implementation of the health promotion programme Support to improve the knowledge levels of health workers on health education and BCC Support for evaluation of the health promotion programme	National Plan for the Integrated Health Promotion Programme developed Resource persons available for training on BCC and evaluation of the health promotion programme Improved knowledge of health workers and the general population on BCC	Health education material on communicable diseases such as malaria, TB and avian influenza developed Health education material on hand-washing, breastfeeding and self-examination for breast cancer developed Vertical health education programme implemented	Inadequate knowledge of programme managers on BCC No resource persons available for imparting training on BCC Limited capacity for evaluation of health promotion programme

F: Interventions for priority health problems – Reproductive health

Priority problem	Challenges	Opportunities	WHO priority	Expected results from WHO collaboration	Achievements	Constraints
Neonatal health	Relatively large number of low-birth-weight babies Weak capacity to provide care at the primary and referral level The less than optimum quality of neonatal care services	The Government's prioritization of improving the quality of neonatal care Intensive network of health-care institutions Strong primary health care system even in the remote regions High percentage of institutional deliveries High adult literacy rate	Facility strengthening for improved neonatal care at each level Continuum of care to improve the skills of health workers, including referral care Institutional strengthening and collaboration Promotion of neonatal care through the	Renovation of neonatal care areas at each level of health facilities Improved knowledge and skills on neonatal care Improved capacity with the continuum of neonatal care Improved neonatal referral care service as	Adapted WHO Guidelines on Essential Neonatal Care in printed form have been introduced in pilot areas Capacity of facilities on neonatal care strengthened Improved awareness among individuals and health workers on ENC Training package for essential and referral newborn care developed and	• The number of trained midwives in essential newborn care (ENC) is insufficient • Services and equipment in health facilities do not meet the standards for ENC training • Regular plan on supervision, monitoring

Priority problem	Challenges	Opportunities	WHO priority	Expected results from WHO collaboration	Achievements	Constraints
			involvement of household doctors and families	well as PHC level	master trainers trained Training conducted on ENC for each level of health doctors, nurses and midwives	and evaluation needed • IEC material needs to be developed to meet the requirements
Making pregnancy safer	Quality of maternal care, especially referral care of high-risk deliveries Anaemia among pregnant mothers Variable capacity of facilities to manage complications during pregnancy and childbirth	Reproductive health strategy XXXXXXX Government's commitment to improve the health of women and children Donor funding to improve women's and children's health Intensive network of health-care institutions Strong primary health care system even in the remote regions High percentage of institutional deliveries	Improvement of midwifery skills and delivery practices, access to antenatal care, deliveries, postpartum and emergency obstetric care Promotion of maternal and child health care through primary health care activities and community awareness. Standardization of training modules for emergency obstetric care, including postnatal care Culturally sensitive IEC material developed	Improved quality of antenatal at the PHC level and emergency obstetric care at each level Sustaining continuum of care on mother and child Improved awareness of individuals and health workers on Basic Emergency Obstetric Care BEmOC and Comprehensive EmOC, including postnatal care	High utilization of antenatal care Increasing number of county hospitals rehabilitated, especially operation theatres and delivery rooms The WHO standard publication Integrated Management of Pregnancy and Child Birth adopted and adapted Skills of midwives and doctors improved through training courses Various IEC material made available	Quality of antenatal care Training modules on CEMOC and BEMOC need further standardization Insufficient number of doctors trained in evidence-based MNH care Insufficiency of surveillance tools for antenatal examination of anaemia Limited availability of equipment for EMoC at each level Insufficient referral care
Sexually transmitted infections (STIs)	Insufficient information and surveillance on STIs	Intensive network of health-care institutions Strong primary health care system even in the remote regions High percentage of institutional deliveries High adult literacy rate	Technical training on STIs for health workers Strengthening surveillance system on STIs Developing culturally sensitive IEC material on STIs	STI surveillance to be strengthened and monitored Health staff trained on syndromic approach in the management of STIs IEC material to be developed	• Guidelines on STIs available • Training for health workers conducted	• Inadequate technical capacity of health staff at the PHC level • Absence of any authenticated scientific and representative baseline study on components such as prevalence, surveillance, sentinel surveillance, STIs, etc. • STI reporting system does not have systematic

Priority problem	Challenges	Opportunities	WHO priority	Expected results from WHO collaboration	Achievements	Constraints
						information • Low levels of community awareness about STIs • Lack of a proper data management system
Adolescent health	Lack of awareness on adolescent health Large young population Lack of information on adolescent health issues	High level of literacy and presence of youth in institutional structures Acceptance of the idea to address adolescent health issues, especially growth and development, mental health, and avoidance of risk factors such as smoking, etc. Free access to health services with a strong primary health care infrastructure even in the remote areas	Advocacy on adolescent health Strategy for adolescent health and development Training of health workers on adolescent health	Technical assistance for development of adolescent health Trained manpower on adolescent health	This has not been a major focus area and direct activities did not get initiated during the period	Accorded low priority in overall health challenges Given the presence of adolescents and youth in institutional structures there has been less acceptance of any need for intervention in this area

Appendix 5: Review methodology

1. Country Office (CO) staff produced a matrix of the opportunities and challenges that impacted WHO's implementation of the last CCS Strategic Agenda (2004-2008), and of the achievements to date.

2. CO staff and the CCS team participated in a round-table discussion of this matrix to allow for further sharing of "internal" perceptions regarding: a) implementation of the past Strategic Agenda; b) perceptions regarding priorities for the this new CCS based on the lessons learnt over the 2004-2008 cycle; c) WHO's collaboration with other agencies and its contributions in the broader health development context.

3. Based on these discussions, and on WHO's relationship with the other development partners working in the country, the CCS agreed on the following broad question areas for the face-to-face interviews scheduled with health development partners:

- Key contributions that WHO has made towards achieving the national health development agenda.
- The specific contributions partners have made towards achieving the MDGs 4, 5 and 6.
- How WHO has collaborated with (*this*) and other partners working in DPR Korea.
- In which areas has WHO done well in contributing to national health development.
- What WHO could have done better.
- Opinions regarding WHO contribution (what and how) during the next CCS cycle.

During the interview, stakeholder perceptions were recorded and reviewed to identify salient views. These provided valuable external perspectives regarding WHO's collaboration in and with the country (Section 4), the current partnership and aid environment (Section 3), as well as inputs to the Strategic Agenda (Section 5).