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Message by His Excellency Professor Pe Thet Khin, Union Minister for Health, Myanmar

I am pleased to include this message in the new WHO country cooperation strategy (CCS) for Myanmar 2014–2018. Since the inception of WHO country cooperation strategies in 2000, significant challenges have arisen, and been addressed, which affect health development in our country.

The Ministry of Health developed a national health plan as part of the broader national development plan. The Government is intending to move forward quickly and thoughtfully to implementation. At this crucial stage of national development, the support of development partners is welcome to achieve our vision of a healthier nation in which good health contributes to economic, social, mental and spiritual development.

WHO has worked closely with the national health authorities, even prior to the development of country cooperation strategies, to help Myanmar achieve its health objectives. The CCS has further enhanced this collaborative partnership, enabling in-depth analysis of challenges and strengths. It takes into account the strategic objectives of the Ministry of Health while detailing how WHO will support the implementation of national health programmes. This is embodied in the strategic agenda of the CCS, which was finalized by WHO during a series of consultations, together with the Ministry of Health and other partners. We are very grateful to WHO for its support to our national health development, and anticipate that the new country cooperation strategy will help to carry this support into the future effectively.

Professor Pe Thet Khin
Union Minister for Health, Myanmar

Preface

WHO country cooperation strategies are a key instrument of the World Health Organization's work in and with countries. They provide a medium-term vision for technical cooperation in support of national health plans. The World Health Organization (WHO) has been working hand in hand for many years with the Member States of the WHO South-East Asia Region to improve the health of its peoples. In fact, the Region was the first to promote WHO country cooperation strategies, which guide WHO on how best to support national health development according to the challenges, strengths and strategic priorities of the country.

In the case of Myanmar, WHO began working with the country soon after its independence in 1948. WHO introduced the modality of country cooperation strategies in 2000, since when Myanmar has been experiencing significant transitions, including in health. Therefore, it is the right time to develop a new country cooperation strategy, for the period 2014–2018, to take into account lessons learnt and chart the health challenges ahead.

Linked to the national health plan, the process of the development of the new country cooperation strategy involved close consultation with the Ministry of Health, as well as United Nations agencies, development partners, nongovernmental organizations and civil society. This is important since stakeholders have a part to play in complementing the efforts of the Ministry of Health to address emerging health needs and priorities of the country. WHO's corporate contribution aims to supplement and support the health development efforts spearheaded by the Ministry of Health in Myanmar.

I would like to take this opportunity to thank all those who have been involved in the development of this country cooperation strategy, which has the full support of the WHO Regional Office for South-East Asia. Over the next five years, we shall work together to achieve its objectives in order to provide health benefits to the peoples of Myanmar. I am confident that with our joint efforts, we shall be able to achieve the vision of the Ministry of Health — to build a healthier nation in which better health contributes to economic, social, mental and spiritual development of all citizens.

Dr Poonam Khetrapal Singh
Regional Director

Acronyms

3DF	Three Diseases Fund
3MDGF	Three Millennium Development Goals Fund
AC	assessed contributions
ADB	Asian Development Bank
ART	antiretroviral therapy
ASEAN	Association of Southeast Asian Nations
BHS	Basic Health Staff
CCS	country cooperation strategy
cMYP	comprehensive multiyear plan
CRD	chronic respiratory disease
CSO	Central Statistical Organization
CVD	cardiovascular disease
D(H)F	dengue (haemorrhagic) fever
DOH	Department of Health
DTP	diphtheria–tetanus–pertussis
EC	European Commission
EPI	Expanded Programme on Immunization
ESCAP	Economic and Social Commission for Asia and the Pacific
EWARS	early warning, alert and response system
FCTC	WHO Framework Convention for Tobacco Control
FDA	Food and Drug Administration
FESR	Framework for Economic and Social Reform
GDP	gross domestic product
Global Fund	Global Fund to Fight AIDS, Tuberculosis and Malaria
GPW	General Programme of Work
HDI	Human Development Index
HepB	hepatitis B
Hib	*Haemophilus influenza* type B
HMIS	health management information system
HR	human resources

HSS	health systems strengthening
IEC	information, education and communication
IHD	International Health Division
IHLCA	Integrated Household Living Conditions Assessment
IHR	International Health Regulations
IMR	infant mortality rate
INGO	international nongovernmental organization
INS	injection safety (GAVI)
IOM	International Organization for Migration
ISS	immunization services support (GAVI)
ITN	insecticide-treated nets
JICA	Japan International Cooperation Agency
M&E	monitoring and evaluation
MARC	Myanmar Artemisinin Resistance Containment
MCH	mother and child health
MDA	mass drug administration
MDG	Millennium Development Goal
MDR	multidrug resistant
MMCWA	Myanmar Maternal and Child Welfare Association
MMR	maternal mortality ratio
MNPED	Ministry of National Planning and Economic Development
MOH	Ministry of Health
MoU	memorandum of understanding
MSM	men who have sex with men
NCD	noncommunicable disease
NGO	nongovernmental organization
NHP	National Health Plan
NTP	National Tuberculosis Programme
NVS	new vaccine support (GAVI)
ODA	official development assistance
PHC	primary health care
RHC	rural health centre

SO	strategic objective
TB	tuberculosis
U5MR	under five mortality rate
UHC	universal health coverage
UN	United Nations
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNCT	UN Country Team
UNDP	United Nations Development Programme
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
UNOPS	United Nations Office for Project Services
UNTA	United Nations Regular Programme for Technical Assistance
VC	voluntary contribution
VPD	vaccine preventable diseases
WCO	WHO Country Office
WHO	World Health Organization

Executive summary

The World Health Organization (WHO) Country Cooperation Strategy (CCS) 2014–2018 for Myanmar provides a coherent medium-term vision of WHO's technical cooperation, and defines its strategic framework for working in and with the country. It aligns closely with the priorities of the National Health Policy, Strategies and Plans and is harmonized with efforts of the United Nations (UN) system for country development. The present CCS is built on the experience and achievements of the previous CCS 2008–2011 and takes into consideration the emerging country situation. It also follows the guidance of Twelfth General Programme of Work (GPW), which provides a six-year (2014–2019) vision for the Organization. GPWs set a global health agenda for all stakeholders and establish a strategic, results-based and accountable framework for WHO. The Twelfth GPW comprises five, as opposed to a previous 13, programmatic categories and one administrative category.

Myanmar emerges from decades of isolation with much hope and support from the global and regional communities. The country has a high potential for rapid growth and development given its natural resources and youth representing nearly 40% of the population. Despite this, and consistent efforts for further development, Myanmar faces multiple constraints and risks that may limit its progress. For example, important disparities are apparent in access to benefits between rural areas, where about 70% of the population resides, and urban areas. In the health sector, constraints to improve the health status of the people include: access to basic health services; inequities and service availability; disparities in availability and affordability of essential medicines; adequate infrastructure and public expenditures; and trained health personnel.

Myanmar has made progress towards the Millennium Development Goals (MDGs): its infant mortality rate (IMR), under five morality rate (U5MR) and maternal mortality ratio (MMR) declined between 1988 and 2007. The U5MR declined steadily since then and if this trend continues, the country will achieve the MDG4 (reduce child mortality) target of 43.3 by 2015. However, the rate in rural areas is almost twice that of urban areas, and this will also need to be addressed. IMR is also in declining trend, but challenges remain to meet the MDG target of 28.3 by 2015. Meanwhile, immunization data are encouraging; Myanmar is free from wild poliovirus transmission and measles immunization coverage increased from 82% in 2008 to 88.0% in 2011. In November 2012, Myanmar introduced *Haemophilus influenza* type b (Hib) as a pentavalent vaccine (DPT+HepB+Hib) in the immunization programme. Based on these trends, the 2015 target of 90% coverage for DTP 3/ Penta3, free from wild poliovirus transmission is expected to be fulfilled. Reducing maternal morality under MDG5 represents a major challenge and will require significant efforts to meet the goal. About 88% of deliveries take place at home with maternal deaths overwhelmingly predominant in rural areas. On the positive side, the proportion of births attended by skilled health personnel increased from 51% in 2001 to 70.6% in 2010.

MDG6 – combating HIV/AIDS, malaria and other diseases – has a major potential to be achieved by 2015. Myanmar already has achieved the goal of a 50% reduction in malaria morbidity and mortality since 2007, with use of insecticide-treated nets (ITN) more than doubling between 2004 and 2008. At the same time the tuberculosis (TB) death rate target has been achieved and the TB incidence target is on track. However, additional efforts are needed to meet the MDG target of halving the TB prevalence rate by 2015 as compared to 1990. The main challenges include finding the many undetected/unreached TB cases, scaling up multidrug-resistant (MDR) TB management and reducing the dual burden of TB and HIV/AIDS. With regard to HIV/AIDS, the epidemic is considered to have stabilized nationally since 2000, with hot spots of high HIV transmission identified at several locations. Continued focus is needed on mostat-risk groups to maintain initial positive achievements. Major challenges also exist to scale up HIV treatment, which now covers only about 1 in 3 of those in need.

The strong Government commitment to comprehensive development, including the health sector, is seen in the Framework for Economic and Social Reform (FESR), which outlines key parameters of the reform process. FESR is an essential tool to realize both the short- and long-term policy agenda of the Government over the three-year period starting in 2013, i.e. focusing on both immediate actions as well as on issues that require in-depth analysis and/or consensus-building. In the health sector, the Government will focus on a number of innovative measures in health financing. Particular attention will be paid to allocating more resources to rural primary health care (PHC), infectious disease control and maternal and child health, in view of the acute need to improve health indicators in all these areas.

At the ministerial level, 'Myanmar Health Vision 2030' was drawn up in 2000 to meet future health challenges. Supporting this ambitious, long-term health development plan, the Ministry of Health has formulated the National Health Plan (NHP) 2011–2016, which is aligned with the latest five-year National Development Plan, the Rural Health Development Plan, the Project for Upgrading Hospitals, and the National Plan for Promoting National Education. As such, the NHP is an integral part of the national economic and development blueprint. It takes account of the prevailing health problems in the country, the need to realize the health-related goals of the MDG, the significance of strengthening the health system and the growing importance of social, economic and environmental determinants of health. WHO has closely collaborated with all health stakeholders in Myanmar in the successive phases of the NHPs – its strategies and plans, resource mobilization, implementation and monitoring processes – and in providing technical advice for the development of the health sector in Myanmar.

Poverty is the principal constraint to improving health status, compounded by factors affecting vulnerability, difficult-to-reach areas and conflict among ethnic groups. The Government has undertaken remarkable efforts to build understanding among these ethnic groups in order to establish a peaceful environment that fosters development. To address poverty, the United Nations Development Programme (UNDP) introduced

the Human Development Index (HDI) in 1994, and provided a significant impact in building community capacity for self-reliance. In moving forward the socioeconomic growth of the country, official development assistance (ODA) plays a significant role in health sector programmes. The total ODA provided to Myanmar was US$ 109.5 million (US$22.6 million, 20.7% for health) in 2002, increasing in 2009 to US$ 390.7 million (US$ 61.2 million, 15.7% for health). The aid environment is expanding and reaching all development sectors. UN Country Team is also engaging in a common framework – UN Strategic Framework – to assist Myanmar. Now in its second cycle, the present UN Strategic Framework 2012–2016 addresses four priority issues: encourage inclusive growth, increase equitable access to quality social services, reduce vulnerability and promote good governance.

WHO is the lead agency in health sector of the country, in which it actively collaborates in all development processes and capacity building of the health system. The CCS follows the guidance of the Twelfth General Programme of Work and regional orientations and priorities. During its elaboration, the social developments emerging from the national reform process and key health challenges confronting the country were carefully synthesized to feed into the strategic agendas and priorities. Close consideration was given to the contributions by other external partners in identifying challenges and gaps in health sector cooperation, as well as to lessons learnt from a review of WHO's cooperation over the last CCS cycle. Special consideration was also given to accelerating achievement of the health-related MDG targets by 2015. The strategic priorities of the CCS 2014–2018 are:

(1) Strengthening the health system.

(2) Enhancing the achievement of communicable disease control targets.

(3) Controlling the growth of the noncommunicable disease burden.

(4) Promoting health throughout the life course.

(5) Strengthening capacity for emergency risk management and surveillance systems for various health threats.

The priority areas will be addressed through a coordinated programme of work that will seek to harness the potential strengths of stakeholders The first priority area is to enhance national capacity to strengthen the health system, including equity in health, increased access to services, and an adequate and sustainable health-care financing mechanism. The second priority area is to enhance the achievement of the communicable disease control targets and MDGs; the third priority area comprises controlling the growth of noncommunicable disease burden and minimizing the major risk factors prevalent in the environment. The fourth area aims to strengthen health system to improve the health conditions of women, children and adolescents and ensure accountability through reporting on progress towards reproductive and sexual health as part of achieving the MDGs. The fifth priority area is to prevent disease outbreaks

through improved rapid response. For each of the strategic priorities, a set of main areas of focus and strategic approaches have been formulated.

In addition to the five priority areas, WHO will continue its core functions as directed by its governing bodies and will actively cooperate with Myanmar on any other public health challenges. The impact of changes in budgets and staffing with required skills and competency in the WHO Country Office are expected to be moderate. The CCS will be implemented in close alignment and in harmonization with the national strategic agenda and the UN Strategic Framework. WHO will focus its efforts on achieving the targets identified by the health sector of the country.

1 — Introduction

The WHO Country Cooperation Strategy (CCS) is a medium-term vision for technical cooperation with Member States, in support of the country's National Health Policy, Strategy or Plan. It is WHO's key instrument to support the national agenda in line with the strategic agendas of other organizations of the UN system and partners in the country. It is also an Organization-wide reference for planning, budgeting and resource allocation for the country within the result-based management framework, guided by the WHO General Programme of Work (GPW).

The formulation of the CCS is a joint exercise between the country and WHO with active involvement of partners in health. It defines the boundaries, focus, policy directions and value premises that will enhance WHO's contribution and result in an optimal health impact for the people of the country. The CCS is consistently used at all levels of WHO governance. It is the basis on which the country office, in collaboration with the regional office and headquarters, will develop the 'one WHO country plan', review its staffing, and mobilize human and financial resources to strengthen WHO support to the country, within the approved programme budget.

WHO initiated the CCS process in 2000, and the first Myanmar CCS was launched to cover the period 2002–2005. Based on lessons learnt, and in line with WHO global and regional polices, Myanmar's development, and the assessment of WHO's comparative advantage in supporting the country's NHPSP, the CCS 2008–2011 has been utilized till end 2013 while formulation process was undertaking following the framework of 12 General Programme of Work (2014-2019).

As Myanmar opens up, both economically and politically, and with greater regional cooperation, a high potential for rapid growth and development emerged, which will facilitate the promotion of human development. The development goals across all sectors are synergistic, interlinked and cross-cutting. All these favourable developments will advance the momentum to meet the MDG targets, especially MDGs 4, 5 and 6 which are currently progressing in the right direction. The following are some of the remarkable milestones that have taken place in the health sector over the last years:

- Considering the rapid changes in demographic, epidemiologic and economic trends, a long-term Myanmar Health Vision 2030 was developed to improve the health status and development of the people. In addition to guiding medium-term national health plans, its main approaches are to develop the

health system in keeping with the changing political, economic, social and environmental situation; ensure universal coverage of health services for the entire nation; reduce the burden of communicable diseases as a public health problem; ensure the availability, quality and quantity of essential medicines and human resources (HR); modernize the Myanmar traditional medicines system; and develop medical and health research to international standards.

- The NHP 2011–2016, developed in line with the first five-year National Development Plan, took into account the prevailing health problems in the country, the need to realize the health-related goals articulated in the UN Millennium Declaration, the importance of strengthening the health system and the growing relevance of social, economic and environmental determinants of health. The NHP aims to ensure that quality health services are accessible and equitable for all citizens. The Plan also highlights the programmes needed to strengthen the health system, extend health-care coverage in rural, periurban and border areas, and expand HR and infrastructure.
- While there is no specific decentralization policy for the health sector, initiatives were taken through health system strengthening efforts for 20 townships in 2012, 40 townships in 2013 and another 60 townships in 2014. Financing and HR deployment are mainly centralized functions of the Ministry of Health (MOH). There is now pressure to develop a system of 'Meso Planning', whereby states and regions develop mid-level plans as input to the National Health Sector Plan. At the highest level, the constitutional reforms took place in 2008, where the legislative power was shared between the Central Parliament and Regional and State Parliaments.

In order to formulate the current CCS 2014–2018, an internal working team led by the WHO Representative was formed. The team captured the strategic directions of the global WHO policy, strategic agenda and priorities spelt out in Twelfth GPW and WHO reform agenda, and worked closely with the country in respect of the NHPSP, socioeconomic dimensions and its changing epidemiology, in line with other organizations in UN System and partners in health. The team also conducted an internal assessment of the performance, achievements and constraints of the last CCS 2008–2011, discussed during meetings with Government and partners in health. A synthesis of key findings and external perceptions was taken into account in the formulation process of the current CCS. A draft document was shared with the WHO Regional Office for South-East Asia and WHO headquarters for peer review. Based on the comments received, and with the support of the concerned Regional Office staff, a consultation was held in March 2013 with the MOH, relevant UN agencies, multi- and bilateral partners, international nongovernmental organizations and all other partners involved in the health sector. The comments and advice of all stakeholders were pivotal in formulating the final version of the CCS.

2 — Health and development challenges: attributes of the National Health Policy, Strategy or Plan and other responses

2.1 Macroeconomic, political and social context

Administratively, Myanmar is divided into 14 states and regions, with 69 districts, 330 townships, 82 sub-townships, 396 towns, 3045 wards, 13 276 village tracks and 67 285 villages. The country had an estimated total population of 61.3 million in 2011, spread among 135 ethnic groups. The major ethnic groups are Bamar, Chin, Kachin, Kayah, Kayin, Mon Rakhine and Shan. Buddhists represent 89.4% of the population, with Christian, Muslin and Hindu minorities.

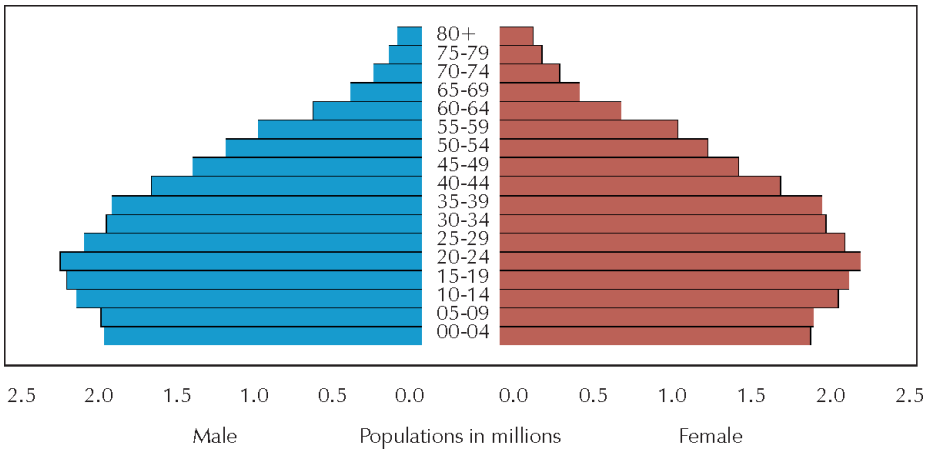
The 15–28 age cohort currently represents 13 million people, 40% of the working population, who contribute and will continue to contribute their efforts and skills to enhancing productivity and competitiveness. People below the legal working age – a significant 25% of the population – will also provide in the years ahead, subject to proper schooling, skills or professional training, the human capital necessary to drive Myanmar's economic transformation. At the other end of the demographic spectrum, older age dependency ratio is low, with the share of people 65 and over equal to only 7.4% of the working age population (Figure 1).

Myanmar is currently in demographic transition; the trends in fertility and mortality would suggest that, while the current population is dominantly young, Myanmar is moving slowly towards an ageing population. The crude birth rate declined from 50 to 29 births per 1000 population in rural areas between 1988 and 2009, and the crude death rate plunged in rural areas from 9.9 to 5.8 per 1000 population in the same period. The population 0–14 years declined from 39% in 1980 to 29% in 2010. Conversely the population above the age of 60 increased from 2% to 9% in the same period. The urban population grew from 25% in 1990 to 34% in 2009; this modern economy is increasing the pressures on migration for seasonal work in rural areas of the country. The population is expected to reach 66 million by 2020.1

In its national strategies and vision, Myanmar aims, and is committed to build an economically developed nation that exceeds the human development targets. The country has achieved economic growth since adopting a market-oriented system in 1988, with trade soaring by a factor of >20 by 2009–2010.[1] Increasing growth rates, combined with a continuous trade surplus in recent years, reduced inflation, and

relatively minor impacts from the global financial crisis, has brought inflation down to single digits and fiscal deficits to 4–6% of gross domestic product (GDP). If Myanmar's development follows this pattern, ADB expects that the country's GDP per capita would reach US$2000–3000 by 2030 – more than three times the current level.

Figure 1: *Age and sex distribution in Myanmar, 2011*



Source: ESCAP online database 2012.

2.2 Other major determinants of health

Myanmar faces multiple constraints and risks that may limit its progress. Key constraints include a deficient infrastructure and human capital development. On the other hand, economic growth has been the most effective tool for reducing poverty. The latest Integrated Household Living Conditions Assessment (IHLCA) survey indicates that one in every four Myanmar citizens is considered poor (19). Moreover, the IHLCA report shows that 84% of poverty is found in rural areas and disparities are pronounced across states: the central state of Chin has a poverty incidence of 73%, which is in stark contrast to the 11% poverty incidence in Kayah, the lowest rate among states. High poverty rates occur in the coastal states of Ayeyarwady, Rakhine and Tanintharyi and the landlocked states of Shan and Kachin.[19]

Wide variations in access to basic services such as housing, water and sanitation also exist across the states and rural and urban areas. From 2005 to 2010, overall access to safe drinking water increased modestly from 75% to 83%.[19] The poor continue to have less access than the rich, and urban areas benefit more than rural areas – 81% of the urban population had access to safe drinking water in 2010, versus 65% of rural dwellers.

Myanmar has identified protein energy malnutrition and micronutrient deficiencies (including iron deficiency anaemia, iodine deficiency disorders and vitamin A

deficiency) as its nutritional problems. With successive improvement in the prevalence of underweight children under the age of five years, the country is potentially on track to reduce such prevalence to a target of 19.3% by 2015, but further intensive interventions are required. In addition, many people are undernourished because they do not consume enough calories; moreover, satisfactory national averages hide significant variation by region and income group.

Education is a right and is particularly crucial to Myanmar, given the country's young population and its history of placing high value on education and culture. Basic education is the responsibility not only of the Ministry of Education but also the Ministry of Development of Border Areas and National Races in relation to border and ceasefire areas, and the Ministry of Religious Affairs, which runs a system of monastic schools that serve primarily poor children. Responsibility for higher education, for which most students use distance education, is shared by 13 ministries.

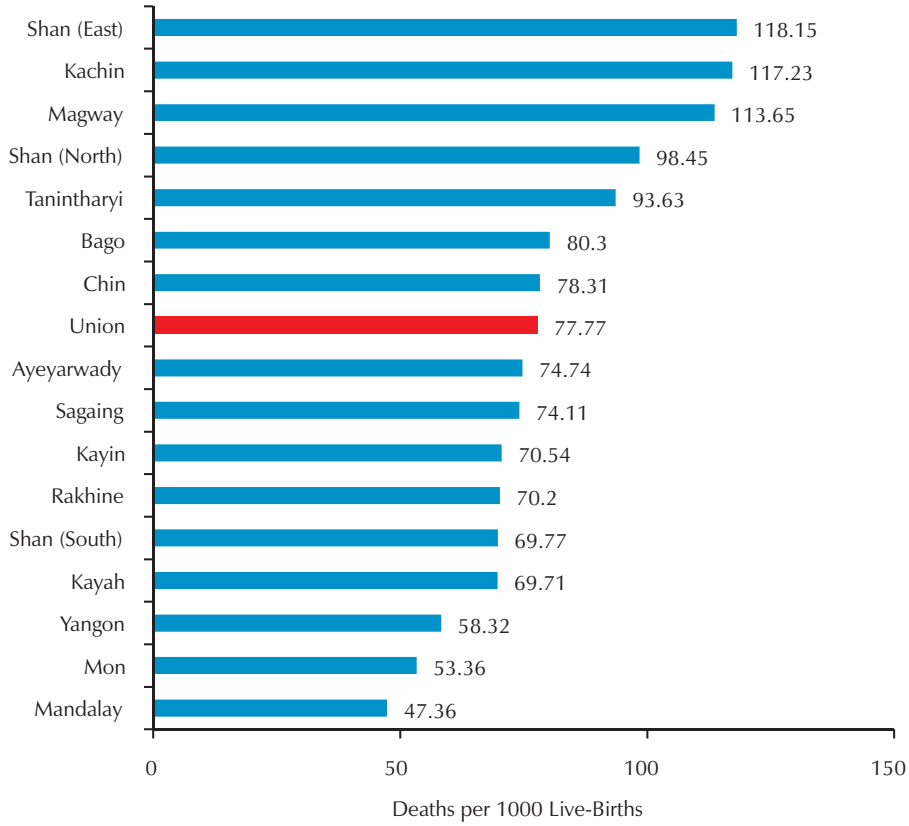
The gaps in access to electricity between income groups and across states are large. About 34% of rural residents have access to electricity versus 76% of urban residents. However, according to government sources, electrification ratios are much lower. In 2011, Yangon City had the highest electrification ratio (67%), followed by Nay Pyi Taw (54%), Kayah (37%), and Mandalay (31%). However, notwithstanding official statistics, electrification in 2012 is thought to be much improved throughout the country (5,8).

2.3 Health status of the population

The country is consistently endeavouring, with its limited resources, to attain its health objectives and maintain its trends in key health indicators. According to official sources, IMR, U5MR, and MMR all declined between 1988 and 2007. Over the same period, life expectancy increased for both men and women. In 1988, life expectancy at birth was 56.2 years for males and 60.4 years for females in rural area and in urban areas was 59.0 and 63.2 years, respectively.[5 8 13] In 2007, life expectancy was 63.2 years for males and 67.1 years for females in rural areas, and 64 and 69 years, respectively, for urban areas.[8 10]

According to the Central Statistical Organization (CSO) of the Ministry of National Planning and Economic Development (MNPED), the U5MR has declined steadily from 77.77 per 1000 live births in 1999 to 64.2 in 2007.[15 16] Moreover, the survey conducted jointly by the Government and UN agencies. indicated significant differences between urban and rural areas of the country, with rural U5MR almost twice that of urban rates (72.5 and 37.3 per 1000 live births in 2003, respectively) (Figure 2). IMR also indicated a decreasing trend to 43.4 in 2007.[8] In respect of immunization data, the joint Government-UN surveys show that measles immunization increased from 67.7% in 1990 to 83.6% in 2007 (Figures 3 and 4).

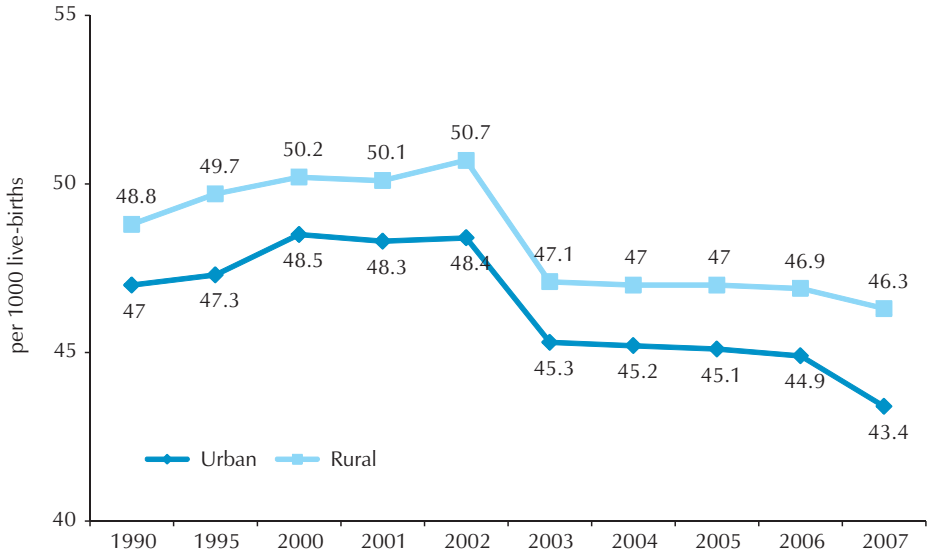
Figure 2: *Under-five mortality rate by state and division, National Mortality Survey, 1999*



Source: Myanmar Health Statistics 2010, Ministry of Health.

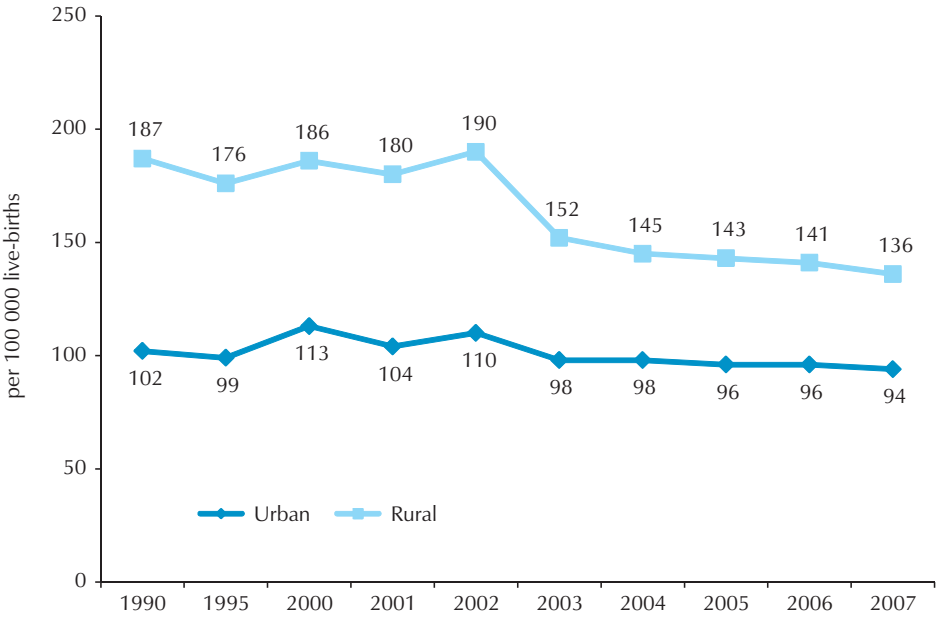
The MMR estimate from the health survey in 2004–2005 stood at 316 per 100 000 live births, although 2008 UN estimates placed the figure at 240. According to the Myanmar Health Vision 2030, MMR was 170 in 2011 and is projected to be 130 in 2021 and 90 in 2031. The 2004–2005 Nationwide Cause-Specific Maternal Mortality Survey analysis (5) showed that severe postpartum haemorrhage was the main direct obstetric cause of maternal deaths (30.98%) followed by hypertensive disorders of pregnancy, including eclampsia (16.9%) and abortion-related causes (9.86%). About 88% of deliveries take place at home, with the remaining deaths occurring either in a public hospital (10%) or on the way to a health-care facility (2%). Delays in reaching health facilities are invariably due to poverty, lack of knowledge, remote location or lack of transport. The vast majority of maternal deaths occur in rural areas. It is also estimated that 42% of maternal deaths occur during intra- and early postpartum period. Poor maternal nutritional status and iron and folic deficiency anaemia adversely influence pregnancy outcomes, as shown in the recent studies by the National Nutrition Centre, Department of Health.[5]

Figure 3: *Infant mortality rate, 1990–2007*



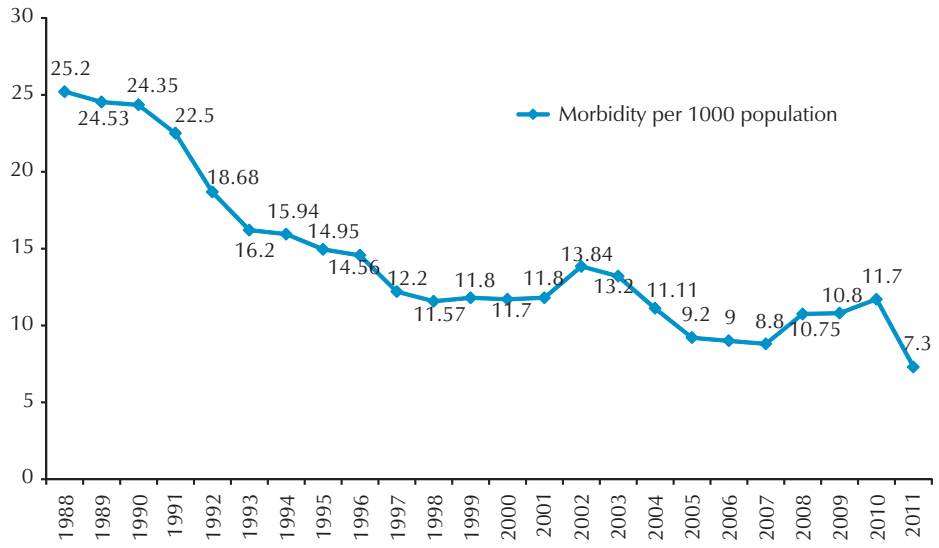
Source: Myanmar Health Statistics 2010, Ministry of Health.

Figure 4: *Maternal mortality ratio, 1990–2007*



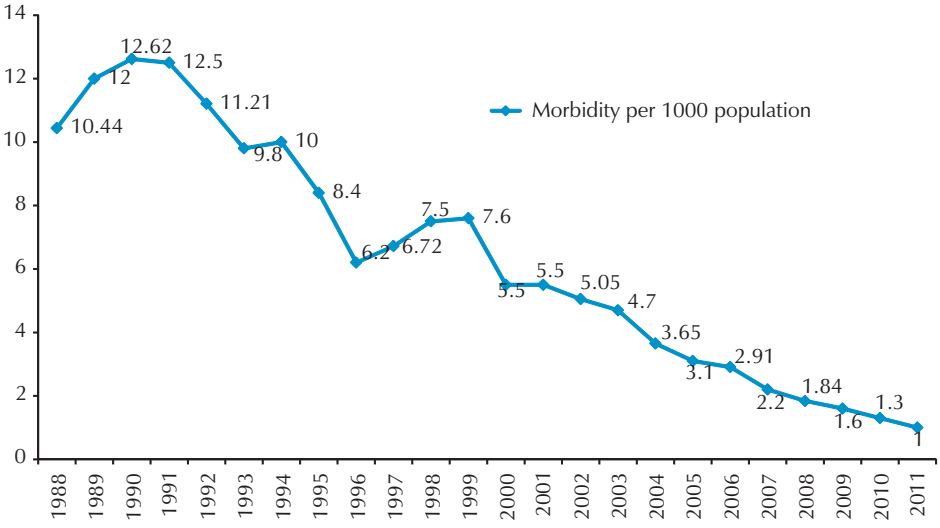
Source: Myanmar Health Statistic 2010, Ministry of Health.

Figure 5a: *Trends of malaria mobidity, 1988–2011*



Source: Health in Myanmar 2012, Ministry of Health.

Figure 5b: *Trends of malaria mortality, 1988–2011*



Source: Health in Myanmar 2012, Ministry of Health.

As such, the overall health status data and analysis indicate significant disparities between regions and groups in access to, and quality of, health services, particularly affecting ethnic minorities, poor people, and people living in remote areas. Women from the poorest households received assistance from skilled attendants during delivery in 51.0% of cases, compared to 96.1% of women from the richest households (Multiple Indicator Cluster Survey, 2010.[15] Similarly, more children in rural areas are stunted than in urban areas, and is most common in Rakhine and Chin states, where the rates of stunting are 49.9% and 58% respectively. Analysis by background characteristics demonstrates that 5 out of the 10 poorest children are stunted. The percentages of deliveries attended by a traditional birth attendant are: Ayeyarwady (35.2%), Rakhine (30.2%), Bago (East) (29.6%) and Chin (25.1%). It was noted in Shan North that 24.9% of women delivered their baby without any assistance at all (in Chin State this is also high at 10.4%).

Among specific diseases, the leading causes of death and illness are TB, malaria and HIV/AIDS. The TB prevalence rate (as confirmed by the 2009–2010 nationwide TB surveillance survey) is three times higher than the global average and one of the highest in Asia. In 2011, WHO estimated that there were 506 prevalent and 381 incident TB cases per 100 000 population, respectively. During the same year, 143 140 TB cases were notified. With a 4.2% prevalence of MDR-TB among new TB cases and 10% previously treated patients, there were an estimated 5500 MDR-TB cases among notified pulmonary TB cases in 2011, out of which only 400 received adequate diagnosis, treatment and care (7%). Extensively drug resistant TB (XDR-TB) has been detected since 2007. About 10% of TB cases are coinfected with HIV/AIDS. Malaria is a major cause of death and illness in adults and children. As per morbidity trend of 1988–2011, the number of cases of malaria range from 4.2 million to 8.6 million a year and 76% of the population live in malaria endemic areas. Figures 5a and 5b present the declining trend of both morbidity and mortality.

With regard to HIV/AIDS, the epidemic is considered to have stabilized nationally since 2000, with 'hot spots' of high transmission in several locations. This is reflected by prevalence among the general population (15–49 years old) of 0.61%. Moreover, the proportion of young people aged 15 to 24 with correct knowledge of HIV increased from 21% in 2003 to 75.2% in 2007. The major challenge at present is to scale up HIV treatment, which now covers only about 1 in 3 of those in need.

The national surveillance system focuses on surveillance of epidemic-prone communicable diseases, emerging infectious diseases and post disaster communicable diseases. Current goals are to eradicate poliomyelitis and eliminate measles, and all Basic Health Staff (BHS) are endeavouring to achieve these goals. The elimination status of maternal and neonatal tetanus is being sustained through effective strategies. There is increasing evidence of rubella disease burden in the country. The prevalence rate of leprosy has been less than one per 10 000 since 2003 and registered cases

were reduced to 2542 at the end of 2011. As far as trachoma is concerned, the active trachoma rate in the central dry zone of Myanmar was 43% in 1964 and was reduced to under 2% in 2000. As trachoma blindness is greatly reduced, cataract is how the main cause of blindness in Myanmar, and is responsible for about 61% of total cases. The rate of blindness in all ages is 0.52%.

The country is currently facing the double burden of communicable and noncommunicable diseases (NCDs). Chronic NCDs with shared modifiable risk factors – tobacco use, unhealthy diet, physical inactivity and harmful use of alcohol – include cardiovascular disease, diabetes mellitus, cancer and chronic respiratory disorders. NCDs/conditions of public health importance that are prevalent are accidents and injuries, disabling conditions (blindness, deafness, and community based rehabilitation), mental health, substance abuse and snake bites. The National STEPwise surveillance (STEPS) survey (2009) reported the following prevalence of conditions: smoking was 33.61% in males and 6.13% in females; hypertension was 30.99% in males and 29.34% in females; overweight (body mass index, BMI$\geq$25 kg/m^2) was 21.85% in males and 23.07% in females and obesity (BMI$\geq$30 kg/m^2) was 4.27% in males and 8.37% in females among the sample population.

Myanmar is also facing the emerging issue of a growing geriatric population. Among the 6 million older people in the country, about 10% are estimated to be vulnerable persons. A study on the health of the elderly revealed that high blood pressure, heart disease, strokes, cancer, lung diseases related to smoking and musculoskeletal problems are common. Some initiatives for healthy and active ageing have been introduced with technical support from WHO and partners, and a community-based health care of the elderly programme was started in NHP 1993–1996.

Disasters are also a major health concern. Myanmar has a long coastline (about 2400 km) which runs along the eastern flank of the Bay of Bengal. According to the Tsunami Risk Atlas, most of the coastal areas of the country fall within the risk zone. On 2 May 2008, Cyclone Nargis made landfall in Myanmar, crossing the south of the country over two days and devastating the Ayeyarwaddy delta region. According to official figures, 84 500 people were killed and 53 800 went missing. A total of 37 townships were significantly affected by the cyclone. The UN estimates that as many as 2.4 million were affected. A three-year Cyclone Nargis relief and recovery operation was conducted by Myanmar Red Cross Society with support from the International Federation of the Red Cross with the cooperation of other partners. In March 2011, an earthquake of Richter scale 7 hit Shan State resulting 64 deaths and 92 injuries. The heavy torrential rain due to the effect of O2B Cyclone caused renewed flooding in Pakukku in October 2011, which claimed 161 lives and affected 29 751 people.

As a result of these disaster experiences, the MOH activated the Strategic Health Operation Centre, which will enable the despatch of an initial response team as soon as the event takes place. Under the stewardship of the National Disaster Management

Committee, the MOH has been working together with the Department of Meteorology and Hydrology, Ministry of Transport, Ministry of Social Welfare, Relief and Resettlement, other related ministries, UN organizations and NGOs for disaster management. This particularly concerns damage and loss assessment of health facilities, sustaining and restoring health services and control of communicable diseases. The priority activities for disease prevention and control include the establishment of an early warning, alert and response system (EWARS), immunization of susceptible populations, proper camp management, food and water safety and prompt response to the outbreaks.

2.4 National responses to overcoming health challenges

National health policies, strategies and plans

In order to overcome the health challenges, there are provisions for health services in the current National Constitution (2008): the Union shall earnestly strive to improve the education and health of the people; enact the necessary law to enable the population to participate in matters of education and health; provide care for mothers and children, orphans, the fallen Defence Services personnel's children, the aged and disabled; ensure that mothers, children and expectant women enjoy equal rights; and promote the right of every citizen to health care.

The National Health Policy formulated in 1993 stated that 'Health for All' and equitable access to basic health services represent the main principles guiding health and health system development to meet the overall needs of the country, including rural and border areas. The policy highlights the importance of sufficient production of HR within the context of the long-term health development plan; and strictly abiding by the existing rules and regulations mentioned in the drug laws and by-laws. In view of the changing economic system, the policy encouraged an increased role for cooperatives, joint ventures, the private sector and NGOs to deliver health care, and the need to explore alternative health-care financing. The policy also directed an intensification and expansion of environmental health activities and the conduct of research activities, not only on prevailing health problems but also on health systems research. The policy reinforces the services and research activities related to indigenous medicine at international level, and is oriented towards implementing health activities in close collaboration with other relevant ministries and strengthening collaboration with other countries for national health development.

At the national level, the National Health Committee (NHC), formed in 1989 and reorganized in April 2011, is a high-level inter-ministerial and policy-making body concerning health matters. The NHC takes the leadership role and gives guidance in implementing the health programmes systematically and efficiently. The Committee coordinates intersectoral collaboration and provides guidance and direction for all health activities.

Considering the rapid changes in demographic, epidemiological and economic trends, both nationally and globally, an ambitious 30-year health development plan – Myanmar Health Vision 2030 – has been drawn up to meet the future health challenges. The long-term visionary plan encompasses the political, economic and social objectives of the country will guide the elaboration of short-term national health plans. With the aim of uplifting the health status of the people, the objectives include: reducing the public health impact of communicable diseases; ensuring universal coverage of health services for the entire nation; training and producing all categories of HR for health within the country; ensuring the availability in sufficient quantity of high-quality essential medicine and traditional medicine. The nine main components of the plan are expected to improve the nation's health indicators, which are presented in Table 1.

Table 1: *Expected outcome indicators of Myanmar Health Vision 2030*

Indicator	Previous (2001–2002)	2011	2021	2030
Life expectancy at birth	60–64	–	–	75–80
Infant mortality rate	59.7	40.0	30.0	22.0
Under 5 mortality rate	77.77	52.0	39.0	29.0
Maternal morality ratio (per 1000 live births)	2.55	1.7	1.3	0.9

Source: Health in Myanmar 2012, Ministry of Health. (Data for life expectancy at birth for 2011 and 2021 is not available)

Aligning with the fifth five-year National Development Plan, and within the framework of the Myanmar Health Vision 2030, the MOH has formulated the National Health Plan 2011–2016. The NHP is interlinked with the Rural Health Development Plan, the Project for Upgrading Hospitals and the Plan for Promoting National Education and, as such, is an integral part of the national economic and development blueprint. In order to achieve the objectives of the NHP 2011–2016, 11 programme areas have been identified, taking into account the prevailing health problems in the country, the need to realize the health-related targets articulated in the MDGs, the significance of strengthening health systems and the growing importance of social, economic and environmental determinants of health. The NHP 2011–2016 was a top-down exercise and the 11 programme areas are:

(1) Controlling communicable diseases

(2) Preventing, controlling and care of non-communicable disease and conditions

(3) Improving health for mothers, neonates, children, adolescent and elderly as a life cycle approach

(4) Improving hospital care

(5) Development of traditional medicine

(6) Development of human resources for health

(7) Promoting health research

(8) Determinants of health

(9) Nutrition promotion

(10) Strengthening health system

(11) Expanding health care coverage in rural, peri-urban and border areas.

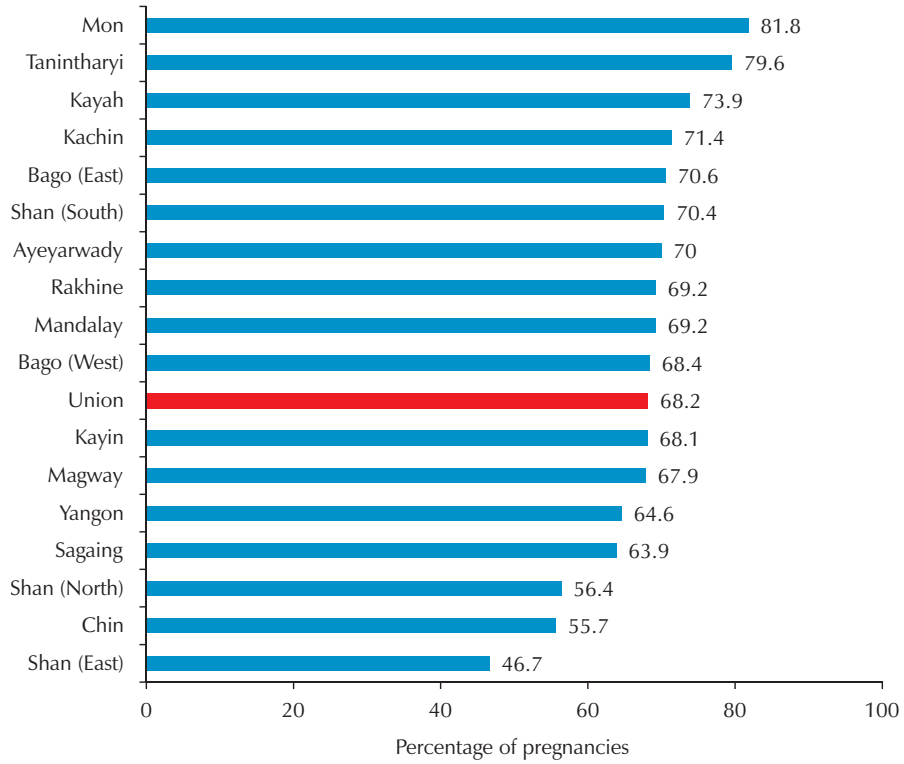
In 2012, the MOH worked with the States and Regions to develop 'Meso Plans' that adopted a more 'bottom-up planning approach' using local data and information.

Within the framework of the Myanmar Health Vision 2030 and successive phases of NHPs, Myanmar has developed several strategies and plans, including resource mobilization, implementation and monitoring processes. WHO provides technical advice and is actively involved with national and external partners in achieving Myanmar's health objectives.

Universal health coverage (UHC) aims to secure access for all to appropriate promotive, preventive, curative and rehabilitative services at an affordable cost. It particularly aims to improve the health status of the poor and vulnerable, especially women and children. Attaining universal coverage requires urgent government attention and action. The approach advocates substantial reductions in out-of-pocket payments, which remain the highest cause of household impoverishment and financial barrier in accessing health services.

In targeting UHC, further improvement in **health financing** becomes critical. The target indicators for monitoring include: out-of-pocket expenditure that does not exceed 30–40% of total health expenditure; total health expenditure is at least 4–5% of GDP; over 90% of the population is covered by prepayment and risk-pooling schemes; and close to 10% of vulnerable populations have social assistance and safety-net programmes (8). To reduce out-of-pocket payments and increase prepayment, measures taken include increasing tax-based financing; expanding coverage of social health insurance through Social Security Law (2012), amending the social security Act 1954; introducing the Maternal and Child Health Voucher Scheme in one township (2012) based on a feasibility study conducted in 2010; a Township Based Health Protection Scheme (TBHP) in terms of community-based health insurance to be piloted in one township based on a feasibility study in 2011; documenting social assistance provided by community based organizations (CBO).

Figure 6: *Antenatal coverage by state and division, 2008*



Source: Myanmar Health Statistics 2010, Ministry of Health.

Recognizing the importance of universal access to **reproductive health** to achieve MDGs 4 and 5, the following core strategies have been established: set an enabling environment; improve information base for decision-making; strengthen health systems and capacity to deliver reproductive health services; and improve community and family practices. As 70% of the total population resides in rural areas, resources and interventions are centred on mothers, newborn babies and under-five children in rural areas. This includes antenatal care, skilled and institutional deliveries, postnatal care, post-abortion care, quality birth spacing, emergency obstetric and newborn care, reproductive health care, involving men in reproductive health care, cervical cancer screening and promoting referral systems.

The interventions for **maternal, newborn and child health (MNCH) care** services are being carried out in an integrated manner to achieve MDGs under the guidance of NHP 2011–2016. The main thrust of the strategies include regular home visits for newborn care; death review management of pneumonia and diarrhoea cases; referral of sick newborns, children and mothers; antenatal and postnatal care; maternal death review; and community capacity development. In 2011, a child survival forum for newborns, and networking and mapping of maternal and child health services was

held. The community-based newborn care (CBNBC) comprehensive strategy to reduce the deaths of newborns has been extended to five townships. The CBNBC allows trained volunteers to participate in essential newborn care such as early and exclusive breastfeeding, hygienic umbilical care, and skin to skin care.

Health system strengthening (HSS) in Myanmar aims to improve service delivery of essential components of immunization, mother and child health (MCH), nutrition and environmental health, and communicable diseases by strengthening programme coordination, health planning systems, and HR management and development, in support of MDGs 4, 5 and 6. In 2011, HSS implementation was initiated in 20 townships. The Maternal and Child Health Voucher Scheme is designed to respond to the need to explore health financing options for improving MCH services in Myanmar, with technical and financial support from the GAVI Alliance and WHO. The new initiative will mainly focus on improving access of poor pregnant women to social health protection. The cost and effectiveness of this scheme is being pilot tested in Yedarshey township in 2013 and will later be expanded to additional townships. Guidelines for health systems assessment at township level were developed and the assessment itself was conducted at the end of 2011. Elements of the assessment comprised: planning and management; hard-to-reach mapping; human resources; community participation; infrastructure and transport; essential drugs and logistics system; finance and financial management; data quality auditing (DQA) and service quality assessment (SQA). Following the assessment results, Rural Health Centre (RHC) and Station Health Unit plans were drawn up and compiled into the Coordinated Township Health Plan (CTHP). CTHP includes health system assessment, monitoring and evaluation (M&E) baselines, annual plans and costing for package service tour, supervision and monitoring of rural as well as township-level health centres.

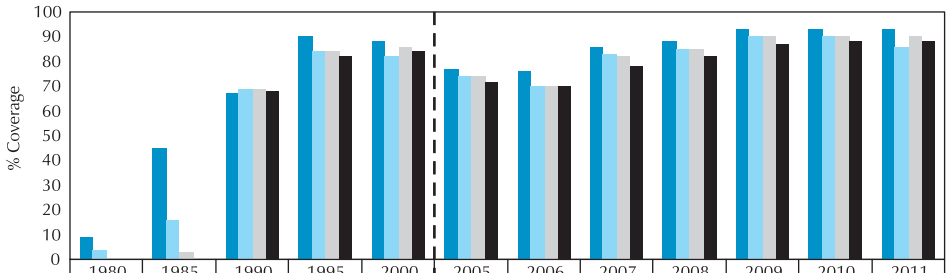
The national response to **HIV and AIDS** is being implemented in the context of the HIV/AIDS National Strategic Plan (2011–2015), developed with participatory inputs from all stakeholders. The vision of this strategic plan is to achieve the HIV-related MDG targets by 2015. The strategic priorities are: prevention of the transmission of HIV through unsafe sexual contacts and use of contaminated injecting equipment; comprehensive continuum of care for people living with HIV; and mitigation of the impact of HIV on people living with HIV and their families. Cross-cutting support for the strategic plan was received from the HSS programme, the Donor Referral System for the Blood Safety Programme, with support from the Japanese International Cooperation Agency (JICA) and the National External Quality Assessment Scheme (NEQAS) of HIV. Based on the Asia Epidemic Model spreadsheet for Myanmar, the distribution of new cases of HIV among populations was estimated and projected. It shows that the incidence of HIV has declined yearly following its peak in the late 1990s. However, the declining trend ceased after 2011, indicating the need to intensify the momentum of prevention and control measures as well as to provide interventions tailored to men who have sex with men (MSM), intravenous drug users (IDU), and female partners of these most at risk populations (MARPs).

The major approaches of the **Malaria** Control Programme are to increase accessibility to quality diagnosis and appropriate treatment according to the national treatment guideline, and to scale up the programme for long-lasting insecticidal nets (LLIN) and insecticide treated nets (ITN) throughout the country. These approaches are supported by an information, education and communication (IEC) programme and HSS through capacity building and programme management. The main thrust of activities are: IEC; stratification; epidemic preparedness and response; early diagnosis and appropriate treatment; and capacity building.

In the National **Tuberculosis** Programme (NTP), the overall goal is to reduce morbidity, mortality and transmission of TB until it is no longer a public health problem; to prevent the development of drug-resistant TB – which should have halted by 2015 and begun to reverse the incidence of TB; and to halve the TB prevalence and mortality rates in 2015 as compared to 1990. NTP is implementing care and preventive activities in line with the TB National Strategic Plan (2011–2015), which focuses on: pursuing high quality expansion and enhancement addressing TB/HIV, MDR-TB and the needs of poor and vulnerable populations; contributing to HSS based on PHC; engaging all health-care providers; empowering people with TB and communities through partnership; and enabling and promoting research. The Government has progressively increased the budget for TB control. Technical partners are guided by the TB Technical and Strategic Group to ensure harmonization and alignment of control strategies. A number of financial partners are supporting the fight against TB with the Global Fund being the most important donor.

Within the framework of NHP 2012–2016, a comprehensive Multi-Year Plan (cMYP) for the **Expanded Programme on Immunization (EPI)** covering the period 2012–2016 has been developed as a follow-up to the previous cMYP 2007–2011. It has been developed by the MOH with support from WHO and the United Nations Children's Fund (UNICEF) using health system analysis. Some of the salient features includes: plans to introduce two new vaccines in 2012; strengthening safe vaccine delivery; introduction of school-based immunization for tetanus and diphtheria in a phased manner in 2014; strengthening of polio eradication strategies and measles elimination goals; intensification of routine immunization to reach the unreached children, specifically in hard-to-reach areas; migratory populations; and activities for effective vaccine management and cold-chain improvement based on findings of the effective vaccine management (EVM) assessment. All these strategies are targeted to achieve MDG4. The country is also strengthening its disease surveillance network, including sentinal surveillance for rotavirus, typhoid, serosurveys and cold-chain capacity to prepare for future introductions of new vaccines such as rotavirus, pneumococcal virus and human papillomavirus. In 2012 the Government cofinanced the pentavalent vaccine cost with partners. The GAVI Alliance, WHO and UNICEF are committed to support the immunization programme, although a funding gap remains of about 32% of the total requirement. Figure 7

Figure 7: *National immunization coverage, 1980–2011*



	1980	1985	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011
BCG	9	45	67	90	88	77	76	86	88	93	93	93
DTP3	4	16	69	84	82	74	70	83	85	90	90	86
OPV3		3	69	84	86	74	70	82	85	90	90	90
MCV1			68	82	84	72	70	78	82	87	88	88

Source: Joint WHO/UNICEF reporting form.

Surveillance, risk assessment and outbreak response capacity all continue to be priorities for Myanmar. Establishing timely, representative and high quality information from indicator-based surveillance (IBS) systems continues to be a challenge. Although the country has established event-based surveillance (EBS), the effectiveness of these arrangements in detecting acute public health events is not always assessed. Encouraging a structured and systematic approach to risk assessment is an important national policy. Similarly, efforts to strengthen outbreak response capacity continue, both through support to field epidemiology programmes as well as through training on international outbreak response.

In order to prevent the international spread of communicable diseases, the Central Epidemiological Unit works closely in collaboration with National International Health Regulations (IHR) Focal Point and the International Health Division (IHD) of the MOH, which is implementing IHR 2005. In addition, the existing communicable disease surveillance activities have been integrated with regional surveillance systems like the Association of Southeast Asian Nations (ASEAN) Disease Surveillance Network (ADSNet) and the Mekong Basin Disease Surveillance (MBDS) Network. Laboratories continue to play a central role in the early detection and verification of acute public health events due to infectious and non-infectious causes. Myanmar has the basic capacity to use polymerase chain reaction (PCR) for diagnostic purposes, and regional laboratories have been identified to provide additional diagnostic services for less common infectious diseases. The National Polio, Measles and Influenza laboratories are certified or accredited to international standards.

Development processes

Poverty and vulnerability, especially in hard-to-reach rural settlements, are the main critical barriers to enhancing human development and to reaching the 2015 MDG targets. Over and above limited access to health care due to terrain, transport,

communication and other economic reasons, Myanmar has suffered for over 60 years from armed conflicts between ethnic groups, which has placed the goal of building lasting peace under a cloud of doubt. With many diverse ethnic groups, creating harmonious social cohesion is a key challenge. The country does not have a poverty reduction strategy for operational reasons. However, to alleviate the pressing issues, UNDP with active national collaboration instituted a Human Development Index (HDI) in response to the acute poverty condition in 1994. It started with a set of projects providing assistance to poor rural communities in 63 townships in 11 different regions. Given the momentum of the initiative, its fourth phase was gradually extended over 18 years until 2012. So far about 5 million people in 8000 villages have benefited.

The Self Reliance Groups (SRG), a product of the initiative, have demonstrated great competency in planning and prioritizing interventions at the household and community level to alleviate their poverty and vulnerability conditions.

The IHLCA is one of the projects of HDI. Accurate statistical information about the living standards of the population, especially the vulnerable groups and the extent of poverty, is an essential instrument to assist the Government in diagnosing the problem, in designing effective policies for reducing poverty and monitoring and evaluating the progress of poverty reduction. IHLCA-II was conducted in 2009–2010 with the active participation of the MNPED, UNICEF and the Swedish International Development Cooperation Agency (SIDA). Several relevant ministries were also closely involved in the process.

The Poverty Profile provides information on levels and trends in key indicators of well-being and their correlates, with a view to inform public policy decisions. It synthesizes the issues of poverty and inequality; demographic characteristics of households; economic activities of households; the labour market; housing, water and sanitation; health and nutrition; and education. Poverty dynamics are a concern in light of changes in the poverty status of individual households over time. Specifically, this analyses households that remain poor (chronically poor), escape from or enter into poverty (transitory poor), and remain non-poor. Overall, transitory poverty appears to affect close to three times the number of households as chronic poverty, 28% vs 10% respectively. For policy- and decision-making purposes, a better understanding of the reasons for descent into, and escape from poverty is necessary.

The MDG Data Report presents the data from the IHLCA-II survey on selected MDG indicators. It provides information on trends of those indicators with a view to inform public policy decisions. It differs from the standard MDG report in that it relies exclusively on survey data and presents seven goals dealing with poverty and hunger; primary education; gender equality; child mortality; maternal health; HIV/AIDS, malaria and other diseases; and environmental sustainability. Overall, these data suggest a general, but modest, improvement across a range of dimensions of well-being in Myanmar between 2005 and 2010. They are based on analytical findings

of the changes in the living conditions of people in Myanmar since IHLCA-I in 2005. In some areas of the country, natural disasters have contributed to lower levels of health access and poorer infrastructure and HR. Poor people have a low adaptive capacity and are vulnerable to environmental shocks such as droughts, floods and extreme weather conditions that are expected to increase in frequency and intensity as a result of climate change.

2.5 Health systems and services, and the response of other sectors

The MOH is responsible for raising the health status of the people through provision of comprehensive health services: promotive, preventive, curative and rehabilitative measures. It has seven departments for Health, Planning, and Medical Sciences; three departments for Medical Research (for Lower, Upper and Central Myanmar); and one for Traditional Medicine. The largest is the DOH, which employs 93% of over 58 000 personnel and accounts for approximately 75% of the Ministry's expenditure. It is responsible for supervising both technical and administrative functions of the health departments in the state, divisions and township levels as well as hospitals and clinics.

Table 2: Development of hospital facilities

Health facilities	1988–1989	2007–2008	2008–2009	2009–2010	2010–2011	2011–2012
Number of hospitals (public sector)	631	839	846	871	924	987
Number of hospitals (Ministry of Health	617	813	820	844	897	921
Other ministries	14	26	26	27	27	66
Total number of hospital beds	25 309	36 949	38 249	39 060	43 789	54 503
Number of primary and secondary health centres	64	86	86	86	86	86
Number of MCH centres	348	348	348	348	348	348
Number of RHC	1 337	1 437	1 481	1 504	1 558	1 565
Number of school health teams	80	80	80	80	80	80
Number of traditional medicine hospitals	2	14	14	14	14	14
No. of traditional medicine clinics	89	237	237	237	237	237

Source: Health in Myanmar 2012, Ministry of Health. (based on financial year: 1 April to 31 March of the following year)

The unit of operation of health is at the Township Health Department level which serves between 100 000 and 200 000 people, and is headed by the Township Medical Office. At township level, a hospital and clinics will take care of curative functions, while the public health component is the responsibility of the health department. The Urban Health Centre, School Health Team and Maternal and Child Health Centre take care of the urban population. Each township has at least 1-2 station hospitals and 4-7 RHCs under its jurisdiction to provide health services to the rural population. RHCs are staffed by a Health Assistant (HA), Lady Health Visitor (LHV), and a midwife. At each RHC there are four to five sub-centres, each of which are staffed with a midwife and a Public Health Supervisor. Each sub-health centre provides health-care services to a cluster of five to ten villages in which there are usually voluntary health workers (auxiliary midwives and community health workers). The development of health facilities of the country from 1988 to 2012 is presented in Table 2.

Volunteers and members of local NGOs and faith-based organizations are also active in the field of health. For example, the Myanmar Maternal and Child Welfare Association (MMCWA) and Myanmar Red Cross Society (MRCS) have members from many villages. With support from health committees and local administrative authorities, these members can be mobilized to assist in and promote the delivery of health-care services in the villages where they live.

The National Essential Medicine Policy, the Food and Drug Administration (FDA) regulatory authority, and a Central Medical Store Department (CMSD) have been practising procurement and distribution for several decades. The national policy related to essential medicines has focused on satisfying the priority health-care needs of the majority of the population. Approximately 80% of essential medicines are produced through domestic sources, but there may be more external needs given changes in the essential medicine policy. A review, focused on providing universal access to essential medicines free of charge to the rural population, identified medical technologies as a key problem that causes high out-of-pocket payments – more than 80%.[7] For the rural retention of midwives in hard-to-reach areas, 'adequate supply of medicines and equipment', was a key motivation factor and may overrule other incentives. Deficiencies in the supply chain system for delivering medical supplies, advocating materials and vaccine to service delivery points are other barriers, especially in rural settings.

Traditional medicine also plays an important role in the public health system. The Government accords high importance and provides considerable support to traditional medicine. Services and drugs are made available free of charge. One unique feature is the existence of traditional medicine along with allopathic medicine. With encouragement by the State, scientific ways of assessing the efficacy of therapeutic agents nurturing popular and rare medicinal plants exploring, sustaining and propagating treatises and practices can be accomplished.

While private sector health care has expanded rapidly and is estimated to provide 75–80% of ambulatory care, private service providers have had very limited involvement in public health programmes. Members of the Myanmar Medical Association and its several branches are providing training on public health issues such as reproductive health and malaria to health workers in the private sector. The MMCWA, Myanmar Red Cross Society are also playing a growing role in service provision.

As far as HR are concerned, it is estimated that the 88 975 public sector workers include 26 435 medical practitioners, 25 544 nurses and 19 556 midwives. This is equal to 1.49 health workers per 1000 population.[1] Currently the midwife to population ratio is 1:6000, while the aim is 1:4000. The main HR issue is inadequate funding and infrastructure. While health staff are distributed evenly between urban and rural areas, understaffing in rural areas was confirmed by the HSS assessment in the 20 townships. In 50% of locations, BHS cover 4000–10 000 of the population, while only 8 out of 108 RHCs surveyed had the standard requirement of 13 BHS. Every RHC in the sample had unfilled posts. The assessment also confirmed that the important barriers to retention of health staff include: lack of motivation; high transportation costs and daily expenditure for food. Under the NHP 2011–2016, a National Health Workforce Strategic Plan is currently under development, where all these issues will be considered. The number of HR for health from 1988/1989 to 2011/2012 is presented in Table 3.

Health care in the **private sector** is gradually increasing. It is estimated that 61% of medical doctors in 2010 are employed in the private sector. A law relating to private health-care services was enacted in 2007. The sector is expanding particularly in cities and towns, although recently it has been reported that there are village-level general practices in some locations. In 2010 there were 103 private hospitals, 192 special clinics and 2891 general clinics. There are some reports on the effectiveness of public–private partnerships for management of TB and malaria.

For evidence-based decisions, strengthening of the health information system is crucial and a principal priority of the MOH. Health Information, a division of the Department of Health Planning, is responsible for data collection, processing, analysis and dissemination of health information. Regarding communicable diseases and related health issues, the International Classification of Diseases (ICD)-10 revision has been instituted and continuous training programmes are being conducted for field teams. System analysis of health information and geographic information systems (GIS) data banking are being promoted for effective delivery of health services. As the overall macroeconomic dimension is rapidly changing, it is vital to strengthen data and information management systems to contribute to effective policy-making, and for appropriate and timely modification of the service performance.

[1] WHO recommends 2.3 per 1000.

Table 3: *Human resources in health development*

Health workforce	1988–1989	2007–2008	2008–2009	2009–2010	2010–2011	2011–2012
Total number of doctors	12 268	21 799	23 740	24 536	26 435	28 077
Public	4 377	7 976	9 583	9 728	10 927	11 460
Cooperative and private	7 891	13 823	14 157	14 808	15 508	16 617
Dental surgeons	857	1 867	2 092	2 308	2 562	2 770
Public	328	793	777	703	813	848
Cooperative and private	529	1 074	1 315	1 605	1 749	1 922
Nurses	8 349	22 027	22 885	24 242	25 644	26 928
Dental nurses	96	177	244	262	287	316
Health assistants	1 238	1 788	1 822	1 845	1 899	1 536
Lady health visitors	1 557	3 197	3 238	3 278	3 344	3 371
Midwives	8 121	18 098	18 543	19 051	19 556	20 044
Health supervisors 1	478	529	529	529	541	612
Health supervisors 2	674	1 444	1 484	1 645	2 080	1 718
Traditional medicine practitioners	540	6 108	6 347	6 627	6 627	6 752
Public	290	945	950	890	890	885
Private	250	5 163	5 397	5 737	5 737	5 867

Source: Health in Myanmar 2012, Ministry of Health. (Financial year is from 1 April to 31 March of the following year)

The health system assessment 2012 noted that the major constraints to service delivery related to availability, acceptability and accessibility of services to the people. In terms of *availability*, the main constraints include an inadequate number of HR at different levels of the system, and particularly overworked BHS, low health expenditures, essential medicines shortages and lack of infrastructure and programme reach. Midwives are also overburdened and lack support from other staff and training opportunities. In terms of *acceptability*, weak communication between health staff and the community, the level of skills and the attitudes of health professionals lead to lower demand. From the consumer side, there is a lack of awareness of what services are available at different levels. In terms of *accessibility*, many areas remain hard to reach due to distance, road conditions, partial, season-based access, or the insecurity of mobile and migrant populations. In many cases, accessibility is higher with traditional health providers (home-based care).

2.6 Similarities with other countries

The country's GDP is likely to grow by about 6.0% in 2012 and 6.3% in 2013 (ADB estimates), which is very similar to the neighbouring countries. However, it is estimated that in 2010, Myanmar had the lowest per capita GDP in purchasing power parity despite relatively good growth during 2000–2010. IHLCA indicates that 25% of the population is considered poor (MNPED, 2011), which is comparable with other Asian peers, e.g. Cambodia at 27% and the People's Democratic Republic of Lao at 32%. As far as renewable water resources are concerned, it stood at 24 352 m^3 per inhabitant per year, higher than nearly all other economies in Asia.

Myanmar's progress towards attaining the MDGs lags behind that of its ASEAN neighbours, especially Malaysia and Thailand. The country has yet to improve further its performance in health-related MDGs aside from the IMR, U5MR and MMR. HIV prevalence remains high, along with malaria and TB. However, the literacy rate of 15–24 year olds in 2010 was high at 95.8%, which is comparable with the 96.9% rate posted by Viet Nam in 2000. The ratio of girls to boys in primary school was 0.93:1 in 2009, similar to other ASEAN countries, while the in secondary school was 0.96:1, even higher than Indonesia and Viet Nam.

2.7 Summary – key health achievements, opportunities and challenges

Achievements/opportunities

- Consistently strengthening its national health system and public health functions, based on principles of PHC and UHC, reaching the poor and hard-to-reach vulnerable groups, addressing equity issues.
- NHP 2011–2016 formulated within the framework of the Myanmar Health Vision 2030, aligned with national socioeconomic growth development.
- Government committed to bring down poverty rates from 26% to 16% by 2015.
- A large youthful population will contribute their efforts and skills to enhance productivity.
- MMR, IMR and U5MR are declining.
- A 50% reduction in malaria morbidity and mortality achieved since 2007; MDG mortality target for TB met, incidence target on track and epidemics of HIV/AIDS considered stabilized since 2000.
- Polio-free status, and the immunization programme reaching more than 85% of all target population with all basic antigens.

- New life-saving vaccines introduced in the EPI programme (Hib and measles second dose).
- Impact of HDI is robust in poverty reduction, alleviating vulnerability and upgrading the capacity of self-reliance in the community.
- Some MDGs – hunger and poverty incidence, U5MR, MMR and sanitation – are on track to be achieved by 2015.

Challenges

- The country has many poor people with low adaptive capacity, and is vulnerable to environmental shocks that are expected to increase in frequency and intensity due to climate change.
- Need to scale up HIV treatment, which now covers only about 1 in 3 people in need, and to provide preventive services to MSM. Additional efforts are needed to meet the MDG target of a 50% reduction in TB prevalence in 2015 compared with 1990. MDR-TB diagnosis, treatment and care must be scaled-up from the current 7% to offer testing to all MDR-TB contacts, retreatment cases and TB patients living with HIV/AIDS (and proper treatment and care to all confirmed MDR-TB cases).
- Health system constraints: service delivery; organization, management and coordination; and HR, all of, which need further attention.
- Obstacles to demand for health care relate not only to the question of affordability, but also to accessibility and acceptability of services by the population.
- Weak focus in coverage of basic health care for MCH services.
- NCD represent 40% of all deaths. NCD prevention and management responsibilities at PHC level is a particular challenge.
- Availability of information technology (IT) know-how and equipment at all levels. This will be a key investment, and the use of disaggregated data should be encouraged in sharpening the policy-making.

3 — Development cooperation and partnerships

The Nay Pyi Taw Accord for Effective Development Cooperation has been developed in collaboration between the Government and partners in a spirit of mutual benefit and accountability. It reflects the conclusions of the international dialogue on aid effectiveness, including the Paris Declaration and Accra Agenda for Action. The Accord commits the Government to create systems for regular, national-led dialogue with development partners and to establish active working groups to support manageable, Ministry-led, sectoral and thematic coordination mechanisms to achieve efficient and effective aid coordination for mutual accountability.

3.1 The aid environment in the country

ODA plays a significant role in health sector programmes. The total amount committed rose from US$ 109.5 million in 2002 to US$ 390.7 million in 2009, of which US$ 22.6 million (20.7%) and US$ 61.2 million (15.7%) were earmarked for health in 2002 and 2009 respectively. This translates to an ODA per capita commitment to health of US$ 0.5 in 2002 and US$ 1.2 in 2009, close to the regional average ODA for health of US$ 0.6 and US$ 1.0 in the same years (Table 4).

Table 4: *ODA commitments and health expenditure, 2002–2009*

	2002	2003	2004	2005	2006	2007	2008	2009
Population at 30 June of each year, in millions	47.4	47.7	48.0	48.3	48.7	49.1	49.6	50.0
ODA commitments*	109.5	126.7	139.0	152.5	171.7	209.5	324.8	390.7
ODA commitments for health*	22.8	34.3	35.9	34.0	32.3	47.8	48.9	61.2
ODA for health as a percentage of total ODA	20.7	27.1	25.8	22.3	18.8	22.8	15.0	15.7
ODA for health, commitment per capita (US$)*	0.5	0.7	0.8	0.7	0.7	1.0	1.0	1.2
Regional average ODA commitment for health per capita (US$)	0.6	0.6	0.7	0.9	1.2	1.4	1.3	1.0

	2002	2003	2004	2005	2006	2007	2008	2009
Total health expenditure per capita (US$)	2.9	3.8	4.7	4.9	5.6	7.2	10.0	12.5
General Government health expenditure as a percentage of its total health expenditure	15.2	12.3	13.5	9.0	14.4	11.7	8.8	9.7

* in millions of constant 2008 US$.
Source: Creditor Reporting System, Organisation for Economic Co-operation and Development (OECD).

Allocation of ODA within the health sector is in the areas of HIV/AIDS, malaria and other diseases, reproductive health, and other health purposes. US$ 41.3 million (67.5% of ODA funding) was committed to the MDG component in (Table 5). ODA is projected to increase through the launch of various partnerships aiming to sustain efforts in support of the MDGs.

Table 5: *Components of ODA commitments in the health sector, 2002–2009*

	2002	2003	2004	2005	2006	2007	2008	2009
MDGs: HIV/AIDS, malaria, TB and other diseases	6.6 (29.1%)	16.4 (47.7%)	18.1 (50.3%)	18.9 (55.3%)	16.7 (51.8%)	33.7 (70.4%)	33.5 (68.5%)	41.3 (67.4%)
Reproductive health	3.7 (16.3%)	3.0 (8.7%)	3.1 (8.6%)	2.7 (7.9%)	3.4 (10.6%)	3.1 (6.5%)	4.9 (10.0%)	5.3 (8.7%)
Other health purposes	12.3 (54.2%)	13.8 (40.1%)	12.5 (34.7%)	9.3 (27.2%)	8.4 (26.1%)	7.4 (15.4%)	7.3 (14.9%)	12.7 (20.8%)
Unspecified	0.1 (0.4%)	1.2 (3.5%)	2.3 (6.4%)	3.3 (9.6%)	3.7 (11.5%)	3.7 (7.7%)	3.2 (6.5%)	1.9 (3.1%)
Total	22.7 (100%)	34.4 (100%)	36.0 (100%)	34.2 (100%)	32.2 (100%)	47.9 (7.7%)	48.9 (100%)	61.2 (100%)

Source: Creditor Reporting System, Organisation for Economic Co-operation and Development (OECD).

3.2 Stakeholder analysis

Bilateral sources of ODA commitments include: Australia, Denmark, Finland, Germany, Ireland, Italy, Japan, Norway, Netherlands, Republic of Korea, Spain, Sweden, United Kingdom and United States of America. Multilateral sources include the European Commission (EC), GAVI Alliance, Global Fund to Fight AIDS, Tuberculosis and Malaria, the Joint United Nations Programme on HIV/AIDS (UNAIDS), UNDP, United Nations Population Fund (UNFPA), UNICEF and United Nations Regular Programme for Technical Assistance (UNTA). Among all these bilateral and multilateral sources of funding support, the five largest contributions of ODA for health in 2009 were: United Kingdom (18%), Japan (17%), EC (14%), Sweden (9%) and UNICEF (9%), which amounted to 63% of the total commitment of ODA for health (Table 6).

These data reflect ODA comitment for health in Myanmar for the year 2009. However, other bilateral and multilateral sources have contributed in other years. Development assistance to the health sector is channelled through global partnerships such as GAVI Alliance, Global Fund, Global TB Drug Facility, Three Diseases Fund (3DF), and WHO Global Malaria Programme; and directly to INGOs and NGOs working in the country. The UN plays a major role in contributing to health activities. The main contributors in health include the Food and Agriculture Organization (FAO), UNDP, UNFPA, UNICEF and WHO. The health activities of these agencies and programmes are described below.

Table 6: *Stakeholder analysis, 2009 (in millions of constant 2008 US$)*

Bilateral sources of ODA in 2009						Multilateral sources of ODA in 2009					
	MDGs	RH	Other	Unspec.	Total		MDGs	RH	Other	Unspec	Total
Australia	0.236	0.0	2.519	0.0	2.756	EC	8.845	0.0	0.0	0.0	8.845
Denmark	2.259	0.0	0.136	0.0	2.395	GAVI	0.0	0.0	1.602	0.0	1.602
Finland	0.0	0.0	0.153	0.0	0.153	UNAIDS	0.965	00	0.0	0.0	0.965
Germany	1.177	0.928	0.296	0.0	2.401	UNDP	0.245	0.0	1.319	0.0	1.564
Ireland	0.0	0.0	0.052	0.0	0.052	UNFPA	1.675	2.836	0.788	0.0	5.299
Italy	0.0	0.361	0.221	0.0	0.582	UNICEF	3.007	0.832	1.842	0.0	5.680
Japan	3.239	0.304	2.383	1.947	7.873						
R. Korea	0.0	0.0	0.018	0.0	0.018						
Norway	0.928	0.0	0.737	0.0	1.665						
Spain	0.0	0.004	0.024	0.0	0.028						
Sweden	5.672	0.0	0.001	0.0	5.673						
UK	10.166	0.0	0.576	0.0	10.743						
USA	2.874	0.0	0.0	0.0	2.874						

MDGs: Millennium Development Goals; RH: reproductive health; unspec: unspecified.
Source: Creditor Reporting System, Organisation for Economic Co-operation and Development (OECD).

Multilateral sources

GAVI Alliance

The Government is receiving financial support from GAVI to introduce new vaccines, strengthen vaccine management and the cold-chain system in EPI, and to develop guidelines and training material for strengthening human and institutional capacity for immunization. Phase 1 of GAVI support for immunization services (ISS), new vaccines (NVS) and injection safety (INS) was implemented from 2002 to 2007. Introduction of hepatitis B vaccine and autodisable syringes were introduced in the EPI programme.

Major activities supported by GAVI-ISS were training, micro planning, operational costs for outreach services, strengthening of the cold chain, monitoring and supervision. GAVI later supported HSS. In all these engagements, GAVI is working together with bilateral partners (Australia, Japan, New Zealand) and multilateral partners (UNICEF and WHO) (Table 7).

The main objective of the HSS programme in Myanmar is to improve services coverage for essential PHC components of immunization and MCH in support of a two thirds reduction in under 5 child mortality between 1990 and 2015. This is being carried out through strengthening programme coordination, improving health planning systems and strengthening HR management. This goal directly addresses the three main health system barriers: service delivery; management and organization; and human resources. The HSS programme covered the period 2008–2011 with funding of US$ 32 780 million.

Table 7: *GAVI Alliance disbursements to Myanmar by type of support, 2002–2012*

Category	Sub-cat.	Year					
		2002	2003	2004	2005	2006	2007
HSS	HSS						
INS	INS	578 647	956 320		678 362	–39 718	–89 634
ISS	ISS			1 074 800	1 717 240	903 020	903 020
NVS	HepB	1 022 679	1 159 670	2 137 383	4 723 841	2 959 191	–1 752 439
	Measles						
	Penta						
Vac. Intro.	Vac. Intro.				100 000		
Total for the year		1 601 326	2 115 990	3 212 183	7 219 442	3 822 493	–939 052
Category		**2008**	**2009**	**2010**	**2011**	**2012**	**Total US$**
HSS	HSS				2 833 405		2 833 405
INS	INS						2 083 978
ISS	ISS				2 812 000	297 000	7 707 080
NVS	HepB	3 160 246	601 905	91 706	-270 570		13 833 610
	Measles					994 743	994 743
	Penta					6 120 703	6 120 703
Vac. Intro.	Vac. Intro.					453 500	553 500
Total for the year		3 160 248	601 905	91 706	5 374 835	7 865 946	34 127 019

Source: GAVI Alliance.
HepB, hepatitis B, Penta, pentavalent vaccine (diphtheria, pertussis, tetanus, hepatitis B and *Haemophilus influenzae* type b), Vac. Intro, vaccine introduction studies.

The GAVI annual report of 2011 reflected that there was a substantial progress in Myanmar's health system foundations to better manage and improve access to PHC services for hard-to-reach areas in 20 priority townships. The capacity of township health managers was upgraded in the field of planning and financial management; needs-based planning was introduced and a culture of participatory action was developed involving all relevant stakeholders, community health leaders, INGOs and NGOs; the health service delivery mechanism was realigned and a package of services was formed – EPI, MCH, nutrition and environmental health for hard-to-reach rural settings; and competency-based training was provided, not only to rural health workers but also investing 1200 volunteers in 2011 to reduce the burden of midwives.

WHO Global Malaria Programme

The WHO Global Malaria Programme convenes experts to review evidence and set global policies, which provide the benchmark for national malaria programmes and multilateral funding agencies. Its activities focus on providing an integrated solution to the various epidemiological and operational challenges by promoting sound, evidence-based and locally appropriate strategies. The programme helps countries reach the most vulnerable populations and ensures that needed interventions take into account economic and environmental realities. Among other support, the Global Malaria Programme provides technical support to the WHO Country Office (WCO) in Myanmar by funding a fixed-term professional position (designated medical officer) as well as by supporting the Mekong Malaria Programme Coordinator.

Global Drug Facility – Stop TB Partnership

The Global Drug Facility, housed at WHO headquarters and managed by the Stop TB Partnership, has been providing crucial support for the national TB programme in Myanmar since 2001 through yearly grants of anti-TB drugs. This in turn catalysed DOTS (directly observed therapy short course) expansion nationwide, raising the budget to more than US$ 2 million for 2008, up from US$ 0.25 million in 2001. Through support from UNITAID and the Canadian Government, the Global Drug Facility has also provided Myanmar with second-line anti-TB drugs and paediatric TB drugs.

Support for TB from USAID, JICA and CIDA

The United States Agency for International Development (USAID) and JICA provide bilateral support for TB control in Myanmar. In May 2011, TB REACH, an initiative funded by the Canadian International Development Agency (CIDA) for increased TB case detection, announced that three organizations, (Population Services International, PSI, International Organization for Migration, IOM, and the International Union Against Tuberculosis and Lung Disease) had been granted US$ 2.5 million for one year. Collaboration is ensured by the corporate sector, and Total/Yadana Consortium

is supporting Myanmar with US$ 0.8 million per year. The total costs for TB control from 2011 to 2015 have been calculated at US$ 186 million with an expected funding gap of US$ 67 million.[10]

Global Fund to Fight AIDS, Tuberculosis and Malaria

The Global Fund provided a grant in rounds 2 and 3 to fight AIDS, TB and malaria in Myanmar. The project began in January 2005 to tackle TB, and initiatives in HIV/AIDS and malaria commenced in April 2005. Collectively, the projects were to have received US$ 98.4 million over five years, US$ 11.8 million of which was disbursed. However, the Global Fund suddenly terminated the grant in August 2005 at a time when partners were just starting the implementation. By August 2006 there was no further disbursement of funds. The donor community tried to secure the survival of the projects and finally elaborated the Three Diseases Fund, a cooperative effort from six countries and the European Union, which will be described separately.

In 2011, Global Fund support was reinitiated and implementation of a Round 9 grant started to target HIV, malaria and TB prevention and treatment activities in 232 townships. For the daily management of the grants, the Myanmar Country Coordinating Mechanism has nominated Save the Children and United Nations Office for Project Services (UNOPS) as the Principal Recipients with a total funding of more than US$ 300 million for the period 2011–2015. WHO provides technical and operational support to implement these grants.

Three Diseases Fund

Following the decision by the Global Fund to terminate its Round 2 and 3 grants provided to Myanmar, a consortium of six donors (Australia, Denmark, the Netherlands, Norway, Sweden and United Kingdom) as well as the EC established the Three Diseases Fund (3DF) to develop a project to fill the critical gap in programme implementation. It was established in October 2006 as a mechanism for international pooled funds to support three countrywide programmes to reduce transmission and enhance provision of treatment and care for TB, malaria and HIV/AIDS for the most needy populations. In line with the European Union's Common Position, the project was implemented by UN agencies, NGOs, the private sector and civilian administration at the township level or below. From 2006 to 2011, US$ 113 million were provided by 3DF to HIV, malaria and TB and integrated projects. The MOH requested WHO to be the executing agency for the national programmes, and WHO engaged in a decentralized fund flow mechanism to meet donor requirements.

Three Millennium Development Goals Fund

As the Global Fund reinitiated its support, 3DF came to an end in 2012 and its successor, the Three Millennium Development Goals Fund (3MDGF) is in its inception phase.

UNOPS is the Fund Manager for the 3MDGF, which will expand its scope beyond the three diseases to cover MNCH care and long-term sustainability.

The aim of the 3MDGF is to contribute to Myanmar's efforts to achieve the three health-related MDG targets of the mortality rate among children under five, maternal mortality rates, and halt and begin to reverse the spread of HIV and AIDS, tuberculosis and malaria. The 3MDGF contributes towards national progress towards these targets using a rights-based approach, and will be supported through a pooled donor fund. Donor commitment is likely to be in the range of US$ 250 million to US$ 300 million over five years. The 3MDGF proposes to achieve these results through three components:

- Component 1. Maternal, newborn and child care: Increased availability and accessibility of essential services;
- Component 2. HIV, TB and malaria: Support for specific interventions for populations and areas not readily supported by the Global Fund;
- Component 3. Health system strengthening: Support for long-term sustainability.

The programme budget is indicatively allocated as follows: Component 1, 74%; Component 2, 15%; and Component 3, 11%. For 2013, US$ 26.4 million has been committed in a first wave, of which US$ 3.8 million each is allocated to TB and HIV and US$ 18.8 million for malaria. In Phase 2, US$ 7.3 million may be committed for partners (US$ 2.9 million for HIV, US$ 2.6 million for TB and US$1.8 million for malaria).

Nongovernmental organizations

Remote and hard-to-reach areas continue to present challenges in each of the six areas identified by the UN theme group on health: malaria, tuberculosis, reproductive health, newborn care, immunization and childhood illness. Funding levels vary widely and most NGOs focus activities and funding on specific townships. The MOH has signed memoranda of understanding (MoU) with 37 INGOs and 14 national NGOs on collaboration in health development, particularly in areas of MCH care; environmental sanitation; control of communicable diseases (notably HIV/AIDS and TB); malaria prevention and control; rehabilitation of the disabled; and border health. In 2006, the Government introduced guidelines for UN agencies, international organizations and NGOs/INGOs on cooperation programmes in Myanmar. The guidelines outline the requirements of the Government of Myanmar with regard to developing MoU, registration of NGOs, staff appointments, travel in the country and implementation of activities.

UN agencies

There are currently 15 UN agencies, funds and programmes operating in Myanmar. These are the UNDP, UNICEF, WHO, WFP (World Food Programme), FAO, UNHCR

(United Nations High Commissioner for Refugees), UNFPA, UNODC (United Nations Office on Drugs and Crime), UNAIDS, ILO (the International Labour Organization), IOM, UNESCO (United Nations Educational, Scientific and Cultural Organization), OCHA (Office for the Coordination of Humanitarian Affairs), UNOPS and UN Habitat. WHO is an active member of the UN country teams and is committed to implementing a common UN approach as outlined in the *Strategic Framework for UN agencies in Myanmar*. In the implementation of activities, WHO coordinates with other UN agencies working in health areas, and with UNICEF, UNFPA and FAO in particular.

UNICEF is actively supporting Myanmar in the provision of vaccines (providing 90% of vaccines for children against the seven major vaccine-preventable diseases, VPD) and equipment, in routine immunization campaigns and expansion of coverage to hard-to-reach areas. UNICEF also supports the improvement of quality and availability of health services through training, ensuring standard and emergency obstetric care facilities at the township level, and through malaria prevention and control. In the area of nutrition, UNICEF promotes exclusive breastfeeding, provides potassium iodate, and supplies vitamin A to children and iron supplements to pregnant and lactating mothers nationwide. UNICEF also supports several surveys, water and sanitation and improving registration of vital events.

UNFPA is supporting a special programme of assistance that covers 93 out of 324 townships in the areas of reproductive health services, behaviour change communication, data analysis of fertility and reproductive health survey, adolescent reproductive health, and prevention of HIV/AIDS. FAO provides support to control avian influenza outbreaks in all poultry species and prevent the transmission of the virus to humans.

WHO is currently participating in UN groups working on HIV/AIDS, food security and nutrition. In addition, the WCO has been designated as the overall coordinating agency dealing with international response to avian and human influenza within the UN system and the international community.

3.3 Coordination and aid effectiveness in the country

It is mandatory to record all external funding (grants) coming into the country in the health sector budget. All grant aid funds are reflected in the National Health Sector Budget, under the financial management of the MOH. The International Health Division, under the direct supervision of the MOH, is responsible for coordination of all health-related activities among partners for health development in Myanmar. These include national and international NGOs, bilateral and multilateral agencies and inter-ministerial coordination bodies.

The country has an active Myanmar Country Coordinating Mechanism, chaired by the Minister of Health. It conducts regular meetings and discussions, and reviews

technical outcomes, barriers and constraints in programme implementation and policy directives for future planning. Under the MOH, the technical units at all levels are engaging in process monitoring throughout the implementation and constantly access the outcomes of the intervention taken. Financial units are responsible for disbursement and financial management including the returns of financial reports. Between the technical and financial units, transparency and accountability, effectiveness and efficiency of their delivery are well under control. As mentioned, assessments of all plans and projects are carried out every 2–3 years in addition to the mid-term and annual reviews. In some cases internal and independent external reviews are carried out to study and monitor progress and assess performance and impact of the interventions. Auditing mechanisms, both internal and external, are also in place.

All UN agencies institute their own M&E mechanisms and activities are discharged in a transparent and accountable manner. Internal and external auditing mechanisms are in place, and external review team mission visits are conducted for respective technical matters.

Among global initiatives and technical partnerships, the GAVI Alliance Transparency and Accountability Policy (TAP) is an integral part of its monitoring of country performance. In case of grant extension, members of the Inter-agency Coordination Committee have to confirm that the funds received from the Alliance have been used for the purpose stated within the approved application and managed in a transparent manner, in accordance with government rules and regulations for financial management.

In the case of 3DF, within the three-year period between 2006 and 2009, US$ 91 million of ODA grants have effectively been delivered, improving tens of thousands of lives. For those living with HIV, resources are more widespread and easily accessed for supportive care and treatment; for people living in malaria-endemic regions and migrant workers, there is improved access to ITN, diagnosis and care; and free provision of TB diagnosis and treatment led to an 85% treatment success rate and more than 41 000 smear-positive cases detected in 2009. By the end of June 2010, 3DF was supporting 27 HIV projects, 8 TB projects, 9 malaria projects and 4 integrated projects. The MOH and local administrations are involved in the 3DF effort through dialogue at central level and support for services provided at township level.

3.4 UN reform status and process

The UN system has been providing assistance to Myanmar since its independence and is the largest provider of international humanitarian and development aid in the country with a total in-country programme of around US$ 150 million per annum. The UN Country Team (UNCT) works as *One UN Approach* through a strategic framework. Four strategic priorities and key elements of the new Strategic Framework for the United Nations in Myanmar 2012–2015 were launched in 2011. The Strategic Framework is a testament to the commitment of the UNCT to work together with the Government

and partners to help address the priority development needs and challenges that the country face. The four Strategic priorities are:

(1) Encourage inclusive growth (both rural and urban), including agricultural development and enhancement of employment opportunities, (contributing to MDG 1, and with relevance to MDGs 2–7).

(2) Increase equitable access to quality social services, (contributing to MDGs 2–6 with relevance to MDG 1).

(3) Reduce vulnerability to natural disasters and the impact of climate change, contributing to MDG 7).

(4) Promote good governance and strengthen democratic institutions and rights (foundation for progress on all MDGs, including MDG 8).

The UN Strategic Framework (2012–2015) provides a framework for coordinated UN assistance in line with the UN Reform processes and the commitments of the Paris Declaration on Aid Effectiveness and Accra Agenda for Action. The timing broadly coincides with the first five years of a new Government, which recognizes these years as 'the most important in building a modern, developed democratic nation'. The UNCT works in partnership with NGOs and INGOs, particularly at the field implementation level, which inter alia add value through capacity development and knowledge transfer to many local organizations.

Resources needed to address the strategic priorities will include both core resource allocations from concerned UN agencies as well as resources to be mobilized from other sources over the implementation period. All Heads of UN agencies remain accountable within their respective agency mandates, and for their commitment to the UNCT and its Strategic Framework.

Each strategic priority will have linkages with the ongoing UNCT Thematic Working Groups:

(1) Strategic Priority 1 with the Food Security and Agriculture Thematic Group.

(2) Strategic Priority 2 with the Education Thematic Working Group, the Health Thematic Working Group, the WASH (Water, Sanitation and Hygiene) Thematic Group, the National Nutrition Network, the HIV/AIDS Theme Group and the Sexual and Reproductive Health Technical Working Group.

(3) Strategic Priority 3 with the Disaster Risk Reduction Working Group and the Environment Working Group.

(4) Strategic Priority 4 with the UNCT Sub-Group on Human Rights, the National Protection Working Group, the Women's Protection Working Group, the Gender Theme Group, the Women's Protection Technical Working Group, the Country Task Force on Monitoring and Reporting, and the MDG/M&E Group.

The MDG/M&E Group will also evaluate national capacity with a view to developing national capacity for research and evaluation through appropriate institutions. The UNCT has a comparative advantage in bringing lessons learnt from nearby countries and thereby promoting south-south cooperation.

3.5 Summary – achievements, opportunities and challenges

Achievements/opportunities

- The country has opened up with strong commitment on reform, and the Development of Policy Options Conference in February 2012 demonstrated a commitment to allocate more resources to social sectors, reflecting a proposed 4-fold increase in allocations to the health budget.
- More bilateral and aid agencies have come forward and strengthened the aid environment, including renewal of the Global Fund grant in 2011.
- ODA commitment for health per capita was US$ 1.2 in 2009, compared with the regional average of US$ 1.0, and 67.5% of its commitment was earmarked for the MDG component.
- In complement to national efforts, the UN system launched the UN Strategic Framework 2012–2015, coinciding with first five-year national development plan of the new Government.
- All four priority areas of the UN Strategic Framework are directed towards achieving MDGs.

Challenges

- Further strengthening of governance and accountability to ensure that the grant aid in the health sector is efficiently utilized, especially the capacity of the coordinating units in the MOH, for effective and timely implementation of planned activities.
- In the proposed budget of some of the national strategic plans, such as TB and EPI cMYP, there are budgetary gaps that need to be filled in time.
- For effective delivery of services, especially in hard-to-reach areas, undertaking appropriate measures to sustain the motivation of the field staff is critical.

4 — Review of WHO cooperation over the past CCS cycle

4.1 Review of WHO cooperation with stakeholders

Key aspects of WHO's contribution to national ownership in priority-setting and plan formulation processes

Myanmar has collaborated with WHO since it became a signatory on 1 July 1948 followed by its signing of the WHO Basic Agreement in 1957. WHO is the lead agency in the health sector of the country, and has actively collaborated in all the development processes and capacity-building of the health system. Support comprises normative guidance, human resources development, and provision of extensive technical advice for further strengthening the national health system. WHO has also effectively committed to aid coordination and has contributed and actively participated in facilitating national ownership in setting priorities, and all stages of the process of identifying strategies, formulating plans, resource mobilization, implementation and monitoring.

During the development of several of the five-year strategic plans, WHO has acted as focal point for the child health programme and supported the costing of the plan. Similarly for the Reproductive Health Strategic Plan, formulation of policies on NCD and on alcohol, and the EPI cMYP, WHO staff from the Country Office have played a crucial role. WHO has also provided technical support to the MOH for implementation of a package of essential NCDs in pilot townships, as well as technical and management support in execution of multi-million grants for 3DF, which is now moving towards achievement of the MDGs under this project. During this process, WHO has played an honest broker role and provided full technical support in formulating the project proposal. The Organization has also prepared a project framework including the costing to AusAid for humanitarian assistance in Rakhine State. WHO also responded to and coordinated the health cluster following cyclone Nargis.

WHO's comparative advantage

WHO is playing an active and leading role in the UNCT as well as among the development partners. Its technical capacity and coordination role in the health sector is well recognized. In the implementation of the UN Strategic Framework, WHO is actively participating in the Health Thematic Working Group, the WASH Thematic Group, the National Nutrition Network, the HIV/AIDS Theme Group and the Sexual and Reproductive Health Technical Working Group. WHO is also secretariat of the technical support groups for TB and malaria.

The landscape of developmental partners in health has recently changed and dramatically increased. WHO has always been a strong advocate and coordinated with both the Government and partners in conducting dialogue on health policy, strategies and plans across the broad range of areas in communicable and noncommunicable diseases, and the health system as a whole. WHO also provides technical advocacy to partners to help enhance the participatory approaches at community level and measures to address inequalities and disparities, including a focus on vulnerable groups. WHO also supports the empowerment of civil society through knowledge sharing and training. The MDG/M&E Group also engaged in national capacity evaluation with a view to supporting the national capacity for research and evaluation through appropriate institutions, such as the establishment of a national evaluation association. WHO played an active role in the MDG/ME Group.

4.2 Consistency between CCS priorities over the cycles

The second Myanmar CCS for the period 2008–2011 focused on three defined priority areas:

(1) Improve health system performance

(2) Reduce excess burden of disease

(3) Improve the health condition of mothers, children and adolescents.

These well-defined priority areas of interventions were linked to the national health status and the development strategies outlined in the Myanmar 30-year long-term vision and the NHP 2006–2011, which is part of the fourth national economic development plan. The main intent of these priorities is geared towards the enhancement of national capacity to strengthen the health system. These priorities were implemented through the biennial collaborative workplans of 2008–2009, and 2010–2011. As the third CCS was incomplete at that time, the same priorities were reflected in the 2012–2013 biennial collaborative workplan. Reviews were undertaken during each planning cycle to ensure that the CCS priorities and their strategic approaches continued to provide a sound basis for the collaborative workplans and their outcomes. The CCS priorities covered most of the strategic objectives (SOs) of the Medium-Term Strategic Plan. Table 8 shows the linkage between the three CCS priorities and SOs.

Table 8: *Linkages between country cooperation strategic priorities and strategic objectives*

Country cooperation strategy priorities	Strategic objectives
1. Improve health system performance	SO5, SO10, SO11
2. Reduce excess burden of disease	SO1, SO2, SO3, SO5, SO6, SO7, SO8, SO9, SO10, SO11
3. Improve the health condition of mothers, children and adolescents	SO1, SO4, SO10

The NHP 2006–2011 was formulated within the framework of the second five-year period of Myanmar Health Vision 2030 and as such was a short-term plan to accelerate endeavours to raise the health status of the nation. As noted in table 11 the CCS priorities were consistent with the NHP strategic objectives and outputs. The CCS was also consistent with the UN Strategic Framework 2006–2011, particularly with the health and health-related strategic objectives and plans. The immediate objective of the UNCT in Myanmar is to help provide the basic needs of the population. The UN Strategic Framework focuses on five broad thematic areas: alleviating acute income poverty; improving food security and nutrition; ensuring access to essential health and education services and interventions; ensuring a protective environment; and reducing regional disparities. Harmonization and alignments between the CCS and UN Strategic Framework is depicted in Table 10.

4.3 Internal review

Allocation of resources

During the second CCS, Myanmar's biennial budget in 2008–2009 was US$ 54.3 million of which US$ 7.5 million were assessed contributions (AC). In the 2010–2011 biennium, the budget was US$ 45.5 million of which AC were US$ 5.47 million and for 2012–2013, the total allocation was US$ 31.7 million, of which AC were US$ 7.46 million. As presented in Table 9, the percentage of financial resources and its allocation is consistent with the priorities of the CCS in all three biennia. In the first biennium of the CCS cycle in 2008–2009, the implementation rate for AC was 100% and the VC component was 84%, in the second biennium, 2010–2011, AC was 83% and the VC component represented 79% of the budget. In the third biennium of the CCS cycle, the implementation rate was still progressing and at the mid-term of the biennium, the implementation rate was 46% and 50% for the AC and voluntary contribution (VC) components of the budget respectively. In assessing the consistency between the CCS priorities and resources, it is important to note that WHO continued to provide its normative core functions to support the national health system and its public health challenges even beyond the priority areas.

Table 9: *Percentage of financial resources over three biennia of CCS cycles, 2008–2013*

Country cooperation priority areas	2008–2009		2010–2011		2012–2013	
	AC	VC	AC	VC	AC	VC
1. Improve health system performance	32.0%	0.01%	25.3%	5.3%	26.6%	7.3%
2. Reduce excess disease burden	35.2%	83.3%	29.0%	65.8%	35.1%	73.4%
3. Improve the health condition of mothers, children and adolescents	8.0%	15.7%	8.3%	28.3%	7.1%	17.4%
4. Other areas	24.8%	1.8%	37.4%	0.6%	31.2%	1.9%

AC, assessed contributions, VC, voluntary contributions.

Table 10: *Consistencies between CCS 2008–2011 priorities, NHP 2006–2011 and UN Strategic Framework 2006–2011*

CCS 2008–2011 strategic priorities – Major component	CCS 2008–2011, CCS subcomponent	NHP 2006–2011 strategic objectives and/or expected outcome	UN strategic framework 2006–2011, priority areas and response
Improve health system performance	***Sub-component 1,*** Improve access and use of acceptable, affordable care for vulnerable groups. ***Sub-component 2,*** Strengthen health system – HR, drugs and supplies, data collection and analysis to improve management. ***Sub-component 3,*** Support operational research. ***Sub-component 4,*** Provide support to University of Public Health. ***Sub-component 5,*** Strengthen IHD, a coordination unit of MOH for partners in health.	Primary medical care and referral of patients: Projects strategy 5-1, expand coverage of essential health care to all wards and villages in all townships in the country; 5-2, Expand basic health institutions and provide PHC services through village health workers; 5-3, intensify rural health development activities. Development of human resources: Project strategy 3-1, produce different categories of HR for health by coordination and cooperation with other programmes. Myanmar Essential Drug Project: activities 6–8, enhance replenishment of good quality essential drugs for all townships using drug revolving fund. Health management information programme: strategy 5-2, systematic recording and maintenance of information. Health research programme: strategy 5-3, promote and accomplish research activities on health systems with special emphasis on health delivery systems.	Alleviating acute income poverty: this is the first priority in the UN Strategic Framework. Its intervention strategy promotes livelihood initiatives through alleviating urgent poverty issues including food security and poor health. AIDS epidemic risks further impoverish families and impede future progress in poverty alleviation. Improving food security and nutrition includes: food assistance, intensive dietary diversification supplementation programmes, food-based approaches to nutrition improvement and nutrition education programmes.

CCS 2008–2011 strategic priorities – Major component	CCS 2008–2011, CCS subcomponent	NHP 2006–2011 strategic objectives and/or expected outcome	UN strategic framework 2006–2011, priority areas and response
Reduce excess burden of disease	***Sub-component 1,*** Support improved surveillance. ***Sub-component 2,*** Support increased coverage of malaria. ***Sub-component 3,*** Support TB control. ***Sub-component 4,*** Support HIV/AIDS control. ***Sub-component 5,*** Support surveillance and control of new and re-emerging communicable diseases, preparedness and response. ***Sub-component 6,*** Advocate for prevention of NCD. ***Sub-component 7,*** Support implementation of tobacco control. ***Sub-component 8,*** Support reduction of violence and injuries programme, environmental health risk and nutrition issues.	Epidemiological surveillance and response: strategies 5-3 and 5-4, strengthen epidemiological surveillance and rapid exchange of epidemiological information. The objective of National Malaria Control Project is to reduce mortality and morbidity and thereby reduce socioeconomic loss due to malaria. The National TB Project aims to reduce morality, morbidity and transmission of TB until it is no longer a public health issue. The objective of the National AIDS and Sexually Transmitted Disease Control Project is to reduce morbidity and mortality related to HIV and AIDS in the country, and mitigate the impact in the community, particularly among infected and affected. NCD Control focuses on Cancer Control Project, Cardiovascular Disease Control Project and Prevention and Control of Diabetes Mellitus.	Ensuring access to essential health and education services and intervention: action against a growing AIDS epidemic has been taken up as a priority. Combating major health problems includes an essential health intervention package; improved communicable disease surveillance; HIV/AIDS prevention; compassion, care and support; malaria and TB prevention and care; child health, and water and sanitation.

CCS 2008–2011 strategic priorities – Major component	CCS 2008–2011, CCS subcomponent	NHP 2006–2011 strategic objectives and/or expected outcome	UN strategic framework 2006–2011, priority areas and response
Improve health conditions of mothers, children and adolescents	***Sub-component 1,*** Support, as a transitional strategy, a partnership of midwives, auxiliary midwives and traditional birth attendants. ***Sub-component 2,*** Continue to support WHO collaborating centres. ***Sub-component 3,*** Strengthen coordination, collaboration and partnerships among agencies in support of MNCH. ***Sub-component 4,*** Continue to support Myanmar EPI. ***Sub-component 5,*** Continue to provide technical and financial support to states and divisions to conduct supplementary immunization activities.	The MNCH Project undertakes activities to improve the health status of rural communities; promote community awareness and involvement; provide proper antenatal care, skilled and institutional delivery, post-abortion and quality birth spacing services; ensure essential obstetrical and essential newborn care; establish adolescent reproductive health; and strengthen male involvement in reproductive health-care provision. It also oversees the immunization programme.	Combating major health problems priority areas: child health, immunization, adolescent health and reproductive health. Issues of quality and access both need to be addressed to improve reproductive health as well as to reduce maternal mortality. This component also advocates for an enabling environment, an increased public budget in health, a supportive health policy and strengthening effective and community participation in service delivery. For quality health-care services, the private sector must comply with acceptable norms and standards.

Human resources

The WHO biennial workplans are implemented by the WHO staff in collaboration with the MOH. Major components of the implementation process are handled by responsible staff and units of the MOH, with normative and technical support from WHO. The WCO has provisions for long-term, short-term and support staff. The organizational structure of the Office depends on the support services needed to complement the national programme implementation staff, and is adjusted to the biennial programme budget. Depending on this budget, the WCO may seek technical support from the WHO Regional Office for South-East Asia or WHO headquarters. During each of the three biennia, an average 45 staff visited from the Regional Office and about 30 from WHO headquarters. These were either individual or group visits, depending on the technical requirement at the country level. Common areas of technical backstopping from the

Organization were: malaria, TB, HIV/AIDs, EPI, reproductive health, child health, health planning and data management. In 2008 and early 2009, several visits were for Nargis cyclone response and rehabilitation. The WCO also procures consultancy services at a rate of about 30 months in a biennium.

During the 2008–2009 biennium, funds made available for the staff component were US$ 4.8 million, or 12.5% of the total available resources for the biennium. The actual expenditure on staff was US$ 4.1 million, that is 85.2% of the available resources for staff. In 2010–2011, the budget for staff was US$ 9.1 million, 20% of the total planned budget, but resources available were US$ 5.5 million. However the actual staff expenditure of the biennium was US$ 5 million, 55.5% of the planned cost. There was an acute shortage of staff in several programmes of the WCO, which resulted in a low implementation rate at that time. The reason for staff shortages was departure of personnel in critical units such as EPI, HIV, TB and TGS. To fill these gaps, international professional staff were recruited on a short-term basis, although the recruitment process itself was relatively lengthy. At the same time, expected VC in some cases did not arrive in time. The detailed structure and financial figures for priority areas is reflected in Tables 11 and 12.

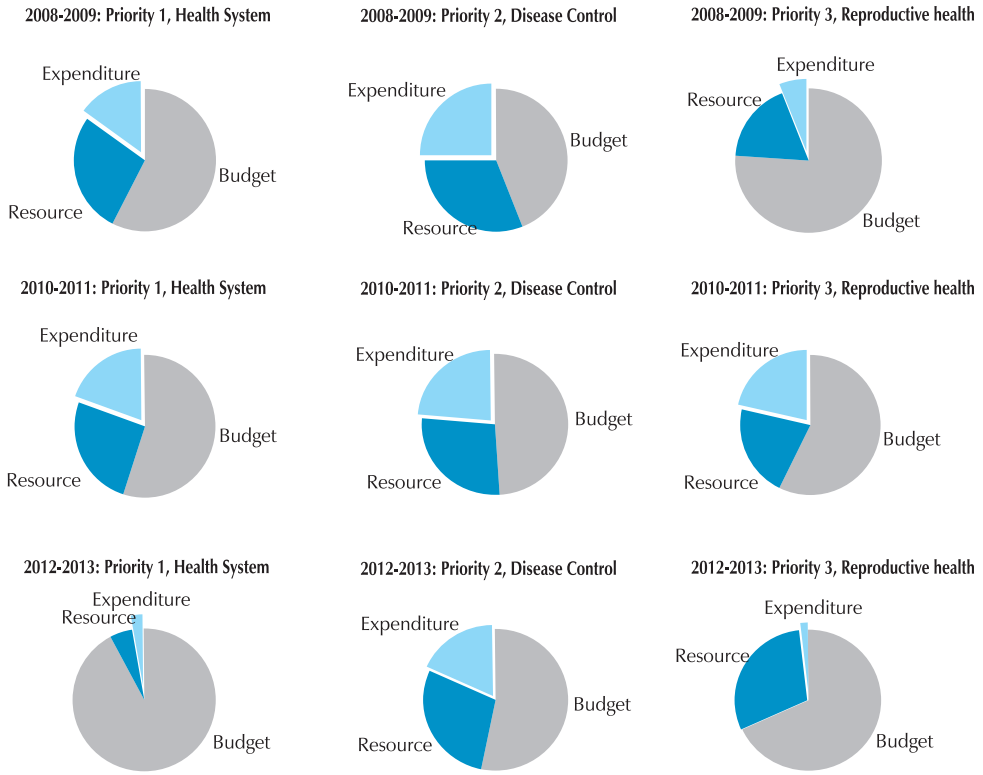
Table 11: *Number and category of WHO Country Office staff, 2008–2013*

	Fixed term		Temporary appointments			Total
	Professional	General Service	Temporary international professional	Temporary general service	Temporary national professonal	
2008–2009	9	31	3	9	1	53
2010–2011	8	32	3	11	1	55
2012–2013	9	32	5	16	2	64

Table 12: *Planned budget, resources and expenditure on human resources, 2008–2013*

	Total budget	Total available resources US$ (%)	Total staff budget US$ (%)	Available resources for staff- USD (% of staff budget)	Staff expenditure USD (% against resources for staff)
2008–2009	54 314 916	43 314 794 (80)	7 671 292 (16)	4 812 912 (64)	4 101 319 (85)
2010–2011	45 533 500	34 176 028 (75)	9 115 500 (20)	5 597 475 (61)	5 061 578 (90)
2012–2013	48 255 023	42 886 497 (89)	9 637 424 (20)	7 674 706 (80)	6 834 014 (89)

Figure 8: *Presentation of planned budget, resources and expenditure on human resources, in respect of three priority areas*



Programme performance review

The WCO consistently carries out a review of mid-term status in every biennium. This is to assess the implementation status, achievements, constraints and decisions on additional or alternative measures to achieve the targets. This exercise uses a three-colour coding system to differentiate progress made toward achievement; action needed to stimulate progress; and when the product is seriously jeopardized. In the 2008–2009 biennium, out of 205 products, it was reported that 79 were making good progress toward achievement and 123 were progressing but needed some intervention. Only three products were in serious jeopardy: two for lack of funding and the remaining one due to a change in programme management.

In the 2010–2011 biennium, WCO had a total of 107 products of which 94 were considered on track, 12 at risk and 1 was considered in trouble. Reasons specified for the at-risk and products include lack of VC funding, and delays in implementation

due to changes of MOH programme managers during the national election process. Another critical issue was an acute shortage of staff in several WCO programmes to support and monitor activities, as described in Section 4.3.2 above.

4.4 Selected achievements during the CCS cycle

Response to Cyclone Nargis

On 2 May 2008, Cyclone Nargis made landfall in Myanmar, crossing the south of the country over two days and devastating the Ayeyarwady Delta region A total of 37 townships were significantly affected by the cyclone which caused the death of 85 000 people and a further 53 800 went missing. It was estimated that as many as 2.4 million people were affected. As soon as it happened, WHO in collaboration with MOH and health cluster partners played an active role in the immediate damage control related to health and rehabilitation of the victims. WHO has three field offices in the affected areas that coordinate with township health officials, hospitals and health agencies to provide a more location-specific response. Through intense community participation, the field team ensured that there was no treatment interruption or emergence of multi-drug resistance for TB. The dengue action plan was also instituted to prevent outbreaks through active surveillance and vector control. WHO also supported the MOH in deploying a team to provide mental health care and psychological support services to the affected community. All health partners were provided information from the field to the bulletin through EWARS.

WHO and its health cluster partners approved a six-month US$ 28 million Joint Action Plan to provide immediate health care to cyclone survivors, and support longer-term efforts to rebuild the country's ravaged health-care system. The overall objective was to prevent excess mortality, morbidity and disability for the population affected by the cyclone through effective collaboration; monitoring health needs and surveillance; responding to health threats; and restoring the functionality of the health system. WHO succeeded in reaching out to the worst affected people in Myanmar.

TB prevalence survey, 2009–2010

Myanmar is among the 22 high-burden TB countries, though a consistent effort has been made to fight the disease. It is essential for the NTP to know its epidemiology, especially its scale and trends. Case notification rates vary significantly between regions and states, and the HIV/AIDS epidemic of the past decade has complicated TB epidemiology assumptions. A clear understanding of the TB situation is critical in order to review current strategies and formulate a more effective strategy, not only to save people from TB infection but more so to alleviate poverty, especially in vulnerable populations.

Though initiated in 2005, financial constraints and other administrative reasons led to the postponement of a nationwide TB prevalence survey until the NTP and WHO jointly organized it in 2009–2010. The outcome of the survey clearly reflected that the vast majority of TB cases remain undetected. While the NTP has been successful in removing symptomatic smear positive cases from the community, the big gap between the TB prevalence and the notification rate of 2009 may be due to the slow decline of TB incidence and/or to limitations of the current case-finding strategy. There is a need to accelerate the identification of cases in Myanmar through improved access to diagnostic services, improved TB screening tools and algorithms and to expand partnerships for TB control.

Myanmar artemisinin resistance containment

Myanmar has the highest malaria burden in the Greater Mekong Sub-region, where it reports some 75% of total malaria cases and deaths. In 2009–2010 the country reported suspected artemisinin resistance that was likely to flow from the Thai-Cambodia multi-drug resistant foci. The country took immediate action by developing the Myanmar Artemisinin Resistance Containment (MARC) framework through extensive consultation during 2010–2011. The MARC framework was endorsed by MOH and partners/donors in April 2011 and 3DF provided initial funding to roll out the containment activities in July 2011. WHO served as one of the eight implementing partners in Year 1 of the MARC project. With the fund flow mechanism set up during the 3DF project, WHO provided managerial support to the National Malaria Control Programme, the Department of Medical Research, Lower Myanmar, and the FDA in containment activities in addition to its core function in providing technical assistance to national programme and coordination.

The MARC Framework was planned for five years (2011–2015) at an estimated cost of US$ 117 million. The budget for rolling out implementation of National Malaria Control Programme (NMCP) – within DOH/MOH – from October 2011 to December 2012 was US$ 2.4 million during which time, with financial support from 3DF through the executing agency (WHO), 31 townships in the Tier 1 area were covered.

One of the recommendations of the Joint Assessment Team in 2012 was to prioritize Myanmar and strengthen the technical and management capacity of the WCO. Therefore, a new project proposal was developed in response to this recommendation and country needs, to be implemented in 2013 under 3MDGF. This new proposal has extended the containment activities to 52 Townships in Tier 1 and 2 areas, and some contiguous townships in Tier 3 areas.

Introduction of new vaccines in the national immunization programme and achieving polio-free status

The immunization programme in Myanmar reaches more than 85% of all targeted population with all antigens, which is leading to an overall reduction of the burden of VPD. The country has recently introduced Hib into the national programme, along with a second dose of routine measles vaccine. Other key achievements in last five years include: no wild poliovirus transmission since 2007; elimination of maternal and neonatal tetanus; and a two thirds reduction in measles mortality and morbidity cases in comparison to the 2000 baseline.

These successes, with the new vaccines, will lead to a greater reduction in childhood mortality and, in turn, accelerated progress towards achieving MDG 4.

5 — The strategic agenda for WHO cooperation

5.1 Introduction

This section addresses the strategic agenda prepared for the five-year (2014–2018) period for cooperation between WHO and the Government of Myanmar. The Strategic Agenda was formulated in line with the NHP 2012–2016, and harmonized with the UN Strategic Framework 2012–2015. During its elaboration, the social developments emerging from the national reform process and key health challenges confronting the country were carefully synthesized. Close consideration was given to the contributions of other external partners in identifying challenges and gaps in health sector cooperation, as well as to lessons learnt from a review of WHO's cooperation over the last CCS cycle. It also follows the guidance of the Twelfth General Programme of Work and regional orientations and priorities. Special consideration was also given to enhancing achievement of the MDGs, principally the health-related targets by 2015.

Five strategic priority areas for WHO cooperation have been identified for the period 2014–2018 (Table 13).

Each priority area is addressed through a coordinated programme of work that will harness the potential strengths of each stakeholder. For every strategic priority, a set of main focus areas and strategic approaches have been formulated. The main focus areas will clarify the role of WHO in addressing the priorities, reflect WHO's comparative advantage in areas where the potential for impact exists, and emphasize both the convening and policy adviser role of WHO. The strategic approaches reflect the ways and means that WHO will adopt in undertaking actions identified under the main areas of focus. Given the cross-cutting nature and interrelationships, a strategic approach under one main focus may have a positive impact on other major priorities. In addition to the five priority areas, WHO will continue its core functions and thus actively cooperate with Myanmar on any public health challenge that the country may have.

Work in these areas will be planned by biennium through negotiation between WHO and national authorities. In summary, WHO's approach to CCS is to strategically focus its collaboration with the Government on public health challenges, which, for the current CCS, will primarily focus on the five areas listed below, the order of which does not indicate an order of priority nor the importance attributed to each:

(1) **Strengthening the health system**

In the area of strengthening of the health system it will the main objectives are to enhance national capacity to strengthen the health system, with emphasis on management information systems, health financing, logistics, inventory and health infrastructure, supporting equity in health and increased access to services, particularly for underprivileged populations and vulnerable groups, through promoting community capacity and enhancing faculty development programmes and facilities for health institutions in order to improve the proficiency of health personnel. The focus areas include improving access to quality care, strengthening implementation of the National Health Plan and promoting traditional and herbal medicine.

(2) **Enhancing the achievement of communicable disease control targets**

In enhancing the achievement of communicable disease control programme area, the main objective is to achieve the disease control targets of the MDGs. The main focus areas include attaining 80% coverage of people needing ART, further reduction in TB prevalence and mortality, intensifying control of malaria in high transmission areas, and control and eliminate neglected tropical diseases. It will also focus in strengthening immunization system.

(3) **Controlling the growth of noncommunicable disease burden**

In controlling the growth of noncommunicable disease burden, the emphasis will also be given to minimize the prominent risk factors in the environment. The focus area includes of supporting to expand activities for promoting practices of healthy lifestyles, including tobacco control, expanding the national efforts for prevention of injury, violence and disability and strengthening the prevention and control of NCD.

(4) **Promoting health throughout the life course**

In promoting health through the life course, the objective is to strengthen the health system by improving health conditions of women, children, adolescent and the elderly and ensuring accountability through reporting on progress on reproductive and sexual health and child health as part of achieving the MDGs. The focus areas include developing integrated package of interventions for birth spacing and MNCH, particularly child nutrition and growth monitoring, improving sexual and reproductive health including adolescent and women's health and health care for elderly, and enhancing safe water supply, water quality control, improving sanitation and health education promotion.

(5) Strengthening capacity for emergency risk management and surveillance systems

In the area of strengthening capacity for emergency risk management and surveillance systems, the main objectives are to prevent disease outbreaks and other acute public health events through strengthening surveillance systems and to strengthen rapid response to disasters, disease outbreaks and other acute public health events. The main focus area includes enhancing preparedness, surveillance and response.

Table 13: *Strategic priorities of the CCS, 2014–2018*

1. Strengthening the health system	
Objectives	1. Enhance national capacity to strengthen the health system, with emphasis on management information systems, health financing, logistics, inventory and health infrastructure.
	2. Support equity in health and increased access to services, particularly for underprivileged populations and vulnerable groups, through promoting community capacity.
	3. Enhance faculty development programmes and facilities for health institutions in order to improve the proficiency of health personnel.
	4. Consider the private sector as part of the health system, encourage more private–public partnerships and promote community participation.
	5. Promote equitable, adequate and sustainable health-care financing.
Main focus area 1.1	Improve access to quality care
Strategic approaches	1.1.1 Provide technical support and advocacy for effective, comprehensive UHC throughout the country, aimed at a healthy life course.
	1.1.2 Provide technical and material support for further strengthening of health-related universities and institutions, ensuring increased availability of an appropriate, skill-mixed and competent health workforce, particularly in remote and rural areas, and assist in the establishment of an HR unit at the central level under the MOH.
	1.1.3 Assist in strengthening health facilities at all levels to provide good quality, safe care with appropriate technology that is acceptable and affordable for all.
	1.1.1 Ensure the availability of quality essential drugs and medical devices at all levels, particularly in hard-to-reach areas, and carry out regular reviews of the national drug policy and supply chain of essential drugs.

Main focus area 1.2	Strengthen implementation of the National Health Plan
Strategic approaches	1.2.1 Provide technical support to develop equitable, adequate and sustainable health financing schemes to prevent barriers in access to health care.
	1.2.2 Support data collection and storage; strengthen skills for data analysis and use; and assist health research to strengthen further the health system.
	1.2.3 Collaborate with MOH in formulating, monitoring and assessing policies, strategies and plans, and ensuring the optimal use of scare resources.
	1.2.4 Ensure availability of strategic information by strengthening the health management information system (HMIS) to facilitate monitoring the target.
	1.2.5 Strengthen the management capacity of the national programme through development of evidence-based plans.
	1.2.6 Provide technical support and strengthen the planning and management perspectives of IHD for effective coordination and resource mobilization.
Main focus area 1.3	Support Government efforts to promote traditional and herbal medicine
Strategic approaches	1.3.1 Provide technical support to enhance capacity in research and development as well as production of quality assured traditional medicine.
	1.3.2 Facilitate MOH in promoting the use of traditional / herbal medicine in PHC.
2. Enhancing the achievement of communicable disease control targets	
Objective	Achieve the communicable diseases control targets of the MDGs.
Main focus area 2.1	Attain 80% coverage of people needing antiretroviral therapy (ART) under national guidelines and minimize HIV transmission from infected mothers
Strategic approaches	2.1.1 Provide technical assistance to scale up the health sector response to HIV.
Main focus area 2.2	Further reduce TB prevalence and mortality to achieve the TB impact targets
Strategic approaches	2.2.1 WHO to provide interventions to improve earlier TB case detection.
	2.2.2 Strengthen the expansion plan for programmatic management of drug resistant TB.
	2.2.3 Scale up TB/HIV collaborative activities.

Main focus area 2.3	Intensify control of malaria in high transmission areas and along international borders; and control and eliminate neglected tropical diseases.
Strategic approaches	2.3.1 Strengthen national capacity in planning, implementing, monitoring and evaluating the malaria control programme and neglected tropical diseases, and further increase access to affordable and quality diagnosis and treatment.
	2.3.2 Intensify malaria control interventions and contain drug-resistant malaria, covering populations at risk of malaria, including hard-to-reach populations and border areas, through targeted partnerships.
	2.3.3 Eliminate vector-borne and neglected tropical diseases, including dengue haemorrhagic fever (DHF), blindness and leprosy through mass drug administration (MDA), environmental management, community participation and behaviour change communication.
Main focus area 2.4	Strengthen immunization systems to achieve at least 90% DTP coverage nationally and 80% in all townships; and expand planning and implementation of other VPD programmes
Strategic approaches	2.4.1 Maintain or expand surveillance for invasive disease (*H. influenzae*, *S. pneumoniae* and *N. meningitides*), enteric pathogens (rotavirus, cholera and typhoid) and others.
	2.4.2 Introduce new vaccines, promote underused vaccines and develop vaccine management systems including immunization safety and adverse events following immunization.
	2.4.3 Further strengthen the monitoring and evaluation of immunization programmes.
	2.4.4 Strengthen case-based surveillance for VPD in all townships and strengthen laboratory capacity, both workforce and equipment.
3. Controlling the growth of noncommunicable disease burden	
Objective	Control the growth of NCD burden and minimize the prominent risk factors in the environment.
Main focus area 3.1	Support the Government to expand activities for promoting practices of healthy lifestyles in the community, including tobacco control
Strategic approaches	3.1.1 Assist the Government in raising awareness on the dangers of tobacco use and exposure to second-hand smoke, and enhance the capacity of tobacco surveillance and support for effective implementation of the WHO Framework Convention for Tobacco Control (FCTC) and its protocol.
	3.1.2 Provide technical support in disseminating appropriate health education messages throughout the country, particularly those related to global health priorities, and develop community-based initiatives that promote healthy lifestyles such as diet and physical activities.
	3.1.3 Facilitate MOH in enhancing capacity for strengthening health promoting school programmes.

Main focus area 3.2	Support the Government to expand national efforts for prevention of injury, violence and disability
Strategic approaches	3.2.1 Provide technical support to enhance national activities for surveillance, prevention and management of injury and violence.
	3.2.2 Facilitate MOH in expanding community-based rehabilitation.
	3.2.3 Assist in establishing an injury unit in MOH.
Main focus area 3.3	Support the Government to strengthen the prevention and control of NCD
Strategic approaches	3.3.1 Provide technical support for surveillance, prevention and control of risk factors, early detection, referral and management of cancer, diabetes, cardiovascular diseases (CVD) and CRD.
	3.3.2 Provide technical support to strengthen community-based mental health programmes.
	3.3.3 Provide technical support to strengthen community-based health programmes for disability due to hearing and visual impairment.
	3.3.4 Provide technical support to strengthen community-based approaches for the prevention, early referral and management of snake bites.
4. Promoting health throughout the life course	
Objective	Strengthen the health system by improving health conditions of women, children, adolescents and the elderly and ensuring accountability through reporting on progress on reproductive and sexual health and child health as part of achieving the MDGs.
Main focus area 4.1	Develop a comprehensive, integrated package of interventions for birth spacing and MNCH, particularly child nutrition and growth monitoring
Strategic approaches	4.1.1 Provide technical and policy support for comprehensive MNCH, through predictable and sustainable investment to ensure availability and accessibility of quality MNCH service-based technologies, integrated delivery of health service and life-saving interventions.
	4.1.2 Increase the knowledge of families, communities, decision- and policy-makers and target groups on MNCH in order to ensure a favourable social, economic and political environment, and community mobilization.
	4.1.3 Provide technical assistance to strengthen community-based nutrition programmes for women and children, and the monitoring and assessment of risks related to food, such as biological and chemical risks.

Main focus area 4.2	Improve sexual and reproductive health including adolescent and women's health and health care for elderly
Strategic approaches	4.2.1 Improve reproductive health programme implementation, including adolescent reproductive health, and strengthen the capacity of adolescent and youth-friendly confidential services and education, including awareness on gender equity issues, gender mainstreaming and domestic violence at all levels.
	4.2.2 Strengthen capacity of management for gynaecological conditions such as severe menstrual problems, obstetric fistulae, uterine prolapse, pregnancy loss, sexual dysfunction and cancer screening (cervical and breast).
	4.2.3 Assist MOH to enhance capacity in elderly care services.
Main focus area 4.3	Support the Government to enhance safe water supply, water quality control, improved sanitation and personal hygiene, and health education promotion
Strategic approaches	4.3.1 Provide technical assistance to strengthen safe water supply, improved sanitation and personal hygiene.
	4.3.2 Provide technical assistance and materials and equipment to raise awareness of safe water, sanitation, personal hygiene and a healthy lifestyle.
5. Strengthening capacity for emergency risk management and surveillance systems against various health threats	
Objectives	1. Prevent disease outbreaks and other acute public health events through strengthening surveillance systems.
	2. Strengthen rapid response to disasters, disease outbreaks and other acute public health events (food, chemical, radiation as well as biological).

Main focus area 5.1	Enhance preparedness, surveillance and response
Strategic approaches	5.1.1 Promote alert and response capacity through implementation of IHR 2005, covering areas of capacity-building of implementers and focal points, quality of surveillance and infrastructure, and intensifying measures to eradicate poliomyelitis by 2014.
	5.1.2 Improve early detection and rapid response to pandemic and epidemic diseases by strengthening diagnostic capacity and laboratory services and developing coordinated plans and mechanisms for disaster preparedness and response, and other public health emergencies of international concern.
	5.1.3 Promote research capability with emphasis on operational research, vulnerability assessment and prediction of future vulnerabilities from the impact of climate change; and provide technical assistance to enhance the field epidemiology training programme, information sharing and HR development.
	5.1.4 Encourage effective coordination and support to ensure access by all populations to interventions for the prevention and control and/or elimination of zoonotic diseases under the "one health programme", specifically implementing the Asia Pacific Strategy for Emerging Diseases (APSED).
	5.1.5 Provide technical support to township health staff in disaster-prone areas for preparedness and response.
	5.1.6 Address public health needs and gaps during emergencies and post-emergency/ recovery phases.

5.2 Rationale

Strengthening the health system

Myanmar is constantly strengthening its national health systems and public health functions, based on principles of PHC and UHC, reaching the poor and hard-to-reach vulnerable groups, and addressing equity issues. However, the basic health services and rural health centre infrastructure have not kept pace with population growth, resulting in suboptimal and inequitable access to rural health care. Measures will have to be taken to make the health system more responsive to the legitimate expectations of the people, which are linked to improvements in social and living standards. Barriers to access are attributed to lack of human resources and skills, frequent stock-out of essential medicines and medical devices, and high out-of-pocket expenditures for the population. A sustainable system for financing health should be established that protects people from financial burden in seeking health care.

Health care should be seen to provide equitable access to all, regardless of socioeconomic and demographic background, and be suitable to the economic situation

of the country. In addition, it is essential to embrace and support modernization at the same time as the continued and extensive use of deep-rooted traditional medicine. Sustaining the Myanmar Traditional Medicine System relies on the strengthening of capabilities for scientific research and developmental tasks. Research studies on traditional medicine involve the quality, safety and efficacy of herbal drugs, while developmental tasks involve the discovery and preservation of ancient manuscripts and literature, health education and health system research. WHO will support training and strengthening of capacity of human resources for health through continued development of an appropriate, skill-mixed health workforce that is able to address the disease and health problems prevailing in the country. In further developing an evidence-based and integrated policy approach, it is critical that timely essential, comprehensive health information is available and, if possible, disaggregated data to help track progress and to measure national policies and plans, including MDGs. Myanmar has launched UHC, which is progressing very well and is solving many of the health system issues. WHO will support the further strengthening of UHC and implementation of the NHP and its medium-term strategies as a whole. All these achievements in the health system will be a firm platform for development of the post-2015 health agenda. It is important that WHO constantly monitors and assesses progress so as to provide appropriate technical input to post-2015 MDGs.

Enhancing the achievement of communicable disease control targets

As far as disease burden is concerned, the country is putting all efforts in the health system to achieve its targets of communicable diseases control and halting the burden of NCDs. Infections related to sex work and those from husband to wife decline faster than other routes of transmission, but remain the most important source of new infections. However, if the present programme of HIV/AIDS coverage is merely maintained, but not increased, the sharing of contaminated injection equipment will constitute the largest source of new infections by 2015. The epidemic remains mainly in the male population. The increasing number of people requiring treatment is a key reason for scaling up the programme, and interventions to prevent mother-to-child transmission of HIV will continue to be the continuum of care channel for the provision of treatment, as this will directly and simultaneously contribute to achieving MDGs 4 and 5, in addition to MDG6. The key thrust areas that WHO will address are hence as outlined in Table 15. The technical scaling up includes normative guidance, assessing evolving trends, developing linkages and referrals, and integrating the HIV response within a health sector moving away from vertical programmes. The strengthening of systems to develop strategic information is an integral part of planning and resource mobilization. This involves continued WHO support in surveillance and M&E activities, i.e. HIV sentinel surveillance, behavioural surveillance, early warning indicators, integrated biological–behavioral surveillance (IBBS), HIV drug resistance surveys, survival studies and research..

A nationwide TB prevalence survey in 2009–2010 confirmed a much higher TB burden than previously estimated, and the NTP thus revised the TB epidemiological data, impact targets, policies and control strategies and funding requirements to achieve the set MDGs by 2015. Additional efforts are needed to screen more actively for TB among populations with poor access to health services, and among risk groups. The NTP needs to scale up the pace of diagnosis, treatment and care for patients suffering from MDR-TB and take steps to reduce the dual burden of TB and HIV/AIDS among populations at risk and for those who have been affected by both diseases. Additional interventions such as screening risk groups, contact investigations and mobile team activities in high prevalence communities, will detect many of the unreached and undetected TB cases. Two other approaches related to MDR-TB and TB/HIV are to treat more drug-resistant cases and make treatment services available in 100 townships compared with 22 in 2010. By the end of 2015, TB/HIV collaborative activities will be made available all over the country and as far as possible be integrated at township level.

In 2005–2006, Cambodia and Thailand reported strong evidence of artemisinin-resistant falciparum malaria at the border between the two counties. Efforts to stem the spread of these parasites commenced in 2008. Myanmar detected evidence of suspected artemisinin resistance in several eastern states and regions, underlining the importance of surveillance of parasite resistance and effective malaria control in the country. The Strategic Framework for MARC 2011–2015 was developed to respond to the regional threat, and the containment action that started in Myanmar in 2011 is not confined to artemisinin but covers all antimalarials. Containment entails concentrated efforts and a high number of activities in a focused area, which calls for even greater coordination and mechanisms backed up by a strong monitoring and evaluation system. Containment can only be achieved using a solid multifaceted approach that focuses on both long- and short-term solutions. It involves intensification of malaria control interventions for all populations at risk of malaria, including hard-to-reach populations, and their increased access to quality diagnosis and treatment with particular emphasis on aspects of cross-border collaboration.

Historically, dengue fever (DF)/DHF have been diseases of urban areas in Myanmar, but since 1998 more cases have been reported in rural settings. In 2011, the distribution of DF/DHF cases was found to be equal in urban and rural areas. Morbidity has been increasing over the last four decades. Lymphatic filariasis was a high burden disease although, in spite of several difficulties, MDA has been implemented in 22 of the 45 disease-endemic districts covering about 20 million people. The elimination programme (MDA) relies heavily on external support. Though leprosy is no longer a public health problem in Myanmar, attention is still needed for particular issues. These include further reduction of disease burden at subnational level, through intensified leprosy activities such as IEC and awareness activities in selected high burden townships, and strengthening participation of persons affected by leprosy.

During the period 2007–2011, the national EPI programme gained in strength and saw increases in reported coverage and a subsequent drop in incidence of VPDs: The programme reached more than 85% of all beneficiaries with all antigens leading to an overall reduction of the burden of VPDs. Today, underserved populations and the causes and solutions for bottlenecks need to be identified so that no community has less than 80% coverage (all vaccines). Focus will be to improve the equity of immunization outreach services. There is also a need to generate demand from the most vulnerable and underserved populations by ensuring that corrective action on these impediments is taken through a participatory and decentralized process. Participation of civil society groups and NGOs to support immunization services should be sought, including paediatric and medical associations, and religious groups who can play an active role in the design, provision and promotion of these services.

The cold-chain backbone is gradually expanding to RHC level and staff are well trained and experienced with both routine campaigns and various national immunization days (polio), tetanus toxoid and measles supplementary immunization activities. Myanmar has reached the goal of 90% measles mortality reduction; however, there are many challenges to sustaining this gain and to progress towards elimination. Though the country was polio free in the period 2003–2005, 11 wild poliovirus cases were detected in 2007, and vaccine-derived poliovirus was reported in 2010. Acute flaccid paralysis surveillance has been strengthened and necessary measures will be taken to ensure that the country remains polio free and that adequate documentation is provided to the regional certification commission so that the South-East Asia Region can be declared polio free in early 2014. Polio endgame strategies will be included in priority 5 of the strategic agenda.

Controlling the growth of noncommunicable disease burden

NCDs are a growing burden to the country, and are responsible for about 41% of deaths. The most common ones are CVD, cancer, diabetes and CRD. Although these are also the four global target NCDs, their negative impact on individuals, families and countries is underestimated and as such are major barriers to human development. Treatment for these diseases is extremely expensive and forces families into tremendous debt and impoverishment.

Myanmar has conducted several studies and chronic disease risk factor surveillance surveys (STEPS). The results of these studies formed the basis of different levels of intervention strategies that have been initiated to tackle the main risk factors that are amendable to modification by simple health promotion measures. These include the use of tobacco, alcohol, and unhealthy diet (fat, salt and sugar, low in fruit and vegetables). NCDs are a multisectoral issue that involves various ministries. Two multisectoral meetings have been held to draft policies on issues that can only be addressed collectively – one on NCD policy and the other on alcohol policy. In the

case of tobacco, 44.8% of men and 7.8% of women are regular smokers. The Myanmar Tobacco Free Initiative was launched in 2000 and the Control of Smoking and Tobacco Products Consumption Law was enacted on 4 May 2006. Myanmar became a party to the WHO FCTC in 2005 and signed the protocol to Eliminate Illicit Trade in Tobacco Products on 10 January 2010. Ongoing health promotion activities in the community include the practice of healthy lifestyles such as healthy diet and physical activity, and controlling the use of tobacco products. The injury surveillance, prevention and care programme also needs to be further strengthened through multisectoral collaboration.

The impact goals of the Twelfth GPW with regard to NCDs is the reduction in the probability of dying from CVD, cancer, diabetes or CRD for people aged 30–70 years by 25% by 2025.

Promoting health throughout the life course

Related to the fourth priority area – promoting health throughout the life course – Myanmar's consistent efforts on reproductive, maternal, newborn and child health are progressing in line with the targets of the respective national medium-term strategic plans. There has been considerable progress towards the targets of MDGs 4 and 5. However, MMR remains high at an estimated at 200 per 100 000 live births and needs further efforts to bring the ratio down to 130 per 100 000 live births by 2015, the MDG target. MMR in rural and hard-to-reach areas was estimated to be about 2.5 times higher than the urban figure. Effective implementation of strategies and programmes are challenged by financial shortfalls for reproductive health services coupled with low investments in health system strengthening, improving coverage and availability of quality services. WHO will work in collaboration with UNFPA, UNICEF and other partners to strengthen the health system to improve the health conditions of women, children and adolescents through technical and policy support to a comprehensive, integrated package of interventions for family planning, safe abortion and MNCH. Sustained investment, improved access to quality MNCH services, and increased knowledge of families, communities and policy-makers on MNCH, will ensure an enabling and healthy livelihood. WHO will also focus on improving adolescent, sexual and reproductive health, women's health and the health of the ageing population to ensure well-being throughout the life course. Demographic transition has led to a growing number of older people, and it is estimated that 10% of the current 6 million elderly are vulnerable persons. Common health issues that the elderly face comprise high blood pressure, heart disease, stroke, cancers, lung diseases related to smoking and musculoskeletal problems. Community-based health care for the elderly was first taken up in NHP 1993–1996 and WHO, in collaboration with development partners, continues to provide support for health care for this population.

Strengthening capacity for emergency risk management and surveillance systems for various health threats

Myanmar has a long coastline of 2400 km, covering almost the entire east coast of the Bay of Bengal. Most of the coastal areas are within a risk zone as they are situated on the highly active fault line called the Sagaing fault, which leaves Myanmar a very short lead time as warning. Other hazards include cyclones, storms and landslides. Urban fires in the central areas of the country are common during the hot, dry season and often human induced. Climate change has led to a re-emergence of MDR *Plasmodium falciparum* as an insecticide-resistant vector. The country also faces several health hazards due to conflict-related complex emergencies and natural disasters. These include diarrhoeal diseases, gastroenteritis, dysentery, cholera, malaria, leptospirosis and other water-borne infectious diseases. Disaster preparedness and response mechanisms have therefore been established in disaster-prone areas/ townships by a collective effort of various sectors and stakeholders.

5.3 Validation of the CCS strategic agenda with NHSP priorities and UN Strategic Framework

The NHP 2011–2016 is composed of 11 projects: communicable diseases, noncommunicable diseases, neonatal care, health care for the life course, quality of hospital care, traditional medicine, health manpower, medical research, nutrition, health systems and rural health care projects. Aligned with the NHP, several areas have developed five-year national strategic plans and, in this validation exercise, reference has also been made to HIV/AIDS, TB, malaria and reproductive health. The UN Strategic Framework 2012–2015 was developed in 2011 by UNCT, and launched in 2012. The strategic framework identified four priority areas: inclusive growth; equitable access to quality social services; vulnerability to natural disasters and climate change; and good governance, democratic institutions and human rights. The validation exercise of the CCS 2014–2018 Strategic Agenda with NHP 2012–2016 and the UN Strategic Framework is presented in Table 14.

Table 14: *Validation of CCS Strategic Agenda with NHP 2011–2016, UN Strategic Framework outcomes 2012–2015 and priorities of WHO 12th GPW*

Strategic agenda of CCS 2014–2018	CCS strategic priorities at main focus level	NHP 2011–2016 strategic objectives and/or expected outcomes and national strategic plans	UN strategic framework 2012–2015 outcomes	WHO 12th GPW (2014–2019)
Strengthening the health system	The main objectives of strengthening the health system are: to enhance national capacity through governance and leadership; support planning processes; support equity in access to quality, people-centred, integrated health services; and to promote sustainable health-care financing. Approaches to increase access to quality care include expansion of UHC throughout the country, availability of skill-mixed workforce, strengthening health institutions and availability of essential drugs, drug management and procurement systems. Implementation of NHP includes health-care financing, strengthening HMIS, and technical support in planning, monitoring, assessment and optimal use of resources; strengthening of IHD coordination activities, and promoting the use of traditional medicine.	The main strategies of Strengthening the Health System Project are: to develop a health policy, strategies and plans; to formulate measures to overcome barriers of health expenditure in seeking health care; to enhance the health information system in the collection, analysis and effective use of data; to cooperate with multisectoral and international partners for collaborative activities in health; to enhance the effectiveness of township level health care; and to promote resource mobilization for health care. The PHC-based border area and rural health care project emphasizes further development of rural health services through an effective skill-mixed health workforce, convenient patient transfer, and availability of essential drugs and medical devices to assure quality care in an equitable manner.	The first strategic priority is to encourage inclusive growth, contributing to MDG1 with repercussions on MDGs 2–7. The first outcome addresses this priority and will contribute to accelerated growth and poverty reduction. The second outcome focuses on the most vulnerable groups, less access to food and touches on critical issue of homelessness. The third outcome addresses rural finance. The first priority will result in equitable GDP growth and facilitate access to health. Strategic priority 2 increases equitable access to quality social services, and outcome 2 of this priority relates to coordinated efforts to achieve this. Emphasis is placed on strengthening health system processes, in particular at the township level, and improving effectiveness through support to service delivery, HR development, leadership management, procurement and supply, health financing and health information systems. Efforts will build on the existing spirit of public health service and commitment of health workers to serve in spite of difficult conditions.	This is reflected as category 4, health systems in the 12th GPW. It supports the strengthening and organization of health systems with focus on integrated service delivery and financing; achieving universal coverage; strengthening HR for health and health information systems; facilitating transfer of technologies; promoting access to affordable, quality, safe and efficacious medical products; and promoting health services research.

Strategic agenda of CCS 2014–2018	CCS strategic priorities at main focus level	NHP 2011–2016 strategic objectives and/or expected outcomes and national strategic plans	UN strategic framework 2012–2015 outcomes	WHO 12th GPW (2014–2019)
Enhancing the achievement of communicable disease control targets	The objective of this priority area is to enhance the achievement of communicable disease control targets and MDGs. The main focus area of HIV is to attain at least 80% coverage of people needing ART under the national guidelines and to minimize the transmission of HIV infection from infected mother to child. TB's focus area is for further reduction of prevalence and mortality to achieve the TB impact targets; the aim of malaria control is to contain drug resistance in high transmission areas along international borders. For communicable disease surveillance, the focus area is to sustain polio free status, maternal and neonatal tetanus elimination and progress to eliminate measles and introduce new vaccines based on burden of disease evidence.	One of the principal strategies in communicable disease control is to strengthen disease surveillance and the rapid exchange of information. For HIV/AIDS, the strategic priorities are: prevention of HIV transmission via unsafe behaviour in sexual contacts and use of contaminated needles; comprehensive continuum of care for people living with HIV; mitigation of impact of HIV on people living with HIV and their family. TB control strategic plans include: active case-finding, 2012–2015; expansion of programmatic management of drug-resistant TB, 2011–2015; and nationwide scale-up plan for TB/HIV collaborative activities, 2012–2015. The goal of malaria control is to reduce morbidity and mortality by at least 50% by 2015. Containment of drug resistance in high transmission areas along the international borders is a critical approach in reaching the goal. EPI activities in 2012–2016 include reaching 90% DTP3 coverage nationally. Other goals are implementation of the National Plan of Action for integrated disease surveillance and EWARS.	Under outcome 2 of strategic priority 2, the UN will ensure a continuous and uninterrupted supply of commodities to health including HIV prevention and treatment. HIV care and support services will be strengthened and expanded through joint programmes among members of UNCT on HIV/AIDS aligned with the national Strategic Plan for AIDS 2011–2015. Outcome 3 will assist in the collection, analysis, dissemination and use of data at township level. Similar initiatives like GAVI will be closely associated. Nationally, the targets are 90% coverage for all EPI antigens and 80% uniform coverage in all townships; sustaining polio free status; three quarter reduction in measles morbidity and mortality to reach elimination goals. The outcome is to achieve active immunization by ensuring that gaps in EPI coverage are analysed, communities not being reached are defined, and causes of major bottlenecks are identified and corrective actions taken in the communities concerned.	This is category 1 of the 12th GPW. Three major communicable diseases – HIV, TB and malaria – stand out clearly on the basis of their contribution to the burden of death and disability in most regions of the world. The demand for WHO support is consistent in more than 80% of country coordination strategies. Immunization is another area where protection afforded by vaccines prevents more than 2 million deaths in a context in which, each year, some 2.5 million children under the age of five die from VPD. Neglected tropical diseases, although contributing less to overall mortality rates, are a major cause of disability and loss of productivity among some of the world's most disadvantaged people.

Strategic agenda of CCS 2014–2018	CCS strategic priorities at main focus level	NHP 2011–2016 strategic objectives and/or expected outcomes and national strategic plans	UN strategic framework 2012–2015 outcomes	WHO 12th GPW (2014–2019)
Controlling noncommunicable disease burden	The main objective is to stem the growth of NCD burden and minimize the prominent risk factors in the environment, with emphasis on CVD, diabetes, cancer, chronic lung diseases and mental health, as well as on injuries and snake bites. Activities will focus on addressing the principal four risk factors identified and promoting health practices in communities.	The NCD component consists of CVD, diabetes, chronic lung diseases and cancer control projects. Mental health, injury prevention and snake bites are also priority areas. Snake bite is very common in rural areas of the country and both morbidity and mortality of accidents and injuries is relatively high in the Region. One of the main strategic approaches to NCDs is to prevent the risk factors of tobacco and drug abuse.	The Strategic Framework priority 2 aims for universal access to quality social services, an essential condition for establishing an inclusive and equitable society. Outcome 1 aims to ensure access for vulnerable groups to quality health and social services.	This is category 2 in 12th GPW and covers all NCDs and their associated risk factors, including work on mental health, disabilities (including blindness and deafness from all causes), prevention of violence and injuries and nutrition. The growing NCD burden has devastating health consequences for individuals, families and communities; it threatens to overwhelm health systems; and is inextricably linked to poverty reduction and economic development. WHO focus for during 2014–2018 will be to combat four primary NCDs (cancer, CVD, chronic lung diseases, diabetes) and four major risk factors (tobacco use, unhealthy diet, physical inactivity and harmful use of alcohol).

Strategic agenda of CCS 2014–2018	CCS strategic priorities at main focus level	NHP 2011–2016 strategic objectives and/or expected outcomes and national strategic plans	UN strategic framework 2012–2015 outcomes	WHO 12th GPW (2014–2019)
Promoting health throughout the life course	The objective of this area is to strengthen the health system by improving the health status of women, children and adolescents and ensuring accountability by reporting on progress towards reproductive and sexual health as part of achieving the MDGs. The focus area includes: ensuring an adequate and competent MCH workforce to provide integrated intervention packages, improving adolescent health and advocating for sexual and reproductive health, women's health and active ageing.	The MNCH project undertakes activities to improve the health status of rural communities; promote community awareness and involvement; provide proper antenatal care, skilled and institutional delivery, post-abortion and quality birth spacing services; ensure essential obstetrical and newborn care; establish adolescent reproductive health services; and increase male involvement in reproductive health-care provision.	Strategic priority 2 contributes to MDGs 2–6. Under outcome 2, UNCT will coordinate efforts to achieve the objectives of the National Strategic Plans on Reproductive Health, Child Health and Women's Health. UNCT collaborative action will aim to increase the availability of and access to antenatal care, skilled attendance at birth, postnatal care, birth spacing, neonatal and child health care; and to ensure the integration of sexual and reproductive health services with HIV prevention, treatment, care and support.	This relates to category 3 in 12th GPW and is by nature cross-cutting. It addresses population health needs with a special focus on key stages of life. This approach enables the development of integrated strategies that are responsive to evolving needs, changing demographics, epidemiology, social, cultural, environmental and behavioural factors, and widening health inequities or equity gaps.
Strengthening capacity for emergency risk management and surveillance systems for various health threats	In respect of disease outbreaks and emerging diseases, surveillance will be enhanced, the IHR 2005 implemented and the EWARS and rapid response team networks instituted. Technical advocacy and support on preparedness and rapid response will be provided. National capacity will be strengthened for detection, verification, risk assessment and response to epidemics and other public health emergencies of national, regional and international concern.	The principal objectives of the Disaster Management and Public Health Emergency project are to implement effective preventive activities, to accelerate emergency preparedness activities and to strengthen surveillance activities for early warning and effective response in disaster prone areas. The capacity of hospital-based laboratories to support communicable diseases should be further strengthened.	Priority 3 aims to reduce vulnerability to natural disasters and climate change and contributes to MDG7. It addresses support and advocacy for formalization of policies and plans related to disaster risk reduction; enhancement of knowledge; and strengthening capacity, awareness and resilience of communities and authorities in high-risk, vulnerable locations to respond to natural disasters and climate change effects. Strengthened national capacity will also contribute to meeting IHR requirements by 2014.	Category 5 of 12th GPW covers the health response to acute and chronic events with public health significance caused by disease outbreaks, antimicrobial resistance, environmental threats, natural disasters and conflict. It includes all elements of emergency risk management: prevention, preparedness, surveillance, response and early recovery.

6 — Implementing the strategic agenda: implications for the Secretariat

6.1 Introduction

The Myanmar Government is strongly committed to socioeconomic reform in all aspects of the development process. The expected economic development will determine the promotion of human development. The development goals among all sectors are synergistic, interlinked and cross-cutting, and are welcomed by the global and regional communities. Several development partners are coming forward to assist in the reconstruction of the country. There are sweeping changes in the aid environment including the health sector and the strategic policy of the MOH is to cooperate with all partners in all its collaborative activities for health.

WHO has worked in close association with Myanmar since the inception of their relations in 1957 to assist the health development of the country. The critical challenge for the WCO will be adjusting and scaling up its capacity to provide effective support that would contribute meaningfully to and influence national health policy processes, that is, the Government's health agenda. It is critical to note that WHO is also undergoing a reform process emphasizing three objectives:

(1) improved health outcomes, meeting Member States' and partners' expectations in addressing agreed global health priorities;

(2) greater coherence in global health, with a leading role for WHO in enabling actors to be effective in contributing to the health of all people; and

(3) establishing itself as an *excellence-pursuing organization* (effective, efficient, responsive, objective, transparent and accountable).

WHO reform is also focussed on five core areas:

(1) Communicable diseases

(2) Noncommunicable diseases

(3) Health throughout the life course

(4) Health systems, and

(5) Preparedness, surveillance and response.

In line with the above, core features of CCS 2014–2018 will be WHO's support to the MOH by fostering health policy dialogue and technical support and advice to the authorities throughout the country in strategic priority areas.

6.2 WHO's role and presence

The role of WHO as broadly envisaged in the CCS strategic agenda is that of a technical adviser, trusted broker, an efficient coordinator and convener that engages with the Government and facilitates partner contributions towards national health policies, strategies and plans. To perform this role effectively, the CCS strategic agenda and the objectives of the WHO reform process require refocusing to prioritize the work at the country level. WHO will continue its normative functions as a core area of support; closely monitor progress towards the achievement of all health-related MDGs; and provide technical support to important public health challenges that do not fall within the priority areas.

The organizational structure of the WHO Country Office may need to shape it up along with the reform process being undertaken and re-aligning itself within the framework of the 12 General Programme of Work (2014–2019). The 12 GPW has five priority components and to facilitate programming and performance implementation, as well as in resource mobilization, the working environment will be more coherent and focused if it is organized in line with the priority components. The dedication and impressive competence level of staff at the WCO will be an asset to this endeavour. However, the office should consider investing in long-term rather than multiple short-term contracts whenever feasible.

Steps will be taken to build stronger, more cohesive and dynamic teams to address cross-cutting issues relevant to the CCS agenda more effectively and efficiently. Issue-specific, task-oriented interactions among the staff on a regular basis are a way forward in this direction. More specifically, reorientation of staff to focus on the health system and evolving issues; training in epidemiology and disease burden as tools for advocacy; and reorientation/training for country office staff in cross-cutting issues impacting health are required. Moreover, periodic orientation on programme management and M&E will be an asset for all staff engaged in the results-based management.

The strategic priorities in this CCS relate to a range of technical expertise available at the Regional Office for South-East Asia and WHO headquarters. A close working relationship between the county office and relevant technical units at the Regional Office and headquarters will add value to the work of WHO in Myanmar.

6.3 Using the CCS – implications for the WHO Secretariat

The Country Office will:

- widely disseminate the CCS document to the Government, national and external development partners, NGOs, civil society organizations and other stakeholders working in and with the country;
- use the CCS strategic priorities, main focuses and other priorities to guide current and future workplan development;
- use the content of the CCS to help define and shape the health-related UN Strategic Framework; and
- use the CCS for advocacy and resource mobilization for WHO's work in Myanmar.

The Regional Office and headquarters will:

- widely disseminate the CCS document and CCS brief to all WHO departments, and to other relevant partners and stakeholders;
- ensure the CCS priorities are used as the basis for the preparation of strategic and operational plans, including budgets and resource allocation; and
- use the CCS for advocacy and resource mobilization for WHO's work with Myanmar.

Work towards achieving the priorities spelt out in the CCS, in collaboration with MOH and partners, calls for major adaptations in the way WCO plans, runs its budget, works and organizes itself. Outward looking (external) and inward looking (internal) implications of the CCS, for the WHO Secretariat, are addressed below.

External implications

(1) WCO will develop an enabling approach, focusing on harmonization and integration of policy recommendations across groups, agencies and social sectors. It is necessary to shift the focus on technical assistance rather than budgetary support in strengthening the country's own capacity. More emphasis should be paid to policy dialogue and technical advice with MOH and partners.

(2) A mechanism will be set up for periodic joint reviews of CCS implementation. WCO will give maximum priority to concentrating on priorities and ensuring that it delivers on time. A key change that is needed is to move from isolated programme management and input-related funding to integrated country work and expected results. A critical culture of health system performance will be promoted.

(3) A shift to impact-ensuring practices will be effected in line with WHO's role as the UN specialized agency for health. WHO will continue to provide top quality technical support as necessary, filling capacity gaps and concentrating on high value-added fields such as standard setting, quality assurance, stewardship mechanisms and tools, and economic evaluation.

(4) WCO will review its human resource policies, budget allocations and structures in order to manage the policy dialogue and technical support work to improve relevance and impact.

(5) WHO's corporate label will be promoted through WHO-led technical activities. Efforts are needed to distinguish WHO from organizations whose prime function is to manage and disburse grants and loans.

(6) Intersectoral action will be even more important: WCO will engage with various stakeholders to foster health actions and policy decisions in all sectors that address social determinants. Specific collaboration will be fostered with civil society institutions and community-led initiatives with whom data and information will be widely shared.

(7) WHO will assist MOH in coordinating health-related programmes and activities, and take the lead in coordinating such programme activities with partners.

Internal implications

(1) The foremost priority for the WCO is to review its current and needed expertise in terms of the country's priority health challenges. This may require boosting technical excellence in the Office, bringing in international experience and strengthening health information and intelligence in Myanmar.

(2) Internal and external communications should be upgraded, including the web site. Facilitating communication provides additional productivity and performance of the Office as a whole and greatly supports professional analytical work.

(3) The office structure should be aligned with the new context of CCS implementation. Horizontal collaboration between programmes and reduced fragmentation should be promoted.

(4) Lines of authority and responsible management should be decentralized with a corresponding increase in terms of discipline and accountability for results.

(5) Principles of programme management will be observed and the culture of process monitoring in programme implementation maintained.

6.4 Monitoring and evaluation of CCS

The Country Office in collaboration with the MOH and other stakeholders will undertake reviews on progress towards attaining the goals and processes towards the end of the first biennium and towards the end of the CCS cycle. The focus of these reviews will be to assess WHO's contribution to the NHP, through implementation of the CCS strategic agenda.

As the strategic agenda laid out in the CCS is implemented through operational planning (workplans), the Office shall also assess the degree of implementation of the CCS strategic agenda and consistency between the strategic priorities, main focuses, and strategic approaches with the workplans for 2014–2015 and 2016–2017.

The findings and lesson learnt from these reviews will be used as input into the development of the next CCS and shared with other countries.

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Annexes

Annex 1

Myanmar's basic statistics

Category			Year[a]		
Economic	**2007**	**2008**	**2009**	**2010[b]**	**2011[b]**
GDP (US$ billion, current)	20.2	31.4	35.2	45.4	51.9
GDP per capita (US$, current)[b]	351.0	537.3	595.7	759.1	856.8
GDP growth (%, in constant prices)	5.5	3.6	5.1	5.3	5.5
Agriculture, livestock, fishery and forestry	8.0	3.4	4.7	4.4	4.4
Industry	21.8	3.0	5.0	6.3	6.5
Services	12.9	4.2	5.8	6.1	6.3
Gross domestic investment (% of GDP)	na	na	na	na	na
Gross domestic saving (% of GDP)	na	na	na	na	na
Consumer price index (annual % change)	32.9	22.5	8.2	7.3	4.2
Liquidity (M2) (annual % change)	20.9	23.4	34.2	36.8	33.3
Overall fiscal surplus (deficit) (% of GDP)	(3.8)	(2.4)	(4.8)	(5.7)	(5.5)
Merchandise trade balance (% of GDP)	4.6	1.6	2.0	0.8	(0.5)
Current account balance (% of GDP)	0.6	(2.2)	(1.3)	(0.9)	(2.7)
External debt service (% of exports of goods and services)	4.6	5.1	4.3	3.1	3.9
External debt (% of GDP)	37.5	25.8	24.4	24.8	22.8
Poverty and social	**2000**			**2011**	
Population (million)	50.1			60.6	
Population growth (annual % change)	2.0			1.3	[2009-2011]
Maternal mortality ratio (per 100 000 live births)	420.0	[1990]		240.0	[2008]
Infant mortality rate (below 1 year/per 1000 live births)	98.0	[1990]		37.5	[2010]
Life expectancy at birth (years)	59.9			62.1	[2009]
Adult literacy (%)	89.9			92.0	[2009]
Primary school gross enrolment (%)	100.0	[1999]		116.0	[2009]
Child malnutrition (% below 5 years old)	34.3	[2005]		32.0	[2010]

Category			Year[a]		
Population below poverty line (%)	32.1	[2005]		25.6	[2010]
Population with access to safe water (%)	62.6	[2005]		69.4	[2010]
Population with access to sanitation (%)	67.3	[2005]		79.0	[2010]
Environment	**2000**			**2010**	
Carbon dioxide emissions (thousand metric tons)	4 276.0	[1990]		12 776.0	[2008]
Carbon dioxide emissions per capita (metric tons)	0.1	[1990]		0.3	[2008]
Forest area (million hectares)	34.9			31.8	
Urban population (% of total population)	28.0			33.9	

( ) = negative, [ ] = latest year for which data are available, ADB = Asian Development Bank, ADF = Asian Development Fund, GDP = gross domestic product, M2 = broad money, na = not available, OCR = ordinary capital resources.

[a] Fiscal year starts 1 April and ends 31 March, such that fiscal year 2010 started 1 April 2010 and ended 31 March 2011.

[b] Estimates.

Sources: ADB 2012a, ADB 2012b, ADB 2012c, ADB 2011a, IMF 2012, MNPED, MOH, and UNICEF 2011; ESCAP, ADB, and UNDP 2012, WHO/SEARO MDG analytical kit 2012.

Annex 2

Selected Millennium Development Goal performance indicators

Indicator	Myanmar		Indonesia		Malaysia		Thailand		Viet Nam	
	Earliest Year	Latest Year	Earliest Year	Latest Year	Earliest Year	Latest Year	Earliest Year	Latest Year	Earliest Year	Latest Year
MDG 1: Eradicate Extreme Poverty and Hunger										
Poverty Incidence (% $1.25 PPP)	no data	no data[a]	54.3 (1990)	18.7 (2009)	1.6 (1992)	0.0 (2009)	5.5 (1992)	0.4 (2004)	63.7 (1993)	13.1 (2008)
Underweight Children Under 5 (%)	39.0 (1997)	*28.0 (2012)	29.8 (1992)	19.6 (2007)	no data	16.7 (1999)	16.3 (1993)	7.0 (2005)	36.9 (1992)	20.2 (2006)
Food Poverty Incidence (%)	47 (1990)	<5 (2010)[c]	16 (1990)	13 (2004)	<5 (1990)	<5 (2004)	26 (1990)	16 (2004)	31 (1990)	11 (2004)
MDG 2: Achieve Universal Primary Education										
Primary Level Net Enrolment (%)	84.7 (2005)	87.7 (2010)	98.3 (2000)	98.4 (2009)	97.7 (1990)	94.1 (2008)	93.2 (2006)	90.1 (2009)	95.8 (1990)	94.5 (2001)
Literacy of 15-24 Year Olds (%)	94.6 (2000)	95.8 (2010)	98.7 (2004)	99.5 (2008)	97.2 (2000)	98.5 (2009)	98.0 (2000)	98.1 (2005)	93.9 (1990)	96.9 (2009)
MDG 3: Promote Gender Equality and Empower Women										
Girls/Boys in Primary School (Ratio)	0.95 (1991)	0.93 (2010)	0.98 (1991)	0.97 (2009)	0.99 (1991)	0.99 (2008)	0.98 (1991)	0.98 (2009)	0.93 (1991)	0.95 (2001)
Girls/Boys in Secondary School (Ratio)	0.97 (1991)	0.96 (2010)	0.83 (1991)	0.81 (2008)	1.05 (1991)	1.07 (2008)	0.99 (1991)	1.09 (2009)	0.90 (1999)	0.92 (2001)

Indicator	Myanmar		Indonesia		Malaysia		Thailand		Viet Nam	
	Earliest Year	Latest Year	Earliest Year	Latest Year	Earliest Year	Latest Year	Earliest Year	Latest Year	Earliest Year	Latest Year
MDG 4: Reduce Child Mortality										
U5 Mortality Rate (per 1000 live births)	130 (1990)	46.1 (2010)	86 (1990)	39 (2009)	18 (1990)	6 (2009)	32 (1990)	14 (2009)	55 (1990)	24 (2009)
Infant Mortality Rate (per 1000 live births)	98 (1990)	37.5 (2012)	56 (1990)	30 (2009)	16 (1990)	6 (2009)	27 (1990)	12 (2009)	39 (1990)	20 (2009)
MDG 5: Improve Maternal Health										
Maternal Mortality Ratio (per 100 000 live births)	420 (1990)	240 (2008)	620 (1990)	240 (2008)	56 (1990)	31 (2008)	50 (1990)	48 (2008)	170 (1990)	56 (2008)
Births Attended by Skilled Personnel (%)	51 (1990)	64.8 (2012)	50 (1995)	75 (2008)	96 (1995)	99 (2007)	99 (2000)	99 (2009)	77 (1997)	88 (2006)
MDG 6: Combat HIV/AIDS, Malaria and Other Diseases										
HIV Prevalence (% of Population Aged 15-49)	0.8 (2001)	0.6 (2009)	<0.1 (2001)	0.2 (2009)	0.4 (2001)	0.5 (2009)	1.7 (2001)	1.3 (2009)	0.3 (2001)	0.4 (2009)
Malaria Incidence (per 100 000 population)	2435 (1990)	1096 (2010)	no data	1645 (2008)	no data	75 (2008)	no data	55 (2008)	no data	no data
Tuberculosis Incidence (per 100 000) population)	393 (1990)	384 (2010)	88 (1990)	89 (2009)	127 (1990)	83 (2009)	137 (1990)	137 (2009)	204 (1990)	200 (2009)
Tuberculosis prevalence (per 100 000)	894 (1990)	525 (2012)	158 (1990)	131 (2009)	227 (1990)	109 (2009)	209 (1990)	189 (2009)	395 (1990)	333 (2009)

Indicator	Myanmar		Indonesia		Malaysia		Thailand		Viet Nam	
	Earliest Year	Latest Year	Earliest Year	Latest Year	Earliest Year	Latest Year	Earliest Year	Latest Year	Earliest Year	Latest Year
MDG 7: Ensure Environmental Sustainability										
Improved Drinking Water Source (%)	56 (1990)	83 (2010)	71 (1990)	80 (2008)	88 (1990)	100 (2008)	91 (1990)	98 (2008)	58 (1990)	94 (2008)
Improved Facility for Sanitation (%)	62 (2000)	76 (2012)	33 (1990)	52 (2008)	84 (1990)	96 (2008)	80 (1990)	96 (2008)	35 (1990)	75 (2008)
MDG 8: Develop a Global Partnership for Development										
Debt Service as % of Exports	18.2 (1990)	0.2 (2006)	25.6 (1990)	7.3 (2009)	10.6 (1990)	3.1 (2009)	11.4 (1990)	0.8 (2009)	3.2 (1996)	1.7 (2009)

[a] Based on IHLCS 2011, poverty headcount ratio under national poverty line is 25.6 in 2010.

[b] Based on IHLCS 2011, severe cases account for 9.1, while moderate cases account for 32% in 2010.

[c] Based on IHLCS 2011, actual figure is 4.8%.

Sources: ADB 2012b; MDGI 2012; MNPED, MOH, and UNICEF 2011.