

**Kingdom of Cambodia**  
**National Religion King**



**Ministry of Health**

# **HEALTH STRATEGIC PLAN**

## **2008-2015**

01 April 2008

Department of Planning and Health  
Information



Health Strategic Plan 2003-2007 (HSP1) was launched in August 2002 and presided over by Samdech Akka Moha Sena Padei Techo **Hun Sen**, Prime Minister of The Royal Government of Cambodia.

Health officials at all levels of the health system together with other relevant national, international stakeholders and community have implemented the plan in a responsible manner toward achieving the Cambodian health related Millennium Development Goals by 2015.

The Cambodian Demographic and Health Survey 2005 indicates that Cambodia has made considerable progress toward successfully accomplishing the MDG 4 (reduce child mortality) and MDG 6 (Combat main communicable diseases of HIV/AIDS, Tuberculosis and Malaria). With regard to MDG 5 (Improve maternal health), maternal mortality remains high and continues to pose a great challenge. This requires considerable investment in term of resources, and, at the same time, strengthening of interventions, further institutional development and capacity building, as well as enhancing health system functioning, including effective coordination and multi-sectoral collaboration.

The Second Health Sector Strategic Plan 2008-2015 (HSP2) is based on a robust platform of experiences gained from both strengths and weaknesses of the implementation of the HSP1. It aims to address health needs of the population during the eight coming years by using the opportunity offered by the Royal Government of Cambodia to maximum extent possible, as the improvement in health status of all Cambodians is recognized by the Royal Government of Cambodia (RGC) as a priority for investing national resources in the social sector. This strong political will is expressed through increase in national annual budget for health; use of national budget to support health equity funds for removing financial barrier to access to health education, prevention, care and treatment at public health facilities by the poor; and incentive systems in line with the Government salary reform framework to motivate health staff to provide health care services in effective and equitable manner in particular to populations living in remote areas, especially nation-wide incentives for midwives to assist safe delivery at public health facilities. Two crucial opportunities, which will shape core roles and functions of the health system to be more responsive and accountable to health needs of the population, are the implementation of the RGC Decentralization and Deconcentration process, as well the RGC Policy on Service Delivery. The approach to the health strategy 2008-2015 has taken these contextual factors into account.


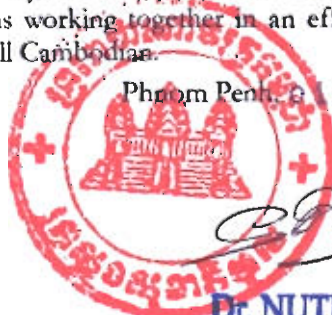
HSP2 has clearly defined the policy agenda consisting of 15 elements that need to be implemented by health institutions at all levels in order to achieve three main goals of the plan: reduce newborn, child and maternal morbidity and mortality with increased reproductive health, reduce morbidity and mortality of HIV/AIDS, Malaria, Tuberculosis, and other communicable diseases, and reduce the burden of non-communicable diseases and other health problems.

Moving towards accomplishing these goals, the health strategy has been developed and focuses on five strategic areas: health service delivery, health care financing, human resource for health, health information system, and health system governance in order to direct interventions for the entire health sector in line with the "Rectangular Strategy" and the National Strategic Development Plan of the RGC.

Successful implementation of the HSP2 will increase demand and ensure equitable access to quality health services in order that all the peoples of Cambodia are able to achieve the maximum level of health and well-being. This will significantly contribute to the long term process of poverty reduction in Cambodia and to more rapid economic and social development.

The Ministry of Health strongly believes that this strategic plan will provide a robust framework with a common vision for officials and health staff across the country, relevant ministries and agencies, development partners and national and international organizations working together in an effective and accountable fashion in order to improve health and well-being of all Cambodians.

Phnom Penh, 1 April 2008



**Dr. NUTH SOKHOM**  
Minister of Health



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Phnom Penh,

April 2008

# Acknowledgements

I highly appreciate the Ministry of Health senior leadership for providing support and guidance in the development of the Second Health Sector Strategic Plan 2008-2015 (HSP2).

The production of this important document, which will steer the work of the entire health sector for the coming period and guide our efforts in addressing the priorities and health needs of the population, would not have been possible without great effort of a committed team, the Task Force for Developing HSP2, co-chaired by HE Prof. Koeut Meach, Director General for Administration and Finance and HE Dr. Tep Lun, Director General for Health.

The consultative process engaged during the development process included active participation and valuable inputs from the HSP2 Task Teams:

- The Task Team on Institutional Development, under the leadership of H.E Prof. Kouth Meach
- Task Team on Maternal and Child Health, under the leadership of Prof. Sann Chan Soeung,
- Task Team on Communicable Diseases and Non – Communicable Diseases, under the leadership of H.E Tep Lun

My sincere thanks go to the Task Force Secretariat, under the leadership of Dr. Char Meng Chuor, Deputy Director General for Health.

I am very pleased with the efforts deployed by the Department of Planning and Health Information in the formulation of HSP2.

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I would also like to extend our thanks to all the Development Partners, NGOs and all those who contributed and provided support to this important work, especially Health Sector Support Project, URC, USAID, and WHO.

Dr. Nuth Sokhom  
Minister of Health

# Abbreviations & Acronyms

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3YRP	3 Year Rolling Plan
ANC	Ante Natal Care
ACT	
AET	
AoP	Annual Operational Plan
ART	
BMI	
BOR	Bed Occupancy Rate
CBHI	Community Based Health Insurance
CDC	Communicable Diseases Control
CDHS	Cambodian Demographic and Health Survey
CMDGs	Cambodian Millennium Development Goals
CPA	Complimentary Packages of Activity
CPR	Contraceptive Prevalence Rate
CS	Child Survival
C-section	Caesarian Section
CSS	Child Survival Strategy
CVD	Cardio Vascular Diseases
D&D	Deconcentration and Decentralization
DF/DHF	Dengue Fever/Dengue Hemorrhagic Fever
DFID	Department for International Development
DOTs	Directly Observed Treatments
DPHI	Department of Planning and Health Information
GDP	Gross Domestic Product
GP	General Practitioner
H-A-R	Harmonization, Alignment for Result
HC	Health Center
HCF	Health Care Financing
HCP	Health Coverage Plan
HEF	Health Equity Fund
HFH	Human Resource for Health
HIS	Health Information System
HMIS	Health Management Information System
HP	Health Post
HSD	Health Service delivery
HSG	Health System Governance
HSP1	Health Strategic Plan 2003-2007
HSP2	Health Strategic Plan 2008-2015
HSR	Health Sector Review
HSSC	Health Sector Steering Committee
HSSP	Health Sector Support Project
ICD	International Classification of Diseases
ICT	Information Communication Technology
IDP	Institutional Development Plan
IDUs	Injection Drug Users
IEC	Information Education Communication
IMCI	Integrated Management of Childhood Disease
IMCI-CS	Integrated Management of Childhood Disease-Child Survival
IMR	Infant Mortality Rate
JAPR	Joint Annual Performance Review
KAP	Knowledge Attitude and Practice
LLIN	Long Lasting Impregnated Net
MDGs	Millennium Development Goals
MDR-TB	Multi-Drug Resistance-Tuberculosis
MHSP	Mental Health Strategic Plan
MMR	Maternal Mortality Ration

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MNCH	Maternal New Born and Child Health
MoEF	Ministry of Economy and Finance
MoH	Ministry of Health
MoP	Ministry of Planning
MPA	Minimum Packages of Activity
MTR	Mid Term Review
NCD	Non Communicable Diseases
NEHAP	National Environmental Health Action Plan
NGO	Non Governmental Organization
NHA	National Health Account
NSDP	National Strategic Development Plan
NSP-NCD	National Strategic Plan for Non Communicable Diseases
OD	Operational District
ODO	Operational District Office
OOP	Out-Of-Pocket
ORT	Oral Rehydration Therapy
PAR	Public Administrative Reform
PBB	Program Based Budgeting
PHD	Provincial Health Department
PHDO	Provincial Health Department Office
PLWH	People Living with HIV/AIDS
PMG	Priority Mission Group
PMTCT	Protection from Mother-to-Child Transmission
Pro-TWGH	Provincial Technical Working Group for Health
PSD	Public Service Delivery
RGC	Royal Government of Cambodia
RH	Referral Hospital
RMNCH	Reproductive, Maternal, New Born and Child Health
RTC	Regional Training Center
SES	Socio Economic Survey
SHI	Social Health Insurance
SOA	Special Operating Agency
STI	Sexually Transmitted Infection
SWiM	Sector Wide Management
TB	Tuberculosis
TCP-NSP	Tuberculosis Control Program National Strategic Plan
TWGH	Technical Working Group for Health
U5MR	Under 5 Mortality Rate
UNFPA	United National Population Funds
URC	University Research Co.
USAID	United States Agency for International Development
VCCT	Voluntary Counseling Confidential Testing
VHSG	Village Health Support Group
WHO	World Health Organization
WRA	Women of Reproductive Age

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# Executive Summary

The Vision developed by the Second Health Sector Strategic Plan 2008-2015 (HSP2) is *"to enhance sustainable development of the health sector for better health and well-being of all Cambodian, especially of the poor, women and children, thereby contributing to poverty alleviation and socio-economic development."*

In the Health Sector, the Mission of the Ministry of Health is *"to provide stewardship for the entire health sector and to ensure supportive environment for increased demand and equitable access to quality health services in order that all the peoples of Cambodia are able to achieve the highest level of health and well-being."*

A value-based commitment of the Ministry of Health is Equity and the Right to Health for all Cambodians.

The day-to-day activities of health managers and staff in all areas throughout the organizations at all levels should be guided by five working principles: (1) social health protection, especially for the poor and vulnerable groups; (2) client focused approach to health service delivery; (3) integrated approach to high quality health service delivery and public health interventions; (4) human resources management as the cornerstone for health system; and (5) good governance and accountability.

For Cambodia in its current phase of economic and social development, the MoH Vision, Mission, Values and Working Principles imply a clear policy direction for the health sector development for the coming years. This policy direction is informed by the review of the first Health Sector Strategic Plan 2003-2007 (HSP1), and mainly focuses on:

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1. Implement decentralized service delivery and management functions
  2. Strengthen sector-wide governance
  3. Scale up access to and coverage of health services
  4. Implement pro-poor health financing systems
  5. Reinforce health legislation, professional ethics and code of conduct, and strengthen regulatory mechanisms
  6. Improve quality in service delivery and management
  7. Increase competency and skills, including allied technical skills, of health workforce
  8. Strengthen and invest in health information system and health research
  9. Increase investment in physical infrastructures and medical care equipment and advanced technology with improvement of non-medical support services
  10. Promote quality of life and healthy lifestyles of the population
  11. Prevent and control communicable and chronic and non-communicable diseases, and strengthen disease surveillance systems
  12. Strengthen on public health interventions to deal with cross-cutting challenges
  13. Promote effective public and private partnerships in service provision
  14. Encourage community engagement in health service delivery and quality improvement
  15. Systematically strengthen institutions at all levels
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HSP1 review findings can be summarized as follows:

- Two of the measurements generally used for defining the quality of a health system – infant mortality rates and child (under five years of age) mortality rate have considerably improved although child indicators need further improvement to meet the CMDG goals.
- The third strategic outcome indicator for health systems – maternal mortality rate – has not improved and remains a greater concern, although substantial progress is made in the areas of maternal and child health and reproductive health.
- Cambodia experiences a transition towards a higher burden of non communicable diseases.

Key recommendations from the HSP1 review are the following:

1. Make policy decisions immediately in areas where advanced experimentation has been made. Such decisions need to include reformed contracting, expanded HEFs and improved remuneration of health staff.
2. Further strengthen institutional roles and responsibilities across the health system, with capacity building, and improve links between the next HSP strategy and the monitoring system.
3. Consolidate aid effectiveness management, addressing the current fragmented status of donor financing through concerted efforts of harmonization and long term undertakings to allow for a continued scaling up of resources.

In defining a Strategic Approach, the HSP2 has characterized strategic priorities for the health sector into two broader interrelated areas that the Ministry of Health and all stakeholders have to pay particular attention to - in the short to medium term interventions during the course of the HSP2. These priorities are:

- Population health problems and essential services:

(1) Reduce maternal, new born and child morbidity and mortality with increase reproductive health	
Objectives	<ol style="list-style-type: none"> <li>1. To improve the nutritional status of women and children</li> <li>2. To improve access to quality reproductive health information and services</li> <li>3. To improve access to essential maternal and newborn health services and better family care practices</li> <li>4. To ensure universal access to essential child health services and better family care practices</li> </ol>
(2) Reduce morbidity and mortality of HIV/AIDS, Malaria, TB, and other communicable diseases	
Objectives	<ol style="list-style-type: none"> <li>5. To reduce the HIV prevalence rate</li> <li>6. To increase survival of People Living with HIV/AIDS</li> <li>7. To achieve a high Case Detection Rate and to maintain a high Cure Rate for pulmonary TB smear positive cases.</li> <li>8. To reduce malaria related mortality and morbidity rate among the general population</li> <li>9. To reduce burden of other communicable diseases</li> </ol>

(3) Reduce the burden of non-communicable diseases and other health problems	
Objectives	<ol style="list-style-type: none"> <li>1. To reduce risk behaviors leading to non-communicable diseases (KAP): diabetes, cardiovascular diseases, cancer, mental health, substance abuse, accidents and injuries, eye care, oral health , etc</li> <li>2. To improve access to treatment and rehabilitation for NCD: diabetes, cardiovascular diseases, cancer, mental health, substance abuse, accidents and injuries, eye care, oral health, etc</li> <li>3. To ensure Essential Public Health Functions: environmental health:, food safety, disaster management and preparedness</li> </ol>

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- Challenges in relation to functional areas of the health system of both “supply-side” and demand-side”

The HSP2's strategic framework has 5 main characteristics as follows:

- A framework that places “*Accountability, Efficiency, Quality and Equity*” at the center of the 5 cross-cutting strategies, supporting the 3 health program areas’ interventions to deliver better health outcomes.
- A framework that translates the RGC’s *Rectangular Strategy* into actions, contributing to a long-term process for poverty reduction.
- A framework that informs and updates the *NSDP’s health related targets* on an annual basis.
- A framework that is *time-bound* and takes *MDGs* as the milestone.
- A framework that reflects the principles of the Paris Declaration (ownership, alignment, harmonization, managing for results and mutual accountability) and The RGC Harmonization, Alignment for Results Action Plan

The building blocks of the HSP2 Strategic Framework are the three main health program areas which implement a set of five cross-cutting health strategies. Each of the five health strategies – health service delivery, health care financing, human resource for health, health information system, and health system governance – is implemented in all three program areas. This will ensure effective and consistent delivery and monitoring of areas’ outcomes across the health sector.

- Health service delivery consists of both public health measures against disease – organization of health promotion for reduction of risk behavior and health protection – as well as a general strengthening of health service delivery through general and disease specific policies and plans. Much emphasis is given the subject of quality improvement. An increase in health demand and empowerment of patients are underlined as important ways forward for improved quality and accountability in health service delivery.
- Health care financing addresses both increases in investments in health and efforts to remove financial barriers to quality health care. Government allocation to the health sector is singled out thus underlining issues around the balance of financing between donors and government as well as efficient funding of operational levels. Strengthening of social health protection mechanisms, including equity funds, CBHI and SHI will contribute to reduction of financial barriers to access health services as well as incidence of catastrophic health expenditures.
- Human resource for health covers a comprehensive range of interventions *i)* to ensure sufficient staffing levels with adequate professional profiles and competencies, *ii)*

revising content of their training, *iii*) increasing the intake of students into schools and universities, and *iv*) strengthened measures to safeguard the quality of training and trainers. Midwives are particularly selected as a target group because of their key role for achieving the general goals of the HSP2. Human resource programming also includes safeguarding professional ethics. Special urgency is associated with implementation of salary reform for health services.

- Health information system addresses the need for high quality, accurate, comprehensive and timely data to provide the basis for evidence-based policy making, planning, performance monitoring and evaluation. It emphasizes improved coordination and collaboration both within and outside the health sector through data sharing, management, analysis, dissemination and use and inclusion of private sector information, as well as tracking budgets and expenditures and expanded training to build HIS capacity.
- Health system governance. The governance perspective of the HSP2 focuses on decentralization and deconcentration. The regularization of internal and external contracting through Special Operating Agencies, as well as block grants from the national level and local resource mobilization will cover the financial needs of the policy. Increased autonomy at the operational level will be developed, together with stronger regulation and stewardship of the private sector. Harmonization and Alignment for Results is stressed to achieve a common policy framework between government and development partners for health development. The strategy will improve the comprehensive picture of the government and donor funding and strengthen harmonization (coordinating external support to follow national procedures, institutions and systems where possible) and alignment (ensuring that priorities identified by Cambodia become the priorities of donors) of aid architecture, in line with the government policies for decentralization and deconcentration and HSP2 priorities.

There are several contextual factors for a sequenced implementation of the HSP2 toward achieving the HSP2 goals.

- First, policy context the MoH will make decisions over key policies in relation to financing and health system governance requirements under decentralization and deconcentration. Year 2008 is recognized as a preparatory year during which this policy formulation process will take place, with a subsequent period of consolidation and implementation.
- Second, institutional context, institutional arrangement and capacity building and strengthening will take place at all levels of the health system - national, provincial, and operating districts, as well as in facilities and communes.
- Third, economic context, resources will be scaled up in a tempo that is acceptable by both government and donors. The financing framework from medium to long term has to be linked to the country macroeconomic framework which will entail a sequenced introduction of the strategy.

As a consequence, the HSP2 implementation will be undertaken in two phases

- A consolidation phase running from 2008 to 2010
- A scaling-up phase starting in 2011 until the end of the plan in 2015

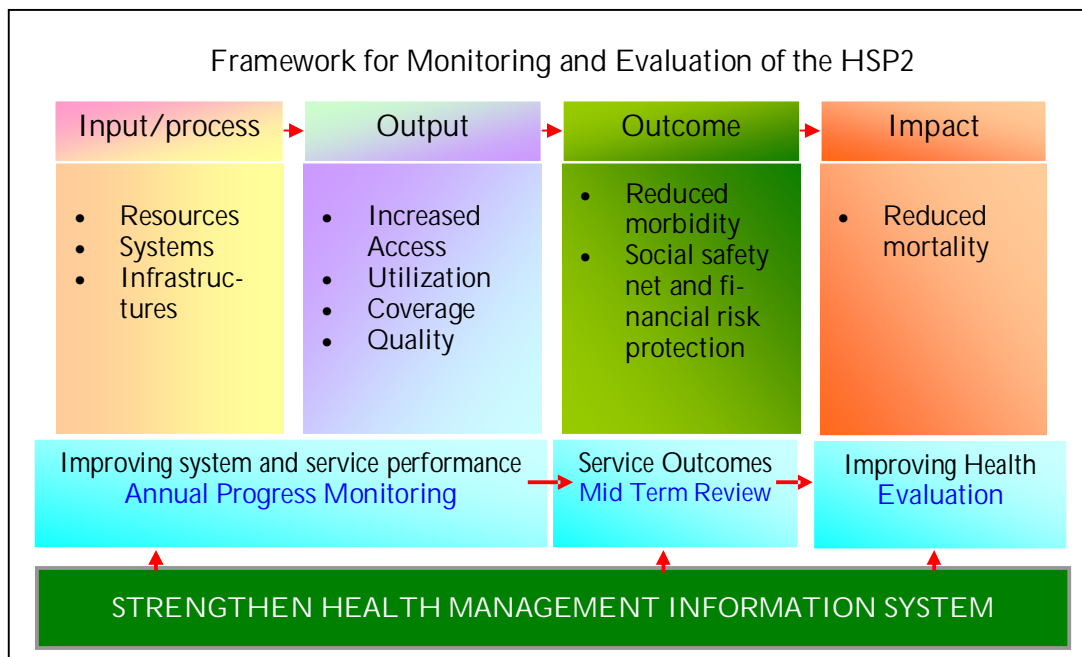
The Implementation Framework of HSP2 clearly defines and strengthens the central role of the two main planning tools already in place in Cambodia:

- Three Year Rolling Plan linked to the Budget Strategic Framework and Public Investment Program
- Annual Operational Plan and program based budget

The progress in implementing the HSP2 will be monitored through annual progress review and mid term review followed by end-cycle evaluation to determine impact of the HSP2 on improved health status.

The monitoring framework presented below is a tool for the MoH to evaluate the overall health sector performance on a regular basis to gain information for making policy decisions.

It is envisioned that all health partners will use this framework (including a set of agreed indicators) to review progress of their programs/projects in the health sector.



The purpose of the indicators framework is threefold:

- To monitor and evaluate health sector performance in improving health outcomes through the implementation of HSP2;
- To refine existing health policies considering the progress made over the course of the HSP2 implementation; and
- To enable policy-makers determine the effectiveness of different interventions and policy alternatives.

The framework consists of 27 core indicators, which will be assessed through Joint Annual Performance Review. For annual operational plan monitoring there are additional 69 indicators for sub-sectoral monitoring.



# Policy Direction

Vision. Mission. Values. Working Principles. Policy Direction

## 1. VISION

A long term broader vision of the Ministry of Health is “to enhance sustainable development of the health sector for better health and well-being of all Cambodian, especially of the poor, women and children, thereby contributing to poverty alleviation and socio-economic development.”

## 2. MISSION

The Statement underlies the Ministry of Health, Royal Government of Cambodia commitment. The statement emphasizes exercising “stewardship” for the provision of services in all areas across the health sector. It highlights also the population’s “highest level of health and well-being” of which a health system strives to promote – the system that places “increased demand, improved quality and promoted access” at the heart of health care delivery.

To provide stewardship for the entire health sector and to ensure supportive environment for increased demand and equitable access to quality health services in order that all the peoples of Cambodia are able to achieve the highest level of health and well-being.

## 3. VALUES AND WORKING PRINCIPLES

- Values

A value-based commitment of the Ministry of Health is Equity and the Right to Health for all Cambodians.

- Working Principles

Increased efficiency, accountability, quality and equity throughout the health system will be achieved only through application of morality, strong beliefs and commitment to common goals by all who are working in health care. Therefore the day-to-day activities of health managers and staff in all areas throughout the organizations at all levels should be guided by five principles.

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1. Social health protection, especially for the poor and vulnerable groups	To promote pro-poor approaches, focusing on targeting resources to the poor and groups with special needs and to areas in greatest need, especially rural and remote areas, and urban poor.
2. Client focused approach to health service delivery	To offer services with emphasis on affordability and acceptability of services, client rights, community participation and partnership with the private sector.
3. Integrated approach to high quality health service delivery and public health interventions	To provide comprehensive health care services including preventive, curative and promotion in accordance with nationally accepted principles, standards and clinical guidelines, such as MPA and CPA, and in partnership with the private sector.
4. Human resources management as the cornerstone for the health system.	To be operational and productive driven by competency, ethical behavior, team work, motivation, good working environment and learning process.
5. Good governance and accountability	To provide stewardship for both the public and private sectors, focusing on a sector wide approach, effective planning, monitoring of performance, and coordination.

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#### 4. POLICY DIRECTION

For Cambodia in its current phase of economic and social development, the MoH Vision, Mission, Values and Working Principles imply a clear policy direction for the coming years. As a first step toward implementation of this Health Strategic Plan, this policy direction must therefore be embodied in formally defined, approved and promulgated policies for the entire health sector. These policies are a prerequisite for consolidating and scaling up the successes of the past years, and they will form the foundation for the strategies to be pursued over the course of this strategic plan.

## POLICY DIRECTION 2008-2015

1. Make services more responsive and closer to the public through implementation of a decentralized service delivery function and a management function guided by the national *"Policy on Service Delivery"* and the policy on *"Decentralization and Deconcentration"*.
2. Strengthen sector-wide governance through implementation of sector wide approach, focusing on increased national ownership and accountability to improved health outcomes, harmonization and alignment, greater coordination and effective partnerships among all stakeholders.
3. Scale up access to and coverage of health services, especially comprehensive reproductive, maternal, newborn and child health services both demand and supply side through mechanisms such as institutionalization and expansion of contracting through *Special Operating Agencies*, exemptions for the poor, health equity funds, and health insurance.
4. Implement pro-poor health financing systems, including exemptions for the poor and expansion of health equity funds, in combination with other forms of social assistance mechanisms.
5. Reinforce health legislation, professional ethics and code of conduct, and strengthen regulatory mechanisms, including for the production and distribution of pharmaceuticals, drug quality control, cosmetics, food safety and hygiene, to protect providers and consumers' rights and their health.
6. Improve quality in service delivery and management through establishment of and compliance with the national protocols, clinical practice guidelines and quality standards, in particular establishment of accreditation systems.
7. Increase competency and skills of health workforce to deal with increased demand for accountability and high quality care, including through strengthening allied technical skills and advanced technology through increased quality practice of training, career development, right incentives, and good working environment.
8. Strengthen and invest in health information system and health research for evidence-based policy-making, planning, monitoring performance and evaluation.
9. Increase investment in physical infrastructures and medical care equipment and advanced technology, as well as in improvement of non-medical support services including management, maintenance, blood safety, and supply systems for drugs and commodities.
10. Promote healthy lifestyles of the population by raising health awareness and creating supportive environments, including through strengthening institutional structures, financial and human resources, and IEC materials for health promotion, behavior change and appropriate health-seeking practices.
11. Prevent and control communicable and selected chronic and non-communicable diseases, and strengthen disease surveillance systems for effective response to emerging and re-emerging diseases.
12. Strengthen public health interventions to deal with cross-cutting challenges, especially gender, health of minorities, hygiene and sanitation, school health, environmental health risks, substance abuse/mental health, injury, occupational health, disaster, through timely response, effective collaboration and coordination with other sectors.
13. Promote effective public and private partnerships in service provision based on policy, regulation, legislations and technical standards.
14. Encourage community engagement in health service delivery activities, management of health facilities and continuous quality improvement.
15. Systematically strengthen institutions at all levels of the health system to implement policy agenda listed under the previous 14 elements.

# *An Overview of the Health Sector*

Health System Organization. Health Coverage Plan. Aid Governance.  
Institutional Development. Health Sector Review 2007

## 1 HEALTH SYSTEM ORGANIZATION

Since 1994, the MoH has been committed to reorganizing the health system, placing an emphasis on the district. The reform of the health system is part of the larger national Public Administrative Reform (PAR). The PAR demonstrates the RGC's willingness to rehabilitate and improve public sector effectiveness and efficiency. The MoH's main objective for the health system reform is "to improve and extend primary health care through the implementation of a district based health system." (The MoH's Master Plan, 1994-1996).

The MoH implements the reform to meet the people's essential health needs by:

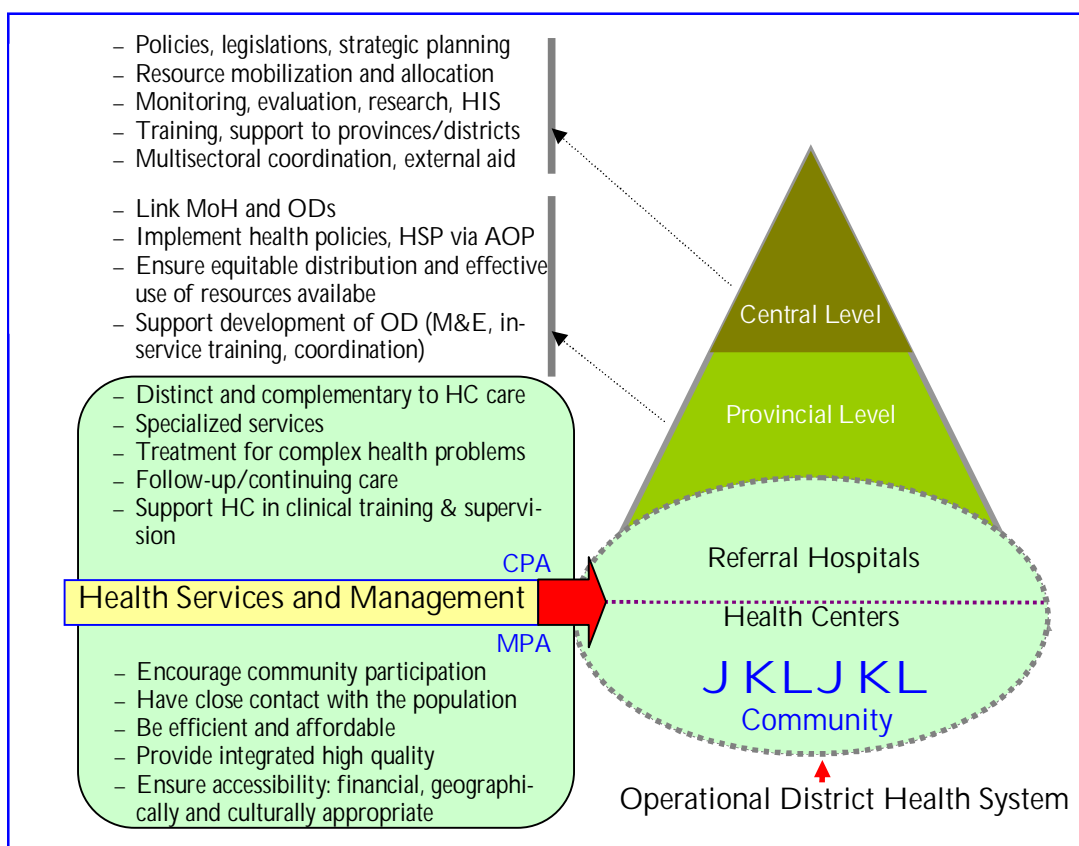
- Improving the population's confidence in public health services.
- Clarifying and reinforcing the role of hospitals and health centers.
- Establishing each facility's catchment area to ensure coverage of the population.
- Rationalizing the allocation and use of resources.

Reform of the health sector entails important transformations, both financial and organizational, such as:

- Rational distribution of resources based on the health coverage plan: financial, infrastructure, drugs, equipment and human resources
- Reorganization of the MoH institutional framework at central, provincial, and district levels
- Budgetary reform e.g. changes to formula based budget allocation
- A new definition of the health system and the types of services expected at each level of the system. (Figure 1)
- Redistribution and retraining of health staff
- Introduction of new ways to finance health services



Figure 1: Health System Organization



### The Operational District (Peripheral) level

The operational district (OD) is the most peripheral sub-unit within the health system closest to the population. While an MoH OD is aligned with administrative levels such as Administrative Districts and Sangkats, its size and coverage is determined by economic and public health considerations, in order to minimize duplication of activities and waste of public resources. It is composed of health centres and a referral hospital. Its main role is to implement the operational district health objective through:

- Interpreting, disseminating and implementing national policies and provincial health strategies.
- Maintaining effective, efficient, and comprehensive services (promotive, preventive, curative and rehabilitative) according to the needs of the community.
- Ensuring equitable distribution and effective utilization of available resources.
- Mobilizing additional resources for district health services, e.g. NGO support.
- Working with communities and local and administrative authorities.

## 2 HEALTH COVERAGE PLAN

The Health Coverage Plan (HCP) is a framework for developing the health system infrastructure, based on population and geographical access criteria. "Working Principles" for selection of Criteria are:

- Coverage of entire population- nor gap neither overlapping
- Basic health needs of majority of population

- Quality of care – integrated care
- Availability of resources

Table 1: HCP Criteria

Criteria	(1) Population	(2) Accessibility
Health Center (HC) MPA	Optimal: 10,000 Vary: 8,000-12,000	Radius: 10 km or Max. 2 hrs walk
Referral Hospital (RH)CPA	Optimal: 100,000-200,000 Vary: 60,000-200,000+	20-30 Km between 2 RHs or Max. 3 hrs by car/boat

The HCP introduced in 1995 aims to:

- Develop health services by defining criteria for the location of health facilities and their catchment area.
- Allocate financial and human resources
- Ensure that population health needs are met in an equitable way through coverage of the whole population.

The projection of the HCP presented in the table 1 is based on:

- The projection of population from the National Institute of Statistics (Ministry of Planning).
- The application of the population criteria of 10,000 populations per HC and 200,000 populations per OD/RH.

Table 2: Summary of the Health Coverage Plan

CODE	PROVINCE	OD			RH			HC			HP		
	Year	95	07	15	95	07	15	95	07	15	95	07	15
1	Banteay Meanchey	3	4	5	3	5	5	45	55	101		8	
2	Battambang	3	5	6	3	4	6	59	75	122		3	
3	Kampong Cham	10	10	11	10	10	11	128	135	218		0	
4	Kampong Chhnang	2	3	3	2	2	3	34	34	66		3	
5	Kampong Speu	3	3	5	3	3	5	50	50	92		0	
6	Kampong Thom	3	3	4	3	3	4	50	50	83		0	
7	Kampot	4	4	4	4	4	4	46	47	70		1	
8	Kandal	8	8	8	5	5	7	88	89	146		3	
9	Koh Kong	2	2	2	2	2	1	6	13	28		2	
10	Kratie	2	2	2	2	2	2	22	23	43		9	
11	Mondulkiri	0	1	1	0	1	0	0	7	6		17	
12	Phnom Penh	4	4	9	1	5	9	37	17	175		2	
13	Preah Vihear	1	1	1	1	1	1	12	14	20		19	
14	Prey Veng	7	7	7	7	7	6	90	90	116		0	
15	Pursat	2	2	3	2	2	3	30	32	52		4	
16	Rattanakiri	1	1	1	1	1	1	15	11	16		18	
17	Siem Reap	4	4	5	4	4	5	57	60	109		0	
18	Sihanouk Ville	1	1	1	1	1	1	11	11	29		1	
19	Stung Treng	1	1	1	1	1	1	10	10	14		3	
20	Svay Rieng	3	3	3	3	3	3	37	37	61		0	
21	Takeo	5	5	5	5	5	5	70	72	104		2	
22	Odor Meanchey	0	1	1	0	1	1	0	15	13		0	
23	Kep Ville	1	1	1	1	1	0	4	4	5		0	
24	Pailin Ville	0	1	1	0	1	0	0	5	5		0	
TOTAL		70	77	89	64	74	85	901	956	1,694		95	

### 3 AID GOVERNANCE, INSTITUTIONAL DEVELOPMENT, DECONCENTRATION & DECENTRALIZATION

The *Paris Declaration on Aid Effectiveness* has been put in practice through the implementation of the RGC's Harmonization, Alignment and Result (H-A-R) Action Plan that identifies ownership as the cornerstone of effective aid management. The progress in coordinating the development partners in 2006 and early 2007, calls for concrete action to consolidate linkages between aid effectiveness work and the achievements of development result.

Health partners are currently supporting the MoH to implement the HSP under a Sector Wide Management (SWiM) Framework adopted by the MoH in 2000. It is argued that SWiM was successful in spite of the process moving slower than anticipated, in building the foundation for effective sector coordination.

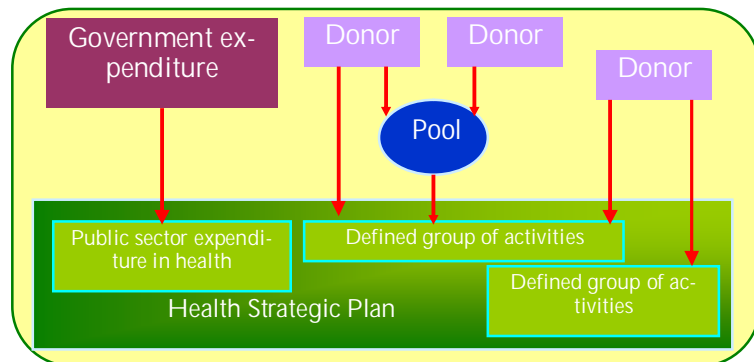
It is in the above-mentioned contexts that the MoH recognizes the importance of strengthening its cooperation with external partners which is reflected in the assignment in the HSP 2008-2015 of a dedicated strategic area in support of Harmonization and Alignment for Results.

The figure 2 depicts an overview of funding mechanism from all possible sources to support the implementation of the HSP2, corresponding to the financial modality adapted by the MoH (The MoH's official letter to health partners: *Decision on Options for Moving to SWAPs in the Health Sector* (23/03/2007)

The implementation of HSP2 offers great opportunities to advance RGC's ownership of the sector but also challenges the health system to further organizational development. If high quality health services are to be delivered within budget constraints, managerial and clinical competencies require substantial improvements, as do systems to manage budgets and staff. In addition, new organizational capabilities will be required as the result of significant changes in the roles and functions of central MoH Departments, Provincial, Municipal and District Health Departments and Communes under D&D. There is general agreement that without the right incentive arrangements, the organizational changes required by D&D will not materialize. These challenges provide the context for greater attention during HSP2 to investments in improved management and in long term organizational system development.

The necessary institutional strengthening will be achieved through significantly increasing the number of organizations in the sector having effective systems in place, including management information systems, to support the following functions: strategic planning; operational planning; financial management; staff management; service production management (including quality management and contract management where appropriate); and asset management in organizations owning assets.

Figure 2: Health sector financing modalities



## 4 HEALTH SECTOR REVIEW 2007

The Health Sector Review (HSR) of 2007 characterizes the Health Strategic Plan 2003-2007 (HSP1) as a land mark event for the Cambodian healthcare. The HSR includes a set of supplementary reviews and assessments, including the Midwifery Review, Sector wide Management (SWiM) Assessment, Contracting Review and the Mid Term Review (MTR) of the Health Sector Support Project (HSSP).

The purpose of the HSR was to measure progress toward achieving the goals and objectives of the HSP1 and the HSSP, derived lessons learned from implementation of both over the 5 year period, and develop policy options and strategies for the formulation of the next HSP 2008-2015 (HSP2) and reorientation of the next HSSP program (2009-2013).

The outcomes of the HSR are a renewed vision for the health sector, and development of the HSP2 in line with the timeframe of the National Strategic Development Plan (NSDP).

### 4.1 Health Outcomes and Health Service Utilization

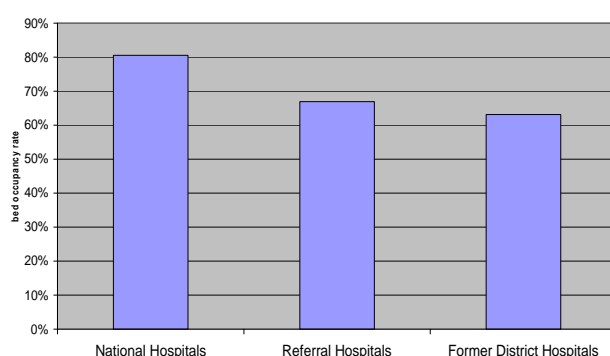
Utilization of health services improved during the HSP1 period, with this improvement taking place from a low baseline (Table 3 and Figure 3). Public health service utilization, while better than earlier, is far below what is needed to achieve good outcomes. There are also strong signs of regional imbalances in health service utilization, and between major urban and rural areas.

Table 3: Out Patients Contacts at Public Facilities

Year	Provincial Level	National Hospitals	Per Capita Contacts
2002	4,595,939	233,650	0.40
2003	4,597,876	368,517	0.39
2004	5,388,885	526,303	0.40
2005	6,254,726	697,646	0.50
2006	7,510,558	886,895	0.60
2007	7,361,394	978,524	0.51

Source: HIS 2007, MoH

Figure 3: Bed Occupancy by Type of Hospital 2006



Under HSP1 important health issues such as equity and the role of the private sector are insufficiently covered in the planning and monitoring processes.

The Cambodian Demographic and Health Survey 2005 (CDHS) showed the improvement of maternal and child health service coverage (Table 4).

Progress has been made in maternal health area; nevertheless, the maternal mortality ratio remains unacceptably high because of low utilization of key services, particularly in remote areas.

Maternal mortality is a multi-sectoral problem that is influenced by women's education and literacy levels, infrastructure development, and levels of women's participation and gender equity. Maternal mortality is commonly recognized as a generic health systems indicator and continues to warrant 'centre stage' attention and action in the HSP2. The HSR notes significant political will to address the issue of maternal mortality. It also

found that well proven interventions are in place and pilots had been carried out. However, without a considerable increase in utilization of these services, significant gains will not be forthcoming.

There has been significant improvement in infant and child health (Table 5). The CDHS 2000 and 2005 showed that infant mortality and under-five mortality decreased in the past 5 years. However, if the country is to achieve the Millennium Development Goal 4 (MDG) by the end of 2015, Cambodia needs to put in strong efforts and commitment.

Table 4: Reproductive, Maternal and New Born Health Services

Key Indicators	2000	2005	2007
Deliveries at health facilities	10%	22%	
Delivery by trained birth attendant	32%	44%	46%
ANC 2	38%	69%	68%
Prevention of tetanus among women	45%	77%	50%
Married women currently use modern contraceptive method	18.5%	27.2%	27%
Maternal Mortality Ratio	437	472	

Source: 2000, 2005: CDHS, 2007: HIS-MoH

Equitable health and health of women and children were the centerpieces of the HSP1. Progress has been made but not to acceptable levels. The Cambodia-MDGs must be reached during the period of the HSP2 – 2008 -2015. However, utilization of both basic

Table 5: Child Health Service

Key Indicators	2000	2005	2007
Child under 1 year of age fully immunized	31.3%	60%	72%
No. of HC implemented IMCI		45 (2002)	533
Nutritional status < 5:			
wasting	15%	7%	
stunting	45%	37%	
under-weight	45%	36%	
Neo-natal mortality	36	28	
Post-natal mortality	58	37	
Infant mortality	95	66	
Under five mortality	124	83	

Source: 2000, 2005: CDHS, 2007: HIS

and complementary health services provided by facility level HCs (MPA) and RHs (CPA) remains too low to reach this goal. Indeed, the current levels of health service provision are considerably lower than those described by the HCP.

Demand creation is an area of particular urgency for maternal and child health. If demand can be significantly improved within this program area, it is anticipated there will be a “spill over” to other areas which will create considerable ‘all

round’ improvement. If health seeking behavior for maternal and child health services can be channeled to quality services, a key area of concern will be resolved. In this way, better health service outcomes for both communicable and non-communicable disease control are also achievable. However, the scaling up of services will remain another serious obstacle if health financing problems remain unresolved.

Progress in these areas will call for strengthened institutional arrangements, including the national reproductive and sexual health programme, and improved involvement and co-ordination of work of all stakeholders.

Table 6: Main CDC Services

Key Indicators	2003	2005	2007
HIV Prevalence		0.6%	
PLWH on ART	392 (2002)		255,353 reached 3 by 5
TB cure rate	>85%		> 85%
TB detection rate	60%		65.4%
Malaria incidence per 1,000 pop.	9.6		4.2
Malaria fatality case per 100 population	9.96		7.9
Number of VCCT	37		197

Source: 2005: CDHS, 2003/2007: HIS

The CDHS 2005 also found that HIV prevalence at 0.6% is about one third of earlier estimates for 2005, placing Cambodia among the few countries worldwide that achieved their goal in 2005. Strong tubercu-

losis control program interventions have led to a highest curative rate since Directly Observed Treatments has been expanded to all health centers (Table 6).

There is still insufficient information about the current profile of non-communicable disease related health service utilization and the change over time. It is however to be expected that rapid economic growth and changes in life-style will bring with them serious non-communicable disease burdens, including high fatality rates due to traffic accidents and emerging diseases due to environmental pollution poor sanitation and lack of safe water. Efforts have been made to increase the focus on non-communicable diseases, and continued efforts will identify future needs and their financial implications.

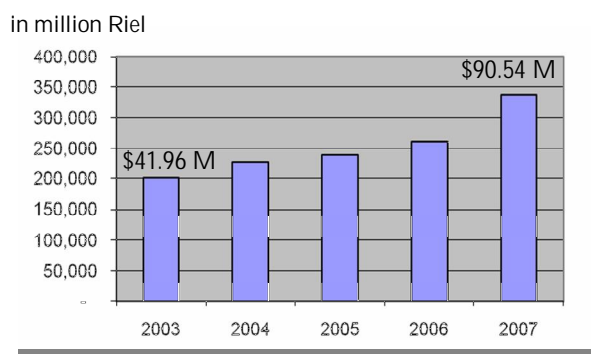
## 4.2 Health Financing

Like in many other developing countries, Cambodian health financing is dominated by out-of-pocket spending. Compared to neighboring countries however, a large proportion of Cambodia's health expenditures come from private households. The total expenditure on health per capita in 2005 was US\$ 37 of which 68% (US\$ 25 ) was out of pocket, while 22% was from donor organizations and only 10% from the MoH, representing a relatively high (10-12%) government budget allocation.

Per capita income was US\$ 430 in 2005 and has continued to increase rapidly in recent years. Cambodian economic growth is impressive, averaging 8% per annum over the last decade, as result poverty level has been reduced in average 1.5% annually. However, 35% of the population still lives under the poverty line of US\$ 0.46-0.63 income per day. Recent estimates show that average poverty levels are lower than before, but that the gap is widening (*WB recent poverty assessment*). Poor households cannot afford health expenditures. Many households not officially under the poverty line are still lacking cash. Health expenditures can tip them into poverty. The HSP1 has seen some welcome improvements, as the declining unit cost of accessing health care and increasing incomes have made health care more affordable and less likely to cause impoverishment. At the same time, pilots of community-based health insurance schemes have been implemented and give promising results for the development of pre-payment schemes. The broader path to universal coverage through social health insurance is defined in the Social Health Insurance (SHI) Master Plan.

The government recurrent budget has increased 67% in 2007 in comparison with that of 2003. Increases have been driven by increases in public spending as a whole. Allocations tend to be based on need, with the poorer provinces generally receiving higher per capita allocations. Yet, a relatively low share actually reaches the facilities, partly because of financial management constraints. Trends in the direction of devolved budget control and management and increased allocation of resources to provinces would strengthen the pro-poor direction of health financing.

Figure 4: National Health Budget 2003-2007



A range of public management reforms should contribute towards more effective public expenditure management. Budget execution has improved gradually over time with both higher and timely releases. However, there is scope for further improvement. The level

of total national health expenditure and the resources available to achieve the health MDGs are both adequate. However, the economic allocation of these resources is skewed, with excessive dependence on private sources and services and too little contribution by the public sector. There is a fundamental need to protect the poor and to move from direct out-of-pocket (OOP) expenditures towards pre-payment and social-transfer mechanisms.

### 4.3 Poverty and Equity

Ill-health and poverty are closely related in Cambodia. In many cases, poor families simply cannot afford qualified health care and resort instead to a range of traditional healers and other unqualified (and often dangerous) private service providers. Treatment rates vary significantly depending on the patient's location and socio-economic status. With about one-third of the population too poor to pay for health care in the public or the private sector, any plan for national health financing must provide appropriate and satisfactory social-protection measures and other safety nets. Currently, this protection is provided through various fee-exemption systems and through health equity funding; the need is to institutionalize and scale-up these mechanisms in the national framework and to develop new means to protect the poor. Lessons learned from health equity funds and community based health insurance at its early 245,598 stage, demonstrate efforts to minimize many of the financial obstacles experienced by patients. HEFs are largely funded by donors; however the RCG has allocated the national budget to support the HEFs.

Table 7: Coverage of health financing schemes

	2007
No health facilities have HEFs:	45
OD	39
National hospitals	6
No of cases covered by HEFs	246,598
No of cases exempted	1,300,025
No of CBHI schemes implemented	9 in 9 ODs
No of CBHI beneficiaries	45,282

Source: DPHI Health Financing Report 2007

### 4.4 Human Resources for Health

Although a number of actions have been taken to address recruitment and retention of midwives, and the challenge of mal distribution of staff between urban and rural areas, there remain shortfalls in the numbers and distribution of midwives. Unless recruitment and training capacity is increased from 2008 and to 2010, the shortfall may become worse, at the same time, there is need to improve quality of the training.

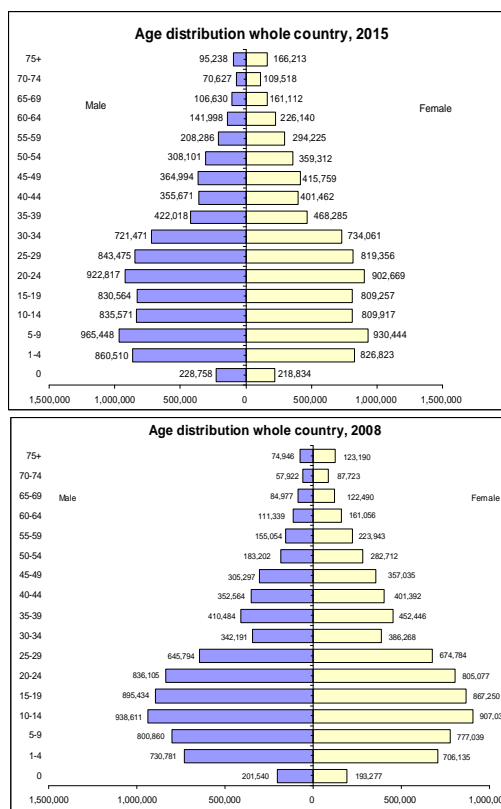
The Midwifery Review demonstrated that the levels of competency amongst primary midwives are inadequate. In addition, placing primary midwives in rural areas has failed to address broader health needs, in particular those of children. Rural areas need a more multi-skilled staff cadre, such as a secondary nurse/midwife. Available multi-skilled staff also needs to be given broad multi-skill tasks. In addition, the narrow definition of a skilled attendant as a 'midwife' has not taken into account the opportunity of using the skills of both doctors and nurses with obstetric skills to provide delivery services. Many of the midwives and other health professionals working in both public and private practice are not adequately documented.

The relationship between public and private service delivery needs to be addressed in the HSP2, especially the difference in remuneration between public and private sectors. Results from the studies of contracting indicate that strong improvements may be expected once a constructive approach to remuneration of health staff is found and implemented.

The experience of contracting of health services and their management has demonstrated that of better pay for staff based on good performance provides a way forward for improving district and facility organizational management and delivery of care. Human resource strategies must therefore include a significant salary increase component within the framework of the health system consolidation package. These strategies will also need to include improved national human resource planning, special incentives for service provision in 'hard to reach' areas, and an effective in-service training system to which health partners will be asked to contribute to avoid fragmentation.

The Health Sector Review recommends that internal contracting reform should be implemented in a stepwise fashion. This should increase accountability for the implementation of the HSP2 using an approach of performance incentives.

Figure 5: Population structures



#### 4.5 Health and Demographic Transition

Rapid development and changing demographics may be expected to bring about an evolution in the illness profile away from communicable diseases and towards increasing prevalence of non-communicable diseases. The prevalence of both hypertension and diabetes mellitus has increased faster than would be expected from the increase in life expectancy. The age of onset of chronic disease is relatively low. The number of deaths and injuries from traffic accidents has increased by 50% between 2000 and 2005. There are also concerns for health burdens related to environmental pollution, poor sanitation and lack of access to safe drinking water. At the same time there is an emerging substance abuse epidemic which is becoming a major challenge due to its effect on mental health, HIV transmission and other social problems. Consequently, emerging health issues in the areas of prevention, emergency care and rehabilitation will require additional resource allocations for effective interventions.

#### 4.6 Evolution of the Health Coverage Plan

As described earlier in this Chapter, the HCP is used to guide investment in health infrastructures. The distinguishing feature of the HCP is the change from an administrative based to a population based health system organization. The HCP has evolved over the past 12 years as a result of key contextual factors:

Table 8: Health facilities development

	2003	2007
No. of HC newly constructed	694	134
No. of HC received MPA drugs	812	880
No. of buildings newly built in RHs	34	3

Source: JAPR Report 2007



- Population increases over time ideally result in increased demand for health services and workload at health facilities;
- Political stability and security nation-wide have provided a robust platform for increasing investment and economic development activity, with migration to urban areas and development zones, as well as improving access to areas that were “inaccessible” when the HCP was first developed in 1995;
- Significant improvements in road infrastructure has provided easier access to HCs and referral services; and
- There is now a more diverse range of private providers, especially in urban areas.

As consequences,

- a number of new health centers and health posts have been added, and the HCP data base has been updated almost every two years;
- The roles and functions of Referral Hospitals have been redefined, with RHs now categorized in three levels: CPA1, CPA2, CPA3 (detail in the MoH CPA Guidelines, 2006);
- Some MPA-HCs have been upgraded to the level of CPA1, while some other planned HCs have been removed, especially in Phnom Penh and in major provincial towns.
- A number of health posts have been upgraded to MPA-HC level.

Continued investment in health infrastructure over the period of the HSP2 will present serious challenges. The Table 1 (Summary of the HCP) indicates that the number of HCs and RHs will approximately increase from 956 and 74 (in 2007) to 1,694 and 85 (by 2015), respectively, if the existing criteria applied across geographical areas, regardless urban and rural areas (10,000 population per a HC, and 100,000-200,000 population per a RH). In this regard, a huge capital investment cost (including supply of medical equipment) is required. Assuming that one commune (total communes is 1621) needs one HC, there will be new 656 HCs to be built) over the period of 2008 to 2015 (or in average 83 HCs to be built annually) and further implication will poses on the human resource production. Based on this simulation 6,560 HC staffs are required to meet staffing level for these new HCs over the same period (the MPA Guidelines 2007 recommends 10 staff per HC) over the same period regardless the current shortage, replacement of the retired/deaths and other types of staff e.g administrative, accountants etc. Overall, operational cost (drugs and other health commodities necessary to support the functioning of those facilities) will be increased over time a long the line of this capital investment.

In order to get a clear picture for this investment, there is a immediate need to conduct a nation-wide revision of the HCP. A review of the existing criteria is required and application of the criteria must pay greater attention to: (a) major urban areas vs. remote/rural areas; (b) taking potential of private providers into account; and (c) alignment of HCP with D & D requirements.

#### 4.7 Aid Effectiveness and Governance

There is a strong consensus among development partners and the government on the main principles Paris Declaration on Aid Effectiveness: strong country ownership; aligned strategies needs to be in place; harmonization of external support to country procedures and systems; management of results through a system of clear objectives, indicators for monitoring and policy development based on learning from progress; and mutual accountability based on result based management in common systems for accountability.

While the HSP1 was designed to promote rational allocations of funds, there exists a complex financial architecture in which donors play a strong role through project financ-

ing, in combination with a generally weak regulatory mechanism for private health market. Both of these are critically important drivers which may not be synergized and working in harmony. Indeed, donor funding remains fragmented and not properly aligned with stated national priorities, despite efforts under the SWiM process. Non-aligned financial flows from donors disrupt the health sector governance model.

The health sector will continue to rely on substantial support from health partners in the foreseeable future. It will therefore be necessary to strengthen the harmonization of donor funding in support of the HSP2 implementation. The SWiM Review provides recommendations for moving the process forward. A number of national and international mechanisms are now in place (including “International Health Partnership launched in September in London in which Cambodia is one of the first wave countries for this partnership) that will improve donor harmonization during the course of the HSP2. Improved co-operation between the government and health partners sets the stage for more effective harmonization and alignment. Furthermore, a dialogue exists between the Government and the private sector that provides a channel for future gains in terms of integration and quality control measures for the provision of health care services.

The new Organic Law covers the roles of the decentralized structures and their relationships to the national level. It will take effect during the planning period of the HSP2 and will have important consequences for the role and methods of work of the MoH; the position and role of the provinces, including their health planning and resource allocation role; and the position and role of the operating districts and their relation to the basic unit for decentralized democratic action – the communes/sangkats.

A detailed, systematic approach to D & D in the health sector will facilitate the implementation of a more stable approach to health system governance. This will build on unique experiences gained from the health systems experiments undertaken during the HSP1, while the Institutional Development Plan (IDP) will sharpen the roles and functions of the health sector to be more strategic, responsive and accountable.

#### 4.8 Conclusions

The HSR concluded that Cambodia’s population general health status has improved considerably from very low post conflict levels. The situation described in CDHS 2005, is consistent with that of a country at this stage of economic development.

- Two of the measurements generally used for defining the quality of a health system – infant mortality rates and child (under five years of age) mortality rate have considerably improved although child indicators need further improvement to meet the CMDG goals.
- The third strategic outcome indicator for health systems – maternal mortality rate – has not improved and remains a greater concern, although substantial progress is made in the areas of maternal and child health and reproductive health.
- There has been a remarkable reduction of HIV prevalence, while high tuberculosis cure rate maintained.
- Due to rapid economic growth, environmental pollution and changes in life style there is an increasing concern of non-communicable disease burdens including high mortality rates due to traffic accidents.
- Utilization of the public health services has improved but remains low, while utilization of private sector services remains relatively high.

- The national budget devoted to health has increased with strategic targets, but there is still scope for further improvement in financial management and budget execution.
- Human resource management remains a pressing challenge, especially with regards to incentives issues and the problem of staffing adequately skilled midwives in health centers.
- Performance assessments of health sector were constrained in part by too many indicators, missing baselines and changing targets and indicators overtime. A multitude of this change has weakened the learning element of the strategy system.
- Health partners have made more resources available to the health sector. Much progress is needed in coordinating their support, making longer term commitments and ensuring their contributions in line with national priorities
- A striking feature of Cambodian health development is large differences in health status between socioeconomic groups. The health status of the rural population is much poorer than urbanized citizens. While families with adequate education levels progress in health, development is weak or even negative among families with no formal education. Disparities between provinces are disturbingly large.

#### 4.9 Key Policy Recommendations for the HSP 2008-2015

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1. To make policy decisions immediately in areas where advanced experimentation has been made. Such decisions need to include reformed contracting consistent with the broader institutional context of the Cambodian public sector, expanded HEFs and improved remuneration of health staff.
  2. To further strengthen institutional roles and responsibilities across the health system, with capacity building, and improve links between the next HSP strategy and the monitoring system.
  3. To consolidate aid effectiveness management, addressing the current fragmented status of donor financing through concerted efforts of harmonization and long term undertakings to allow for a continued scaling up of resources.
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# *Approach to the Health Strategic Plan*

## Role of HSP2. Strategic Priority. Goals. Objectives and Targets

### 1. ROLE OF THE HSP2

The HSP2 is built upon the significant work of the HSP1 by first consolidating key achievements across the health sector and then scaling up already proven interventions nationwide, for the benefit of all Cambodians.

This second Health Strategic Plan focuses on these challenges and provides improvements in strategic health interventions, in the operations of the health system. The Plan integrates this reform work in the larger context of Cambodian reform.

- 
- Provide a long-term broad vision to guide development of the Cambodian health sector, including capacity development and resource allocation.
  - Enacted through the Health Coverage Plan, 3 Year Rolling Plan (3YRP) and Annual Operational Plan (AoP)
  - Align with the national priorities and planning processes (NSDP)
- 

The plan derives its strategic areas from the NSDP confirming and strengthening Cambodia's health priority goals of improving the health of women and children, combating infectious diseases, and strengthening health service delivery for all Cambodians. The NSDP also states important broader objectives affecting the HSP2 – to contribute to bring poverty index down to 25% from 2010 and to target areas with high poverty prevalence.

The HSP2 – reflecting the general national policies – is intended to impact on the policies for health through a number of processes in which the Ministry of Health, the Provinces, Districts, Communes and the facilities are involved. Of particular importance are:

- Specific development in the health sector on governance, and financial management.
- Reform work to further develop the relationship with development partners
- Human resource remuneration policies and planning
- Quality policies for the health sector and clinical guidance for health facilities
- Monitoring and evaluation of the health sector
- Strengthening the role of health facilities (MPA and CPA)

Policies and strategies of the HSP2 will be continuously monitored and evaluated. The Joint Annual Performance Review (JAPR) and the Annual Health Congress will play a decisive role for continued revision of interventions and updating operational targets process, and make the HSP2 a “living document.”

## 2. STRATEGIC PRIORITIES

The HSP2 has characterized strategic priorities for the health sector into two broader interrelated areas that the Ministry of Health and all stakeholders have to pay particular attention to - in the short to medium term interventions during the course of the HSP2.

These priorities are: i) population health problems and essential services as provided in the Table 10; and ii) challenges in relation to functional areas of the health system.

Table 10: Health Program Areas Priority & Essential Services

Reproductive, Maternal, Newborn and Child Health	Communicable Diseases	Non Communicable Diseases and other health problems
Family planning and birth spacing; Safe abortions; Maternal and child nutrition, Antenatal care, PMTCT, Skilled birth attendance, Emergency Obstetric Care Integrated postnatal care of mothers and newborns, Immunization, including measles & tetanus elimination, and introduction of new vaccines IMCI, Essential pediatric care Adolescent / Youth health Key family practices	Reproductive tract infections HIV/AIDS/STI TB, leprosy Dengue Fever Malaria Helminthiasis Schistosomiasis Emerging and reemerging diseases International Health Regulation implementation	Diabetes Cancer Cardio-Vascular Diseases (CVD) Mental health, including substance abuse Blindness and deafness prevention Oral health Environmental health risks Injury, accident Occupational health Rehabilitation Elderly Food safety Tobacco control

The level of health system challenges of both supply-side and demand-side are presented in Box 1 and Box 2, respectively.

Box 1: The 'supply side' challenges

- Many remote facilities are insufficiently staffed because of recruitment and deployment problems associated with limited competency and motivation of health staff.
- Health service delivery is constrained by inadequate financial flow and logistic support for drugs and commodities.
- Inadequate resources to maintain and scale up services and coverage of HEF and SHI.
- Problems with quality of care exist at facility level in terms of standards of medical care, as well as the delivery and organization of service provision.
- Health system governance at provincial level and management capacity at district and facility levels is limited. This calls for considerable health system strengthening and capacity building efforts.
- Weak enforcement of health legislations and compliance with standard guidelines and practices, and quality assurance (lab and drug quality control).
- Insufficiently reliable information system and reporting system, comprehensive preparedness plan, emergency response system, epidemiological data.
- Fragmented aid architecture prevents a broader systemic approach to health sector management and drives health service delivery towards more non-integrated vertical approaches and project approaches. This makes the overall stewardship role of the Ministry of Health difficult and limits integration of financing systems.
- Integration of Private Sector (including NGO) providers and their services into a national health policy implementation framework is weak.
- Capacity and knowledge gaps in dealing with emerging disease burdens related to changes in life style and environmental pollution.

Box 2: The 'demand side' challenges

- Low level of utilization of the public health service
- Inappropriate health practices and health seeking behavior, leading to receive medication/care from drug shops/pharmacies, and from providers with little formal training.
- Knowledge, beliefs and cultures and distance also influence patients' decision to seek care.
- Gender-based issues, violence, women empowerment, male involvement, food insecurity, education, sanitation, perceptions, compliance to treatment, stigma and discrimination leading to limited access for vulnerable population.
- The costs of health services (direct and opportunity costs), transport and food during periods of treatment/hospitalization are important barriers to health service utilization for many patients.

3. HSP2 GOALS, OBJECTIVES AND TARGETS

Progress moving toward the long term vision of the health sector will be reviewed and updated on regular basis by measuring outcomes of interventions in the three program

areas against targets set for three strategic goals and for 12 strategic objectives through the JAPR in the health sector within the overall monitoring framework of the NSDP.

- Strategic Goals and Outcomes

HSP2 Goal 1	Outcomes
Reduce maternal, new born and child morbidity and mortality, and improve reproductive health	<ul style="list-style-type: none"> <li>• Reduced maternal mortality ration</li> <li>• Reduced neonatal and infant mortality</li> <li>• Reduced under five mortality</li> <li>• Improved women's nutritional status</li> <li>• Improved child nutritional status</li> <li>• Increased contraceptive prevalence rate</li> <li>• Increased delivery assisted by skilled birth attendants</li> <li>• Reduced morbidity and mortality of acute respiratory infection (ARI), diarrhea and vaccine-preventable diseases</li> <li>• Increased Expanded Program for Immunization (EPI) coverage</li> </ul>
HSP2 Goal 2	Outcomes
Reduce morbidity and mortality of HIV/AIDS, Malaria, TB, and other communicable diseases	<ul style="list-style-type: none"> <li>• Reduced morbidity and mortality of HIV/AIDs</li> <li>• Reduced of morbidity and mortality rate of tuberculosis</li> <li>• Reduced morbidity and mortality rate of malaria</li> <li>• Reduced morbidity and mortality caused by other communicable diseases in including vaccine preventable, emerging and re-emerging diseases</li> </ul>
HSP2 Goal 3	Outcomes
Reduce the burden of non-communicable diseases and other health problems	<ul style="list-style-type: none"> <li>• Reduced morbidity, disability and mortality rate of mental health, substance abuse</li> <li>• Reduced morbidity and mortality rate of diabetes</li> <li>• Reduced morbidity and mortality rate of CVD</li> <li>• Reduced morbidity and mortality rate of cancer</li> <li>• Reduced blindness and deafness rate</li> <li>• Reduced prevalence of DMFT for adults and children</li> <li>• Reduced prevalence of tobacco consumption</li> <li>• Reduced alcohol consumption</li> <li>• Reduced morbidity and mortality rate of injuries, accidents and violence</li> <li>• Reduced environmental risks and health impacts from disasters</li> </ul>

- OBJECTIVES

Goal 1	Reduce maternal, new born and child morbidity and mortality with increase reproductive health
Objective	<ol style="list-style-type: none"> <li>1 To improve the nutritional status of women and children</li> <li>2 To improve access to quality reproductive health information and services</li> <li>3 To improve access to essential maternal and newborn health services and better family care practices</li> <li>4 To ensure universal access to essential child health services and better family care practices</li> </ol>
Goal 2	Reduce morbidity and mortality of HIV/AIDS, Malaria, TB, and other communicable diseases
Objective	<ol style="list-style-type: none"> <li>5 To reduce the HIV prevalence rate</li> <li>6 To increase survival of People Living with HIV/AIDS</li> <li>7 To achieve a high Case Detection Rate and to maintain a high Cure Rate for pulmonary TB smear positive cases</li> <li>8 To reduce malaria related mortality and morbidity rate among the general population</li> <li>9 To reduce burden of other communicable diseases</li> </ol>
Goal 3	Reduce the burden of non-communicable diseases and other health problems
Objective	<ol style="list-style-type: none"> <li>10 To reduce risk behaviors leading to non-communicable diseases (KAP): diabetes, cardiovascular diseases, cancer, mental health, substance abuse, accidents and injuries, eye care, oral health , etc</li> <li>11 To improve access to treatment and rehabilitation for NCD: diabetes, cardiovascular diseases, cancer, mental health, substance abuse, accidents and injuries, eye care, oral health, etc</li> <li>12 To ensure Essential Public Health Functions: environmental health:, food safety, disaster management and preparedness</li> </ol>

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#### 4. TARGETS AND INDICATORS

HSP2G1 Reduce maternal, new born and child morbidity and mortality with increase reproductive health			
Indicator	Baseline Value 2005-2008	Target 2010/2011 MTR	Target 2015 Evaluation
Total fertility rate	3.4	3.4	3.0
Maternal mortality ratio per 100,000	437	243	140
Neonatal mortality rate per 1,000	28	25	22
Infant mortality rate per 1,000	66	60	50
Under-five mortality rate per 1,000	83	75	65
contraceptive prevalence using modern contraceptive method	27,2	44	60
Women of reproductive age with low BMI (<18.5kg/m2)	20	12	8
Anaemia in pregnant women (<11g/dl)	57.1	39	33
% of HIV+ pregnant women receiving ART for PMTCT	7	50	75
% births delivery by trained health personnel	44	70	80
% of deliveries by C-section	1.8	3	4
Proportion of children under 1 fully immunized	60	70	80
% of children under one year immunized with DPT3-HepB	82	92	95
% of children under one year immunized against measles	79	85	90
Proportion of infants put to the breast within one hour after birth	35	45	62
Proportion of infants 0-6 months old exclusively breastfed	60	65	70
% of children 6-59 months receiving vitamin A 2 doses during the last 12 months	83	85	90
% of children under 5 with chronic malnutrition: stunted (New WHO Growth Standards)	43	35	25
% of children under 5 years with cough or difficult breathing who sought treatment by public health provider [IMCI-CS]	48	70	75
Proportion of children with diarrhea having received ORT	58	80	85

HSP2G2 Reduce mortality and morbidity of communicable diseases			
Indicator	Baseline Value 2005-2008	Target 2010/2011 MTR	Target 2015 Evaluation
HIV prevalence rate among adult 15-49	0.6 (0.9)*	< 0.6 <(0.9)	<0.6 <(0.9)
# of Voluntary Confidential Counselling and Testing sites operating in public and non-for profit sector	194	250	>250
% of HIV+ pregnant women receiving ART for PMTCT	7	50	75
% People with advanced HIV infection receiving antiretroviral combination therapy	50	> 85	> 85
% PLHAs on ART survival after a 12-month treatment.	n.a	> 85	> 85
Prevalence of smear-positive TB per 100,000 population	269 (2002)	214	135
TB death rate per 100,000 population	87	45	32
Case detection rate of smear (+) pulmonary TB (%)	66	>70	> 70
TB cure rate (%)	> 85	>85	> 85
Malaria incidence rate per 1,000 populations	4.2	3.58	2.16
Malaria case fatality rate per 1,000 population	0.36	0.2	0.1
# of malaria cases treated at public health facilities per 1,000 pop	4.2	3.58	2.16
% of families living in high malaria endemic areas (< 1 km from forest) of 20 provinces have sufficient (1 net per 2 persons) treated bed nets (LLIN/ITN)	6.4	85	95
Dengue hemorrhagic fever case fatality rate	1	0.5	0.3
HSP2G3 Reduce burden of non-communicable disease & other health problems			
Indicator	Baseline Value 2005-2008	Target 2010/2011 MTR	Target 2015 Evaluation
% of deaths due to road traffic accident	3.5	3.0	2.8
Percentage of population with head trauma due to road traffic accident received treatment	TBE		TBE
Incidence of cervical cancer reported from public health facilities	25	6.5	12.5
Incidence of diabetes reported from public health facilities	15	TBD	TBD
Incident of hypertension	TBD	TBD	TBD
Percentage of adult smoking	54(M)/9(F)	- 5%	- 10%
% of blindness	1.2	1	0.8
% Decayed missing filling teeth for children	8.9	>5	>5
# of mental health cases reported in public sector	14000	20000	28000
# IDUs enrolled in Opioids substitution treatment	150	400	1200

n.a: Non available

TBD: Target to be determined

\* Expert Consensus Workshop on Estimation of HIV Prevalence, 2007- NCHAD

(M): Male, (F) Female



# Health Strategy

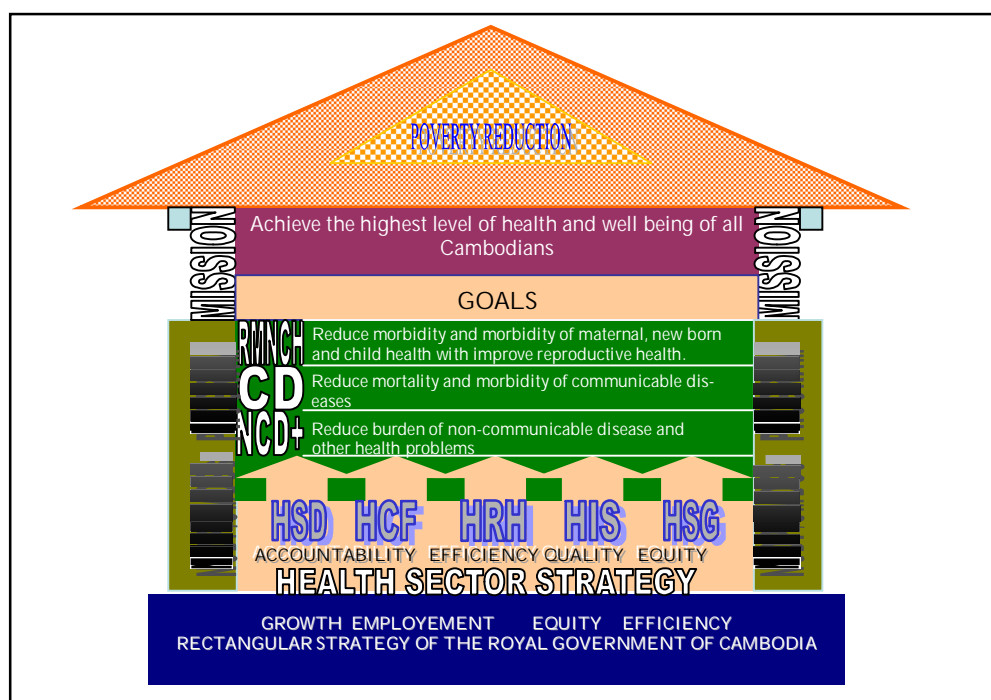
Strategic Framework. Operational Framework. Approach to Health Strategy.  
Strategies and Strategic Components

## 1. STRATEGIC FRAMEWORK

The HSP2's strategic framework has 5 main characteristics as follows (Figure 6):

- A framework that places “*Accountability, Efficiency, Quality and Equity*” at the center of the 5 cross-cutting strategies, supporting the 3 health program areas’ interventions to deliver better health outcomes.
- A framework that translates the RGC’s *Rectangular Strategy* into actions, contributing to a long-term process for poverty reduction.
- A framework that informs and updates the *NSDP’s health related targets* on an annual basis.
- A framework that is *time-bound* and takes *MDGs* as the milestone.
- A framework that reflects the principles of the *Paris Declaration* (ownership, alignment, harmonization, managing for results and mutual accountability) and The *RGC Harmonization, Alignment for Results Action Plan*

Figure 6: The HSP2 Strategic Framework

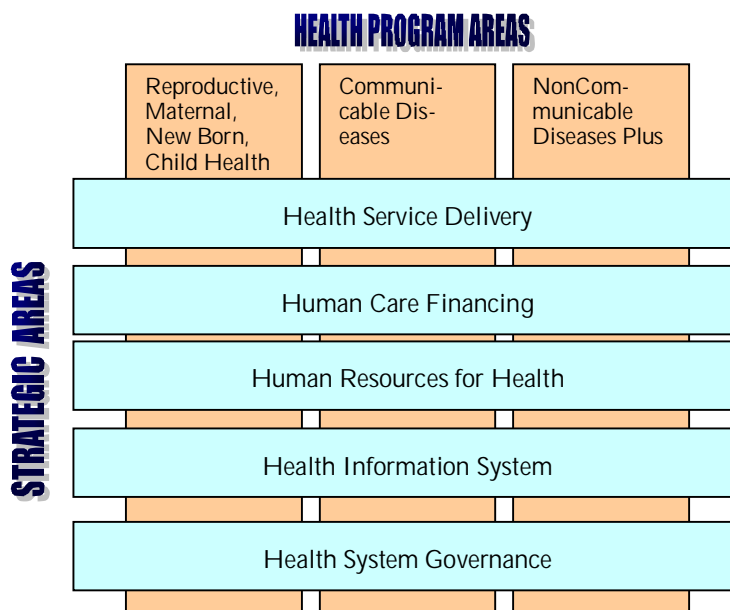


NOTE: HSD: Health Service Delivery. HCF: Health Care Financing. HRH: Human Resource for Health. HIS: Health Information System. HSG: Health System Governance. RMNCH: Reproductive, Maternal, New Born and Child Health. CD: Communicable Diseases. NCD+: Non-Communicable Diseases and other health problems

## 2. OPERATIONAL FRAMEWORK

Figure 7: Operational Framework

The building blocks of the HSP2 Strategic Framework are the three main health program areas which implement a set of five cross-cutting health strategies. The matrix diagram in Figure 7 illustrates the operational framework. Each of the five health strategies – *health service delivery*, *health care financing*, *human resource for health*, *health information system*, and *health system governance* – is implemented in all three program areas. This will ensure effective and consistent delivery and monitoring of areas' outcomes across the health sector.



The selection of health program areas is driven by three key factors: (i) alignment with CMDGs and structures of program-based budgeting to support AoP development and implementation; (ii) clustering of diseases in relation to population health priorities to be addressed during the course of the HSP2 2008-2015; and iii) maintaining the success of National Program approaches to key public health concerns while at the same time anchoring these more securely within the broader health sector.

Each Strategy is comprised of a set of strategic components. Strategic interventions are identified for each strategic component.

### 3. APPROACH TO HEALTH STRATEGY

The health strategy sets platforms for the MoH's, and all stakeholders', actions in health during the course of the HSP2. The challenge for implementation of the strategy is two-fold: i) to consolidate the successes of the HSP1; and ii) to scale up key proven interventions in an efficient and effective manner for the health benefit of all Cambodians.

It is a two-phase strategy. During the first phase, the policy foundations will be laid for consolidation of current achievements, and the institutional and systemic constraints to a successful scale up will be addressed. During the second phase, the key interventions for the strategies outlined here will be rolled out to all provinces in accordance with well-defined policies and subject to rigorous monitoring.

Consolidation of the policy foundations for this plan will need to precede scaling up of interventions. Therefore, for each strategic area laid out in this HSP2, a set of policy requirements will be detailed.

### 4. STRATEGIC AREAS

- Health service delivery consists of both public health measures against disease as well as a general strengthening of health service delivery through general and disease specific policies and plans. Much emphasis is given the subject of quality improvement. An increase in health demand and empowerment of patients are underlined as important ways forward for improved quality and accountability in health service delivery.
- Health care financing addresses both increases in investments in health and efforts to remove financial barriers to quality health care. Government allocation to the health sector is singled out thus underlining issues around the balance of financing between donors and government as well as efficient funding of operational levels. Strengthening of social health protection mechanisms, including equity funds, CBHI and SHI will contribute to reduction of financial barriers to access health services as well as incidence of catastrophic health expenditures.
- Human resource for health covers a comprehensive range of interventions *i)* to ensure sufficient staffing levels with adequate professional profiles and competencies, *ii)* revising content of their training, *iii)* increasing the intake of students into schools and universities, and *iv)* strengthened measures to safeguard the quality of training and trainers. Midwives are particularly selected as a target group because of their key role for achieving the general goals of the HSP2. Human resource programming also includes safeguarding professional ethics. Special urgency is associated with implementation of salary reform for health services.

- Health information system addresses the need for high quality, accurate, comprehensive and timely data to provide the basis for evidence-based policy making, planning, performance monitoring and evaluation. It emphasizes improved coordination and collaboration both within and outside the health sector through data sharing, management, analysis, dissemination and use and inclusion of private sector information, as well as tracking budgets and expenditures and expanded training to build HIS capacity.
- Health system governance. The governance perspective of the HSP2 focuses on decentralization and deconcentration. The regularization of internal and external contracting through Special Operating Agencies, as well as block grants from the national level and local resource mobilization will cover the financial needs of the policy. Increased autonomy at the operational level will be developed, together with stronger regulation and stewardship of the private sector. Harmonization and Alignment for Results is stressed to achieve a common policy framework between government and development partners for health development. The strategy will improve the comprehensive picture of the government and donor funding and strengthen harmonization (*coordinating external support to follow national procedures, institutions and systems where possible*) and alignment (*ensuring that priorities identified by Cambodia become the priorities of donors*) of aid architecture, in line with the government policies for decentralization and deconcentration and HSP2 priorities.

#### 4.1 Health Service Delivery Strategy

It is through the HSD Strategy that the RGC *Policy on Service Delivery* (May 2006) is implemented in the health sector. The strategy supports the key output of the public and private health sector and is the means through which the ultimate outcomes of the HSP2 will be achieved. The other 4 Strategies in HSP2 are designed to support HSD to this end.

By 2015, all communities will have access to full MPA and CPA services, as well as to licensed and accredited private sector providers. Previous success with contracting for health service delivery will have been scaled up across the country and regularized within the Cambodian public sector institutional context through a stronger focus on internal contracting and managerial autonomy through Special Operating Agencies in accordance with the RGC Policy on Service Delivery supported by “*block grants*” at the provincial level.

The HSD Strategy uses *Continuums of Care* to build and link MPA and CPA, accompanied by strengthened clinical guidelines and treatment protocols, as well as a stronger focus on quality and professionalism in both public and private sectors.

Facilities, services offered, and support structures will be more closely targeted to population needs via the Health Coverage Plan as well as a Burden of Disease assessment. Monitoring and supervision will be strengthened through increased integration and through the establishment of a multi-departmental MoH Service Delivery Monitoring Team to support National Programs, PHD, and OD levels.

## A. Challenges

Health service delivery in Cambodia is currently characterized by:

- Slow increase of utilization of the public health services;
- Overall low level of quality of care in both public and private sectors;
- Rapid change, both in term of patterns of consumer expectations (including preference for individual care) and patterns of health service provision;
- Fragmentation of activities, funding, monitoring and supervision, administrative lines of authority
- Ineffective regulatory mechanism and weak coordination between public and private including not-for-profit health services.
- Difficult geographical access to health services and lack of information about health services available in remote areas.

It is these challenges that will be addressed through consolidated service delivery strategies in a more efficient and integrated fashion by strengthening and building upon the Minimum Package of Activities at Health Centers and the Comprehensive Package of Activities at Referral Hospitals. The strategies are designed to mitigate fragmentation in health service delivery, while at the same time respecting the MoH administrative structures and safeguarding the core functions of high quality National Programs and other key private institutions. At the broader level, regulatory mechanisms for private practices will be strengthened to ensure the minimum quality standard is respected.

## B. Strategic Components and Interventions

### HSD1 [Expand coverage of MPA and CPA based on Health Coverage Plan and focused on client needs](#)

- HSD1.1 Scale up provision of full MPA at HCs and CPA and RHs, in particular the specialized services at the National Referral Hospitals and Provincial Hospitals where Regional Training Centers are located, according to the MPA and CPA Guidelines, with strengthening referral system between HCs and RHs.
- HSD1.2 Define a set of Continuums of Care within MPA and CPA for key RMNCH, CDC and NCD+ priorities. These Continuums of Care will:
- Serve as fundable building blocks for strengthening MPA and CPA;
  - Include clinical, outreach, and communication interventions;
  - Include referral pathways linking MPA and CPA;
  - Include clinical guidelines and treatment protocols that are consistent with and further strengthen existing MPA and CPA guidelines.
- HSD1.3 Strengthen integrated monitoring and supportive supervision at provincial and OD level to support health service delivery function at referral hospitals and health centers through the provision of dedicated budgets for monitoring and supervision.

- HSD1.4 Strengthen the Central MoH multi-departmental health service delivery monitoring and supportive supervision to support PHDs and ODs implementing their monitoring and supervision function through the establishment and funding of a Health Service Delivery Monitoring Team drawn from Departments, National Programs and Centers.
- HSD1.5 Strengthen health service delivery roles and functions at health facilities by strengthening implementation of annual planning process including appraisal and feedback mechanism, especially at provincial and operational district level.
- HSD1.6 Strengthen integrated out-reach and community-based models of care as an intermediate strategy for scaling up maternal, newborn and child survival interventions, especially in communities with limited access to health facilities; ensure effective involvement of local authorities and volunteers (VHSGs) in provision of selected services and information for improved MNCH.
- HSD1.7 Promote healthy life-styles through establishing healthy environments and behavior change communication strategies
- HSD2 **Strengthen health Service delivery support systems in an integrated manner**
  - HSD2.1 Strengthen effective referral systems including community based referral system and establish referral networks, where needed, through clustering of ODs or provinces, that promote maximal utilization of existing resources, and assist communities to implement established community based referral systems by their own.
  - HSD2.2 Improve organization, management and technical capacity of paramedical services including laboratory and blood service facilities to support diagnosis, treatment and good quality of care in effective manner.
  - HSD2.3 Strengthen skills and competencies in forecasting and quantification of health commodities, and strengthen quality assurance and control of health commodities, especially at provincial and district level. .
  - HSD2.4 Align ancillary services with rational needs for service provision and strengthen logistical systems to ensure availability and timely delivery of drugs and health commodities at health centers and referral hospitals.
- HSD3 **Target public health service provision and public health interventions according to need.**
  - HSD3.1 Determine expected number of consolidated packages of essential services for facilities to target public health interventions, preventive, curative services and promotive according to result of the country-wide Burden of Disease assessment and other social determinants for health.



- HSD3.2 Review HCP nation-wide with mapping health facilities by supplementing with data on expected service delivery. The HCP will be updated regularly every three years.
- HSD3.3 Strengthen implementation of framework for the early warning system, and disease surveillances, early detection and response through developing a comprehensive national policy and specific technical guidelines for emergency and disaster response, and strengthening interventions of national and provincial Rapid Response Teams.
- HSD4 **Develop and apply consistent standards of quality across entire health sector (public, private and non-profit)**
  - HSD4.1 Strengthen the implementation of the *National Policy for Quality in Health (October 2005)* to provide care with quality; safety; efficacy; focused clients; timely; and equity by greater emphasis on clients' rights; institutional regulations and management; clinical practices; professional development and supportive environment for quality improvement.
  - HSD4.2 Develop and implement routine facilities survey procedures and reliable systems for follow-up to ensure that appropriate medical supplies, basic equipment and infrastructure are in place according to MPA and CPA guidelines.
  - HSD4.3 Establish incentive mechanisms for high quality, such as facility bonuses and recognition/awards for high achievement with involvement of consumers.
  - HSD4.4 Monitor client satisfaction in public health service through regular client surveys; and improved communication and coordination between health facilities and Health Center Management Committees, Village Health Support Groups, Health Equity Fund implementers and Commune Councils.
  - HSD4.5 Strengthen institutional regulatory mechanisms for licensing in the private sector followed by implementation of an accreditation system as a step-up after compliance to licensing requirements. This process will be introduced gradually in the public sector, as well.
- HSD5 **Develop contracting models as the center of a comprehensive approach to health service delivery**
  - HSD5.1 Scale up health service delivery contracting country-wide in conformity with RGC laws and policies through implementation of Special Operating Agencies (SOA) and other compatible service delivery agreements, to increase access, efficiency, quality and equity, and make health managers and health providers more accountable for results. These arrangements will be developed in conformity with the RGC *Policy on Service Delivery (PSD)* and codified in an MoH Policy on Contracting. In accordance with the *PSD* these arrangements will ensure:

- Focus on needs of consumers by clearly determining the category, quality and price of delivered services;
  - Clearly defined expected results and resources to be made available;
  - Clearly defined organization and functioning of the unit;
  - Precisely defined mechanism for monitoring, control and evaluation.
- HSD5.2 Uses the MoH approved AoPs as the basis for SOAs and other enforceable contracting agreements between the MoH and health institutions across the sector.
- HSD5.3 Where appropriate, consolidate annual planning, budgeting and funding for public facilities, including Special Operating Agencies, with quarterly capitation based block grants and pooling of funds at appropriate level (eg. at the MEF, the MoH, PHD, and OD as appropriate), with special consideration for poor and remote areas.
- HSD5.4 Strengthen capacity and develop skills across the sector in particular at PHD and OD level to design, manage, implement and monitor the all forms of contracts.

## 4.2 Health Care Financing Strategy

By 2015 the different elements and institutions of the current health financing system will be combined under a single strategy guided by national health priorities; social health insurance mechanisms will be in place; the poor will be protected by suitable social-transfer mechanisms; government funding for health will be at a level appropriate for the adequate provision of services to the population; donor support will be harmonized and aligned with national priorities and support effective service delivery. The achievement of these objectives will make the move to universal coverage possible.

### A. Challenges

Currently, the financing of health care in Cambodia is characterized by:

- A reasonable level of national health expenditures per capita compared to other developing countries reaching about US\$35 per capita
- An increasing level of recurrent government spending for health, reaching 12% of national budget, although remaining a low share of GDP at little more than 1% in 2007
- a very high level of private, out-of-pocket (OOP) household spending that accounts for approximately two-thirds of all health expenditure.

Dependence on donor funding for health care, reaching US\$7 per capita per year in 2007; an extremely high level of national health expenditure compared to other developing countries;

- a low level of salaries and incentives for staff working in the public health

sector, preventing effective delivery of health services;

- a low level of public funding reaching the service delivery level, with equally significant impact on service delivery.

For the years 2008 to 2015 the financing strategy is based on the implementation of a 'mixed model' of health financing. The mixed model combines: public and private sources of revenue; public-sector with private-sector service delivery; and fee-based, pre-payment and social-transfer financing mechanisms. In this mixed model respective roles of the stakeholders are the following:

- The role of the Government is to provide the infrastructure, human resources and operational costs of the public health system, to exercise stewardship over the whole health system, define priorities, increase the delivery of public health services as a proportion of total service delivery, and ensure efficiency and quality. Contracting arrangements in conformity with the RGC *Policy on Service Delivery* are an essential tool for fulfilling government's role.
- The role of Donors is to provide technical assistance, to support national health priorities and to fill the gap in funding between resources currently available and those needed to achieve health goals. Harmonization and alignment, in particular along defined contracting arrangements will be needed for an effective donor support.
- Official, regulated User Fees will continue to be an important supplementary source of revenue for health facilities to finance staff incentives and running costs, with fee exemptions for the poor provided wherever appropriate. The role of Health Equity Fund schemes is to provide access to health services and to protect the poor from catastrophic health expenditures. The role of Community Based Health Insurance is to provide a risk-pooling mechanism for informal-sector workers who live above the poverty line. Social Health Insurance provides universal coverage to wage earners employed in the formal sector. The ultimate objective is to bring all pre-payment schemes under a common Social Health Insurance umbrella.
- Through the private sector, services may be provided to those who can afford the costs of health care and private health insurance premiums.

## B. Strategic Components and Interventions

### HCF 1    Increase government budget and improve efficiency of government resource allocation for health

- HCF 1.1    Strengthen advocacy effort between the MoH and the MoEF to increase the share of government expenditures for health over the total health expenditures
- HCF 1.2    Use effective yearly and medium term planning tools (AoP and 3YRP) at sector and sub-sector, and decentralized level, based on health priorities and health needs of the population in yearly and strategic budgeting.

- HCF 1.3 Implement sound financial management tools, move functions of budget control and budget management to the point of service delivery.
- HCF 1.4 Mobilize additional resources to cover health care and disability cost of traffic accident victims and non-communicable diseases prevention and health promotion.
- HCF 2 **Align donor funding with MOH strategies, plans and priorities and strengthen coordination of donor funding for health**
  - HCF 2.1 Align donor funding with health sector priorities 2008-15 by using the MoH yearly and medium term planning and budgeting process and tools.
  - HCF 2.2 Harmonization of donor funding through pooling arrangement whenever possible.
  - HCF 2.3 Advocate for more predictable funding from medium to long term from development partners.
  - HCF 2.4 Strengthen delivery of NGO assistance in line with the HSP2 priorities and ensure their independence and complementarities in addressing the health of the marginalized groups, and engaging in policy dialogue.
- HCF 3 **Reduce financial barriers at the point of care and develop social health protection mechanisms**
  - HCF 3.1 Reduce financial barriers to quality health services by regulation of user fee schemes, scaling-up HEF arrangements and expansion of CBHI as an intermediate measure before development and effective implementation of universal social health protection.
  - HCF 3.2 Improve quality of health services and use pre-payment and social health protection schemes as leverage for quality assurance.
- HCF 4 **Account for the main sources and uses at service delivery level of national resources for health Strategic intervention**
  - HCF 4.1 Effective financing of health priorities based on Burden of Disease studies and costing of defined Continuums of Care, including reproductive and women and children health services.
  - HCF 4.2 Appropriate allocation of credible budgets to service delivery units through decentralized budget control and appropriate planning, budgeting and accounting capacities and tools.
  - HCF 4.3 Establish and implement National health accounts or other types of comprehensive financial flow and expenditure tracking surveys.

HCF 4.4 Scaling-up contractual arrangements to ensure quality service delivery, and appropriate funding and pooling with provincial block grants to ODs and SOAs.

#### HCF 5 Evidence and information for health financing policy

HCF 5.1 Strengthen the system for tracking budgets and expenditure from all sources of financing and link with the development of National Health Accounts (NHA).

HCF 5.2 Integrate equity and gender perspective in health financing data collection, analysis and health financing policies.

HCF 5.3 Perform costing of MPA, CPA and essential packages of interventions on regular basis.

HCF 5.4 Integrate health financing information, costing results and other evidence in health financing policies

HCF 5.5 Improve local capacity for health economics research.

### 4.3 Human Resource for Health Strategy

By 2015, health workforce will be better trained; more competent and well motivated by improved human resource management, better financial and non-financial incentives, and increased professional accountability. Incentives and in-service training will be coordinated to strengthen performance without undermining core activities, and pre-service training facilities will be on the path to achieving international standards of quality.

The HRH Strategy focuses on health worker's ability and motivation to provide quality care for all Cambodians. The strategy strengthens human resources development and management, with a new emphasis on pre-service training and on coordinated and consolidated approaches to management and training. A cross sectoral approach to establishing and enforcing norms and standards of professional conduct will be undertaken, and attention given to providing the essential enabling environment for high quality performance by health workers.

#### A. Challenges

Cambodia's current health workforce is characterized by:

- Relatively small size in relation to the country's population;
- High level of overlap between the government and the private sector workforce;
- Imbalances in deployment, with some overstaffing in urban areas and severe understaffing in remote rural areas, especially severe shortage of midwives and, to a lesser extent, nurses;
- Inadequate skills and competencies and limited management capacity due to low quality of practical training sites and limited quality of teaching staff among both school instructors and preceptors

- Low salaries and lack of appropriate motivation associated with weak performance related management, constraining increased productivity and quality of services.
- Lack of coordination in training activities, resulting in frequent absence of staff from their work place.

The MoH *Health Workforce Strategic Plan 2006-2015* identifies major challenges to be met in terms of structure, size and composition of the future workforce, recruitment, employment and deployment, productivity and staff remuneration. All of these elements have potential impact on the development of the public health system and the effectiveness of health service delivery and health financing strategy. In addition there is increased demand for staff to deal with specific health problems i.e. communicable disease control, burden of non-communicable and chronic diseases, traffic-related trauma, and substance abuse leading to increased demand for prevention, emergency medical and ambulance services, as well as health education measures.

Staff salary reforms that are sensible in terms of public health goals and at the same time are consistent and conform to broader Civil Service policies and regulations is a key task to be undertaken over the course of HSP2. Incentive schemes will need to be flexible enough to allow targeting key personnel such as midwives, as well as to facilitate recruitment to the hard to reach areas and remote ones through subsidies to travel, housing, social support to families choosing to work in these areas. In addition, financial incentives need to be complemented by nationwide training to raise the standards of care, particularly in priority areas such as child and maternal health.

## B. Strategic components and Interventions

### HRH 1 Improve technical skills and competence of health workforce.

- HRH 1.1 Invest in better clinical skills through pre-service training (at both public and private training institutions) with more focus on clinical and public health practices, including practical training in remote and rural context as well as establishment of teaching hospitals.
- HRH 1.2 Develop systematic continuing education management training, both general and system-specific by including high degree level in business (public) administration for senior managers and specialist degrees in financial management and human resource management for management at all levels of the health system.
- HRH 1.3 Develop and implement comprehensive and coordinated approach to in-service training, beginning with a review of policies and guidelines for continuing education and regular review of curriculum in order to ensure that it responds to the health needs of the people.
- HRH 1.4 Develop and implement accreditation system for public and private sector training institutions, to be strengthened through international accreditation and through affiliation with ASEAN and other international universities and training institutions.

- HRH 1.5 Increase basic training provision for new midwives (promote active local recruitment of trainees) and strengthen the capacity and skills of midwives already trained through continuing education (implementation of midwifery review recommendations and the MoH Health Workforce Plan 2006-2015).
- HRH 1.6 Develop scholarship programs to support access to local, national and international pre-and in-service training programs, and provide comprehensive and up to date information on scholarship and fellowship opportunities for all staff on MoH website.
- HRH 2 **Strengthen staff professionalism, ethical conduct, and quality of work.**
  - HRH 2.1 Encourage self-regulatory bodies for health professionals such as medical councils, midwife association etc.
  - HRH 2.2 Develop and implement professional accreditation and licensing system for health workforce in public and private sectors.
  - HRH 2.3 Develop, implement and enforce Health Workforce codes of conduct in the Public Sector, in collaboration with the Medical Council and other professional associations.
- HRH 3 **Staff distribution and retention, with priority to personnel essential to health sector priorities**
  - HRH 3.1 Align human resource planning and personnel management with health sector planning and the HCP.
  - HRH 3.2 Develop and implement human resource management policies to deploy staff in underserved areas through contracts.
  - HRH 3.3 Increase the number of midwives placed and retained in public sector facilities through effective implementation of the RGC's "Midwifery Incentives" and of full implementation of midwifery review recommendations and the MoH Health Workforce Plan 2006-2015.
- HRH 4 **Staff remuneration, salaries, performance incentives**
  - HRH 4.1 Continue to promote better remuneration and salary through Civil Servant Reform of Royal Government of Cambodia.
  - HRH 4.2 Improve management of facility-managed salary supplementation from user fees, HEF, quarterly block grants, contracting, SOAs, CBHI and others.
  - HRH 4.3 Expand the implementation of PMG and PMG-compatible incentive mechanisms, and implement other incentive approaches for "back office" staff.

#### 4.4 Health Information Systems Strategy

The HIS Strategy focuses on the provision of relevant and timely high quality health information for evidence-based policy formulation, decision making, program implementation, performance monitoring and evaluation so as to contribute toward the improved health status of the Cambodian people.

By 2015, the national HIS will comply with international standards and receive recognition and support from the public, users and policymakers. It will provide improved data for evidence-based decision making using appropriate communications and technology, and it will make available quality socio-demographic, economic, morbidity, mortality, and risk factor information. This will improve coordination of survey planning and implementation. The quality of patient medical records will likewise be enhanced for improved case management. And surveillance data will be more complete and timely for efficient outbreak response and diseases control. Comprehensive coverage will be achieved with improved database management of infrastructure, human resources, and logistics.

##### A. Challenges

While Cambodia has a functioning routine health information system that extends from the lowest facility level up through operational district and provincial levels to the central level, a number of critical challenges may be identified as the following:

- The private sector is largely excluded, so that information only pertains to public facilities and those national hospitals. Since utilization of public health services constitutes only about a fourth of total utilization, HIS data cannot be used to monitor health status in the country.
- While a number of studies cannot demonstrate any systematic patterns in data inaccuracies, data validation checks show that inaccuracies are common.
- Despite efforts to improve the use of data in planning and monitoring, there is limited use of health information at all levels of the system.
- There is an appreciable lack of coordination and collaboration among information providers within and outside the health system. This has resulted in national health surveys or national surveys with health modules being conducted too close to each other to provide meaningful information for trend analysis.
- While a reasonably effective surveillance system exists for the twelve notifiable diseases, case reporting and monitoring of key non communicable diseases is weak. The civil registration system also is weak and cause of death reporting nonexistent.
- HIS staff at local levels has low knowledge and skills and is poorly motivated, lacking ICT software and hardware to manage data effectively, and conduct basic data analysis.

Over the plan period a number of initiatives will be launched to strengthen the national HIS. These include new legislation to incorporate reporting by private providers, expanding use of ICT at all levels, strengthened supervision, training of HIS staff and managers in data use, advocacy for increased HIS budgetary allocations particularly at provincial and OD levels, and inclusion of reporting on non communicable diseases from facility



level upwards. A unique opportunity for strengthening the HIS exists in the launching of the first HIS Strategic Plan, 2008-15 which was formulated through extensive multi-sectoral collaboration, and which has identified strategic interventions and activities that will contribute to meeting the challenges outlined above. To ensure effective coordination among all stakeholders, the established HIS Stakeholders Working Group will continue to meet periodically to monitor progress of the HIS Strategic plan implementation within the overall monitoring progress of the HSP2 implementation.

## B. Strategic Components and Interventions

### HIS 1 Increase the availability of accurate, timely, and complete health data of high quality from public and private sources, together with enhanced coordination, and resources for the HIS

HIS 1.1 Review and strengthen existing legislation, regulations and administrative procedures related to health data recording, reporting, storage, retrieval, dissemination governing both public and private sector.

HIS 1.2 Strengthen HIS supervision and feedback focused on data quality and performance standards adherence.

HIS 1.3 Provide incentives and benefits linked to performance for staff involved in the HIS at all level.

HIS 1.4 Strengthen the capacity of staff involved in the HIS through in-service and continuing training programs.

### HIS 2 Improve data sharing, management, analysis, dissemination and use across all levels of the health system, including population and socio-demographic data

HIS 2.1 Develop, maintain, and use ICT systems for health data management and communications (metadata dictionary and data warehouse, inter and intranet communications).

HIS 2.2 Provide training for service managers on the analysis and use of data, including census data for planning and monitoring; and in partnership with the National Institute of Statistics, the Ministry of Planning, for core census staff on all phases of census management.

### HIS 3 Improve the national disease surveillance system, public facility patient medical record system, and strengthen the case reporting, monitoring and response to NCDs

HIS 3.1 Strengthen the disease surveillance system and procedures at all levels including community, including updating the list of notifiable diseases, their case definitions, notification, lab confirmation and response procedures, mapping of at-risk populations and data sharing and publication (compliance for both public and private sector).

HIS 3.2 Develop the reporting of non-communicable diseases in the overall surveillance and case reporting and response system, including accidents and injuries (compliance for both public and private sectors).

HIS 3.3 Revise and strengthen patient record management (medical records, storage and retrieval facilities) in all public health facilities, including ICD coding.

HIS 4 Expand the participation in the national HIS by the private sector, and facilitate data use for planning, resource allocation and management of human resources, infrastructure, and supplies

HIS 4.1 Broaden the participation of private providers in the national HIS, including the surveillance system, through inventorying them, and sensitizing and informing them about legislation, and providing them with the necessary standard forms, and adjusting HMIS software.

HIS 4.2 Strengthen the system for tracking budgets and expenditure from all sources of finance and link with the development of National Health Accounts (NHA).

HIS 4.3 Strengthen human resources, facilities and drug management support systems through assessment, procedures development (including data base development) and training.

#### 4.5 Health System Governance Strategy

By 2015, successful implementation of this strategy will benefit all aspects of the Cambodian health sector through coordinated and transparent funding, management and accountability structures. A decentralized and deconcentrated service delivery will be supported through strong government guidance and leadership on health policy, legislation and monitoring. Consumers will have a choice between regulated private sector services and public health services that are more directly accountable to them and their communities.

The HSG Strategy focuses on the roles and functions of the health system that can only be carried out by the Ministry of Health, most importantly its role as steward for the entire health system. The strategy will strengthen MoH's ability to exercise leadership over all activities in the health, and it will improve planning, accountability mechanisms and effective coordination for better link resources to improved health outcomes.

Significant cross sectoral engagement will be required, as well as innovative approaches to encourage community involvement in the evolving context of Decentralisation and Deconcentration. An active and constructive dialogue with the Private Sector is foreseen to complement an expansion of contracting and increased institutional autonomy within MoH through the implementation of Special Operating Agencies and other mechanisms laid out in the RGC Policy on Service Delivery.

## A. Challenges

While the Health Service Delivery Strategy focuses on the ultimate outputs of the health sector, the Health Sector Governance Strategy focuses on those functions that can only be performed by the Ministry of Health and without which the health sector would not be able to deliver. During the consolidation phase of HSP2, MoH will need to identify and strengthen its core functions in the context of an increasingly diverse and complex sector, rapid economic and social development, and the government wide Decentralization and Deconcentration reforms.

Specific challenges to be faced include:

- There is a lack of clear policies for important areas such as community outreach.
- The private sector contribution to the health sector is growing in importance. However it remains unregulated, leaving consumers unprotected from ....
- Further institutional development is needed, including especially:
  - Aligning financial flows with managerial authority and with accountability for outcomes;
  - strengthening budgetary management especially at provincial and operational levels;
  - increasing managerial autonomy of stronger units while ensuring accountability;
  - maintaining quality of national centers and programs while at the same time providing them with more systems support and protection against changes in international funding priorities.
- The potential impact of D&D on the health sector remains unknown. MoH will need to ensure that the reform process is implemented in the health sector in a manner that increases community inputs and managerial autonomy, while at the same time ensuring accountability and performance at the operational levels. The technical and economic determinants of the distribution of facilities under the Health Coverage Plan will therefore need to be supplemented with closer alignment with administrative lines of authority. At the same time, MoH will need to maintain and strengthen the oversight and guidance roles of the central ministry.
- Many of the most important health challenges to be faced in the coming years are cross sectoral issues that lie outside the official mandate of the Ministry of Health. These include traffic safety, domestic violence, water and sanitation, education, and environmental health concerns.
- Currently, Cambodia's aid architecture is characterized by:
  - a diverse range of multi-lateral and bi-lateral sources and a large number of actors both external and national, undertaking a multitude of activities in support of health development. Collectively they have contributed to significant improvements in health outcomes over recent years
  - a mostly projectised approach in their operations—in which external partners rely predominantly on their own procedures and management systems, thereby aggravating fragmentation in the sector;
  - The predominant attention given to communicable disease control programmes by external funding sources has led to imbalances in spending priorities away from national health spending priorities.

## B. Strategic Components and Interventions

### HSG 1 Harmonization and Alignment within MoH and across the Health Sector

- HSG 1.1 Develop partnership agreement including technical assistance and funding in support of the HSP2 implementation, as well as integration of the Global Health Initiatives into existing processes of coordination and partnership in Cambodia, in order to reduce transaction costs and avoid distortion of program priorities.
- HSG 1.2 Ensure institutional “buy-in” and respect from national and external partners for unified processes and instruments of MoH sector stewardship through regularly scheduled cross-sectoral consultation (e.g. TWGH and Provincial TWGH).
- HSG 1.3 Strengthen the 3-year Rolling Plan as the medium-term planning process (including peer review) to align and identify partners’ support and as the basis for the strategic budget plan and a single comprehensive health sector priority investment plan.
- HSG 1.4 Align external funding to the health sector by adapting earmarked sector support budget through existing partial pooled and non-pool, with respect to priorities identified in the HSP2 and with agreement on common management systems.
- HSG 1.5 Align development partners monitoring and evaluation, to maximum extent, with a common framework for monitoring and evaluation (including indicators framework) of the HSP2 e.g. JAPR as the central event for policy dialogue and coordination and as an integral part of Cambodian *Harmonization, Alignment and Result Action Plan*, with a high degree of transparency that allows development partners to reduce dedicated forms of monitoring.
- HSG 1.6 Strengthen the Public Procurement Unit according government procedures, and strengthen logistical systems to ensure availability of and timely delivery of drugs and health commodities at health centers and referral hospitals.

### HSG 2 Public Private Partnerships

- HSG 2.1 Use the contracting and SOA framework of the RGC *Policy on Service Delivery*, together with the AOP monitoring framework, as the basis for MoH contracts to accredited NGOs and other private sector providers to deliver services.
- HSG 2.2 Develop and implement an accreditation system for private sector providers and include accredited providers in Health Coverage Plan.
- HSG 2.3 Strengthen joint planning between public and private sectors and coordinated HIS and surveillance reporting and feedback through active engagement of Pro-TWGH, PHDO's and

ODO's with private sector, using lessons learned from successful National Program public-private partnerships.

- HSG 2.4 In collaboration with relevant Ministries and Professional Associations, reinforce the implementation of health laws and legislations, especially Abortions Law, Pharmaceutical Law, Management of Medical and Paramedical services in Private Sector.

### HSG 3 Research, Policy, Regulation and Legislation

- HSG 3.1 Develop a package of evidence-based, comprehensive, implementable policies conform with RGC laws, regulations and policies for key areas including but not limited to:
- *Contracting for service delivery (covering SOAs and external contracting);*
  - *Decentralization and de-concentration in the health sector;*
  - *Public autonomous institutions: hospitals, laboratories and support institutions;*
  - *Social Health Protection, including Health Equity Funds and Social Health Insurance;*
  - *Staff management and staff remuneration, including performance incentives, merit based pay, facilities based salary supplementation, per diems, and contract work;*
  - *Procurement and management of medical supplies; and*
  - *Health management information systems and disease surveillance*
- HSG 3.2 Conduct a comprehensive country-wide Burden of Disease survey.
- HSG 3.3 Ensure compliance with international health obligations, including WHO Framework Convention on Tobacco Control, and the International Health Regulations.
- HSG 3.4 Promote public health and policy research and analysis through introducing or/and strengthening the research function of the relevant MoH central institutions including the National Programs and in collaborating with Cambodian and international research institutions.
- HSG 3.5 Support continued innovation in health service delivery and health sector management through development and implementation of a comprehensive framework and guidelines for operational research and pilot projects.
- HSG 3.6 Strengthen the MoH internal audit, enforcement and adjudication processes, and strengthen coordination and collaboration with other government agencies and civil society oversight institutions

### HSG 4 Institutional Development

- HSG 4.1 Develop integrated 3-year Rolling Plans for each of the 3 program areas, including all MoH and external resources, to guide

resource allocation planning and budget envelop development for each program area, and ensure that external funding towards National Programs better reflects the Burden of Disease in addition to program performance.

- HSG 4.2 Align roles and functions of National Programs to ensure that these roles and functions respond to the needs of D&D and reflect the HSP2 goals, including the new focus on non-communicable diseases.
- HSG 4.3 Plan and implement the appropriate type of autonomy for different organizations in accordance with the RGC *Policy on Service Delivery (2006)* to ensure increased managerial autonomy is based on strengthened accountability for performance.

## HSG 5 Strengthen MoH Health Sector Stewardship through Decentralization and De-concentration

- HSG 5.1 Organize and mobilize the Government and development partner's support to the institutional development agenda e.g. future roles, function and structures of the MOH in light of decentralization and deconcentration and the MoH's IDP.
- HSG 5.2 Focus central level planning on a few key national objectives and targets and allow municipal, provincial and district authorities with greater flexibility to devise operational strategies for addressing local health priorities.
- HSG 5.3 Strengthen health service delivery roles and functions at operational level through PHD and OD by developing and implementing organizational reforms for public health care facilities consistent with the RGC *Policy on Service Delivery* and D & D.
- HSG 5.4 Develop strategic organizational plans for all units to guide organizational adaptation to roles and functions and organizational structures according to D&D.
- HSG 5.5 Enhance the MoH stewardship capacities in the context of changing governance structures through development and implementation of a D&D Learning Strategy to:
  - Strengthen managers' understanding of D&D implications for roles and functions at all levels;
  - strengthen change management capacities at all levels; and
  - Mobilize community leaders and local authorities for increased participation in health system management and oversight.

## HSG 6 Mobilize multi-sector responses increased national health system accountable for access to quality health services for all.

- HSG 6.1 Catalyze involvement of all relevant sectors in inter-sectoral collaboration to improve social determinants of health.

- HSG 6.2 Implement the MoH *Providers and Consumers' Right Charter* to strengthen communities' awareness of consumers and providers rights.
- HSG 6.3 Improve interaction between communities, consumers and suppliers at the operational level through establishment of forums and other mechanisms with support from NGOs and Civil Society Organizations, to advocate for policy dialogue and policy reforms in the health sector.
- HSG 6.4 Strengthen the function of Health Center Management Committee and Village Health Support Groups as focal points of communication between consumers and suppliers.
- HSG 6.5 Enhance local governance and community monitoring of health services efficiency.



# Implementing Health Strategy through Health Program Areas

Approach to Health Program Areas.  
Reproductive Health, Maternal, New born and Child Health. CDC and NCD

## 1. APPROACH TO HEALTH PROGRAM AREAS

### 1.1 Introduction

The HSP2 will be implemented through three program areas – Reproductive, Maternal, Neonatal and Child Health (RMNCH), Communicable Disease Control, and Non-Communicable Disease. The epidemiological transition which is already underway in Cambodia has clear implications for these programs. These three program areas overlap. Therefore, central coordination within the Ministry of Health is of particular importance in terms of assuring oversight, cohesion and stewardship of the entire sector.

The development of these program areas will focus on:

- *The challenges for each program area-* based on these challenges an operational framework can then be designed, including indicators for detailed program planning and implementation.
- *The overlap and 'common ground' between these three program areas-* the patient needs to be seen as a whole with health program areas functioning as part of an integrated health sector. The interrelations between program areas must be strong, as must be the coordination among the National Programs, National Centers, Departments and other institutions working within them. Integrated clinical governance aimed at supporting the activity of the health facilities and guided by the MPA and CPA can be effective and efficient only if it functions as part of a "seamless" service.
- *Demands for disease interventions-* this will always be greater than the resources available. Resources - economic as well as human resources - need to be distributed between the program areas and implementing units based on ethical considerations, the number of patients and the costs associated with an assessment of quality life years as a consequence of intervention.



- *The position of these three program areas* in the context of the epidemiological transition in Cambodia.

The implementing units within the three program areas have varying levels of independence within the Ministry of Health. Those working in RMNCH and CDC have a relatively high degree of autonomy due to their separate financing via donor resources. In comparison, the Non-Communicable Disease program has less independence.

Programs against disease in the HSP2 will concentrate, wherever possible, on interventions against disease or disease risk using known, cost effective methods of intervention that maximize the number of quality life years through preventive action, cure, rehabilitation and palliative care. Implementing this main principle calls for a Cambodian Burden of Disease study. A Cambodian Burden of Disease study will provide a more informed approach to the three programs. The usefulness of existing studies for the regions in Cambodia's neighborhood has limited since the difference between the South Asia burden of disease data and the East Asia and Pacific data differ in many important respects. Furthermore, the conduct of a burden of disease study would facilitate a revision of the activities described for health centres and hospitals in the MPA and CPA. In conjunction with a revised Health Coverage Plan this would allow for detailed costing and staff planning.

Resources for the program planning, implementation and monitoring exist at national level. Corresponding resources at provincial level are weak. Capacity building for program planning and implementation at provincial and district levels needs to be high priority.

Given the focus of health systems consolidation and strengthening in the HSP2, there is a greater need for:

- Linkages, integration and synergy of the three program areas and their implementing units with the wider health system are of critical importance.
- Integration of the three program areas needs to be expressed right through the system of clinical governance.
- The three health program areas will each need an implementation framework, integrated 3 Year Rolling Plans, and a timeline for HSP2 that includes operational targets not included in the strategic targets for the health programs.
- The organizational roles and responsibilities within the program areas will need to be reviewed and more closely aligned with HSP2 goals and the needs of D&D.

## 1.2 Demographic and Epidemiological Transition

The HSP2 planning period is longer compared to the HSP1. The HSP2 also takes place in a period characterized by rapid change in almost all societal respects in Cambodia. Thus the need to take transition factors into account is more pressing than earlier.

Over the period of the HSP2, population health in Cambodia is likely to evolve towards that of a country with a double burden of disease. This means there will be a prolonged period of very high resource demands in all three program areas. The likelihood of this double burden of disease increases the need for a good prioritization model developed by the MoH for its use in the following areas:

- routine clinical care
- planning within each of the program areas
- strengthening and updating of MPA and CPA
- pro-poor resource allocation across the three program areas and across provinces

The development and strengthening of the stewardship role of the MoH will help to establish constructive dialogue with the private providers of health services, and find an optimum role for them.

Capacity building for provinces health planning and budgeting will be increasingly important in the HSP2 because urban and rural areas will increasingly differ in their health needs and health demands.

*In conclusion,*

- Population increase and changing distribution of population numbers call for a review of the Health Coverage Plan. The provinces will be actively involved in planning and a capacity building platform needs to be developed to support strongly increased involvement in health planning on a decentralized level.
- Cambodia is now entering a period of “double burden of disease”. This will have profound impact on scarce financial and human resources for health.
- The increasing demands on health services that follow from the double burden of disease can be managed through a strict system of prioritization.
- A prioritization system will have implications on all levels of the health system – routine clinical care, planning within and between the three program areas, the content of MPA and CPA and the budgetary decisions for the health sector.

## 2. REPRODUCTIVE, MATERNAL, NEONATAL AND CHILD HEALTH (RMNCH)

RMNCH is one of the NSDP's four health related priorities. Progress has been made in the RMNCH area in general. Utilization has increased for some reproductive, maternal and child health services including ANC, delivery by doctor/midwife, delivery in health facility, CPR and immunizations but the overall remain suboptimal. Children's health improved dramatically over the period from 2000 to 2005 and infant and child mortality rates declined by almost 30%. Nutritional status has improved for children and women but under-nutrition and stunting remain amongst the highest in the region. Immunization coverage has improved for all antigens, the incidence of measles is at its lowest ever, wild polio has been eradicated. However, neonatal tetanus remain a problem and the proportion of fully immunized children falls below target. This positive development is driven by two underlining factors. Firstly, there is strong political support for major efforts to control the situation around maternal and child health. Secondly, the content of interventions in the maternal and child health is already well developed and implemented.

### 2.1 Challenges

Women's health has not improved in pace with child health. Maternal mortality remains unacceptably high and substantial investments in delivery services will be required in order to achieve CMDG 5.

Demand for public child and maternal health services has not increased as expected. Demand side interventions are necessary to improve use of improved services. This requires that provision of clearly defined Continuum of Care of RMNCH services be supported by effective communication strategy to accelerate demand.

There are large disparities in maternal and child health outcomes between richest and poorest quintiles and there are indications that inequities in health service utilization and

access to care is increasing. Improved services tend to benefit already advantaged groups. Comparisons of CDHS 2005 data on health outcomes and health service utilization rates in different socio-economic groups are revealing it is clear that the equity aspects of the RMNCH need stronger attention. Targets and indicators need to be identified reducing inequities in maternal and child health.

## 2.2 RMNCH Health Priorities and Essential Services, Goals and Objectives

Goal 1	Reduce maternal, new born and child morbidity and mortality with increase reproductive health
Objective	<ol style="list-style-type: none"> <li>1. To improve the nutritional status of women and children</li> <li>2. To improve access to quality reproductive health information and services</li> <li>3. To improve access to essential maternal and newborn health services and better family care practices</li> <li>4. To ensure universal access to essential child health services and better family care practices</li> </ol>
Health Priorities & Essential Services	
<ul style="list-style-type: none"> <li>• Family planning and birth spacing;</li> <li>• Safe abortions;</li> <li>• Maternal and child nutrition,</li> <li>• Antenatal care,</li> <li>• PMTCT,</li> <li>• Skilled birth attendance,</li> <li>• EmNOC</li> <li>• Integrated postnatal care of mothers and newborns,</li> <li>• Immunization, including measles &amp; tetanus elimination, and introduction of new vaccines</li> <li>• IMCI,</li> <li>• Essential pediatric care</li> <li>• Adolescent / Youth health</li> <li>• Key family practices</li> </ul>	

## 2.3 RMNCH Implementation of the HSP2 Strategies

The four key documents for RMNCH are; the National Strategy for Reproductive and Sexual Health (NSRHS), the Child Survival Strategy (CSS), the Five Year Strategic Plan for National Immunization Program (FYSPNIP), and the National Nutrition Strategy (NNS). The policies and guidelines in these documents are reflected in the Minimum Package of Activities (MPA) and the MPA training packages.

The NSRHS's four strategic objectives are: *improve the policy and resource environment; increase availability and strengthen delivery of quality services; improve community understanding and increase demand for services; and expand the evidence base for policy and strategy development.* The strategy presents a package of essential services for reproductive health.

The CSS has six strategic components: *improving coordination, planning and policy formulation; strengthening human resources and capacity building; promoting community action for child survival; ensuring health care financing for child survival; improving efficiency and quality in service delivery; and strengthening monitoring and evaluation.* The strategy aims to achieve universal coverage of 12 high impact child survival intervention which are summarized in the Child Survival Score Card. The interventions will be implemented through integrated packages of activities at key contact points.

The overall goal of the FYSPNIP is *to improve child survival and health, and support achievement of MDGs 1 and 4 by controlling, eliminating or eradicating all vaccines preventable diseases targeted by the National Immunization Program.* The strategy cover four strategic areas; (1) Surveillance and Disease Control, (2) Health System and Program Management, (3) Logistics, Communication and Training, and (4) Service Delivery

The National Nutrition Strategy covers the period 2008-2015 and its overall goal is to contribute to improved maternal and child survival, and better nutritional status of women and children.

These four key documents put the RMNCH program area in a strong position to achieve the goals in the program area. The interventions are well designed and realistic and will lead to good results if adequate resources are made available and universal coverage can be achieved.

HSP2 Strategy	Key RMNCH Strategic Components and Interventions
Health Service Delivery	<ul style="list-style-type: none"> <li>• RMNCH Continuum of Care in health centre (MPA) and referral hospital (CPA) level based on the child survival, immunization, nutrition and reproductive health strategies</li> <li>• RMNCH communication strategy to support community health development and increase the demand for RMNCH essential services;</li> <li>• Joint monitoring and supervision of facilities by integrated technical teams</li> <li>• Align ancillary services to RMNCH needs; including laboratory services, medical supplies and equipment, pharmaceuticals, and improvement of Blood Services provision to support EmOC, Dengue case management and other RMNCH priorities</li> <li>• Contracting policy and scale-up.</li> <li>• Strengthen integrated out-reach and community-based models of care as an intermediate strategy for scaling up maternal, newborn and child survival interventions, especially in communities with limited access to health facilities; ensure effective involvement of local authorities and volunteers (VHSGs) in provision of selected services and information for improved RMNCH.</li> </ul>
Health Care Financing	<ul style="list-style-type: none"> <li>• Reduction of financial barriers to RMNCH services by regulation of user fee schemes, inclusion of RMNCH services in CBHI and HEF schemes, expansion of CBHI and HEF population coverage, free immunization and delivery services.</li> <li>• Financial provider incentives and consumer protection for ensuring greater equity in the delivery of RMNCH health services (cash transfers, delivery grants, vouchers etc.)</li> </ul>

Human Resources for Health	<ul style="list-style-type: none"> <li>• Full implementation of the recommendations made by the Midwifery Review and the High-Level Midwifery Taskforce.</li> <li>• Strengthen technical skills and competencies at MPA and CPA level through quality, comprehensive training, education, retention, licensing and registration systems</li> </ul>
Health Information Systems	<ul style="list-style-type: none"> <li>• Strengthen monitoring of equity and gender relevant data across provinces and ODs</li> <li>• Increase the completeness of vital statistics through the expansion of Maternal Death Reviews, introduction of Perinatal Death Reviews, and integration of birth registration into the health system.</li> </ul>
Health System Governance	<ul style="list-style-type: none"> <li>• Clear guidelines and regulations for workforce conduct</li> <li>• Policies for Staff Management, including remuneration</li> <li>• Policy for Community Health Workers, including dispensing guidelines.</li> </ul>

## 2.4 RMNCH Targets and Indicators

The target indicators are described in detail in the National Strategy for Reproductive and Sexual Health (NSRHS), the Child Survival Strategy (CSS), the Five Year Strategic Plan for National Immunization Program (FYSPNIP), and the National Nutrition Strategy (NNS). Progress needs to be measured at provincial and OD levels to guide activities at service delivery level. This will become increasingly important as decentralization and de-concentration progresses.

IMR, U5MR, MMR: IMR and U5MR also on province level and analyzed in CDHS on rural urban, education level, poverty level if possible by province.

Indicator	Annual	Core JAPR	Baseline Value 2005-2008	2009 Targets	2010/2011 MTR	2015 Evaluation
<b>Overall development</b>						
Total fertility rate			3.4		3.4	3.0
<b>CDHS</b>						
Maternal mortality ratio per 100,000			472		243	140
Neonatal mortality rate per 1,000			28		25	22
Infant mortality rate per 1,000			66		60 (2010)	50
Under-five mortality rate per 1,000			83		75 (2010)	65
Anaemia in women of reproductive age			46.6		32	19
Anaemia in pregnant women			57.1		39	33
Women of reproductive age with low BMI			20		12	8
Proportion of infants put to the breast within one hour after birth			35		45	62
Proportion of infants 0-6 months old exclusively breastfed			60		65	70

% of children under 5 underweight			35.6 (29)*		28 (35)*	22 (25)*
% of children under 5 wasted			9		7	5
% of children under 5 with chronic malnutrition: stunted			37 (43)*		28 (35)*	22 (25)*
Proportion of children under 1 fully immunized			60 <sup>a</sup>		70	80
% of children under 5 years with cough or difficult breathing who sought treatment by public health provider [IMCI-CS]			48	60	70	75
Proportion of children with diarrhea having received ORT			58	63	80	85
<b>HIS</b>						
% of HCs implemented IMCI [IMCI-CS]	ü		56	65	75	80
contraceptive prevalence using modern contraceptive method	ü	ü	27,2		44 (2010)	60
2 or more ANC health personnel consultation	ü	ü	68 <sup>b</sup>		75 (2010)	90
% of pregnant women receiving iron/folate supplementation	ü		69 (HIS)		75	90
% of pregnant women receiving at least two TT injections	ü		69		85 (2010)	90
% of HIV+ pregnant women receiving ART for PMTCT	ü	ü	7		50	75
% births delivery by trained health personnel	ü	ü	44		70 (2010)	80
% births delivery by trained health personnel at health facilities.	ü		22		40 (2010)	70
% of deliveries by C-section	ü	ü	1.8		3 (2010)	4
% of postpartum women receiving iron/folate supplementation	ü		57		85	90
% of children under one year immunized with DPT3-HepB	ü		82 <sup>b</sup>		92	95
% of children under one year immunized against measles	ü	ü	79 <sup>b</sup>		85 (2010)	90
% of children 6-59 months receiving vitamin A 2 doses during the last 12 months	ü		83 (HIS)		85 (2010)	90
% of child 6-59 months receiving mebendazole every 6 months	ü		27	85		90
Dengue hemorrhagic fever case fatality rate	ü	ü	1.03 (2007)	<0 .9	<0.9	<0.9

Note: "Blue" indicates "Core indicators"

\* WHO new Standards

### 3. COMMUNICABLE DISEASES

Communicable disease control is one of the NSPD health-related priorities, and 3 of the Cambodian MDGs are CD related. Cambodia has through its communicable disease programs demonstrated that enormous achievements are possible when sufficient resources are available. It is one of the few countries in the world that achieved its HIV 3x5 targets and is on track for achieving all of the communicable disease CMDGs.

Cambodia has strong communicable diseases programs with a strong leadership and strategic vision, and the progress in controlling communicable diseases is a function of the strengths of these programs. A number of key factors have contributed to these successes. Performance based incentives have provided competitive remuneration and have significantly strengthened the human resources base. Strong planning, monitoring and evaluation in National Programs and Centers have allowed for effective use of resources, and vertical integration has ensured the rapid response necessary for communicable disease control. Improved treatment particularly by use of antibiotics and new drugs has strengthened interventions against Malaria and TB in particular, and effective prevention measures and promotion of risk reducing behavior have been particularly successful in HIV/AIDS. Several disease programs have also undertaken successful multi-sector response including close collaboration with the private sector.

As is the case for the rest of the Ministry of Health, over the course of HSP2 implementation the disease specific National Programs and Centers will need to adapt their roles and functions to make best use of the RGC Decentralization and Deconcentration program. They will also need to guard against eventual uncertainties in external funding and resolve existing implementation bottlenecks through even closer coordination, joint planning and implementation with Central MoH, PHDs and ODs. This will allow them to maintain their current achievements while improving overall service quality and strengthening key areas such laboratory diagnostic capacity, surveillance, infection control, strategic information, and regulatory functions for drugs.

#### 3.1 Challenges

While the role of Communicable Disease in the Cambodian burden of disease has declined, it still plays a major role and requires sustained and even increased attention. And the level of preparedness still needs to be high because of the risk for emergence of new diseases – and re-emergence of the old.

Key challenges for CDC efforts over the period of the HSP2 include:

- Key disease control areas are still seriously underfunded;
- Multi-drug resistance, especially in TB and Malaria;
- Widespread distribution of counterfeit anti-malarials;
- Continuing threat of re-emerging diseases, including those successfully eradicated in Cambodia, as well as the ongoing threat of viral mutations;
- Multiple Dengue serotypes, combined with accelerated transmission by *Aedes aegypti* through population growth, rural-urban migration and the inadequacy of basic urban infrastructure;

- Cross-border transmission , regional and global CD threats, including possibility of Pandemic Influenza;
- The need for strong cross-sectoral engagement by Government and Partners for control of zoonotic diseases such as Rabies;
- Maintaining vigilance against reversals in declining incidence, particularly in view of the international evidence of HIV incidence rising again;
- Linkages between CD and NCD and need for coordinated approaches (eg cervical cancer/papyloma , liver cancer/hep, ARCs)
- High cost of treatment for chronic effects of communicable diseases;
- Volatility of external funding for disease specific interventions, as well as the lack of external support for diseases that present serious threats in Cambodia.
- Maintaining quality of disease specific National Program interventions in context of a weaker health system upon which it relies, especially with regards to Human Resources, HMIS, pharmaceutical supply management, and disease surveillance systems;

### 3.2 CDC Health Priorities and Essential Services, Goals and Objectives

Goal 2 Reduce morbidity and mortality of HIV/AIDS, Malaria, TB, and other communicable diseases	
Objective	<ul style="list-style-type: none"> <li>5. To reduce the HIV prevalence rate</li> <li>6. To increase survival of People Living with HIV/AIDS</li> <li>7. To achieve a high Case Detection Rate and to maintain a high Cure Rate for pulmonary TB smear positive cases</li> <li>8. To reduce malaria related mortality and morbidity rate among the general population</li> <li>9. To reduce burden of other communicable diseases</li> </ul>
Health Priorities & Essential Services	
	<ul style="list-style-type: none"> <li>• Reproductive track infections</li> <li>• HIV/AIDS/STI</li> <li>• TB, leprosy</li> <li>• Dengue Fever</li> <li>• Malaria</li> <li>• Helminthiasis</li> <li>• Schistosomiasis</li> <li>• Emerging and reemerging diseases</li> <li>• International Health Regulation implementation</li> </ul>

### 3.3 CDC Implementation of the HSP2 Strategies

These above-mentioned challenges provide the context for strengthened interventions during the HSP2 to increase in the efficiency of the communicable disease control program within the HSP2's broad operational framework, as well as the individual planning frameworks of the National Programs and Centers in the CDC Program Area. The strong technical capacities within the disease specific National Programs has enabled them to



successfully prepare and implement sophisticated planning, which has been a contributing factor to their success to date. Indeed, the spill-over effects of these technical strengths for the health system in general have been particularly evident in the area of health planning, monitoring and evaluation.

The HSP2 is not intended to replace the individual strategic plans but rather to provide them with a system-wide planning context. HSP-2 builds upon the strategic plans that are currently in implementation, and it lays out a broad strategic framework for the next NP planning cycle. It provides the link between disease specific planning, the health system in general, and the National Strategic Development Plan and CMDGs. For detailed strategies and interventions that are disease-specific, it is therefore essential to refer to individual strategic plans and implementation frameworks.

Key strategic plans within the CDC Program Area include the *HIV/AIDS National Strategic Plan 2006-2010 (HIV/AIDS NSP-II)*, *National Health Strategic Plan for Tuberculosis Control in the Kingdom of Cambodia 2006-2010 (TCP NSP)*, *Strategic Master Plan for the National Malaria Control Program 2006-2010 (NMCP-SP)*, and the *Strategic Plan for Emerging Diseases 2007 (EI-SP)*.

The overall goals of the HIV/AIDS NSP-II are: 1. To reduce new infections of HIV; 2. To provide care and support to people living with and affected by HIV/AIDS; and 3. To alleviate the socio-economic and human impact of AIDS on the individual, family, community, and society. Seven strategies are presented, together with objectives and key activities to support them in the areas of: prevention, comprehensive care, impact mitigation, government leadership, public policy, information (monitoring, evaluation and research), and equitable and sustainable resource mobilization and allocation.

The *TCP NSP 2006-2010* focuses on seven policy areas. These are: (1) leadership of TB control and treatment through MPA and CPA; (2) clear policies, plans and guidelines; (3) quality assurance; (4) effective and efficient use of resources; (5) resource mobilization and prioritization; (6) information systems and research for program management; and (7) partnership and coordination. Key strategies focus on sustaining DOTS at MPA level and expansion of Community DOTS (C-DOTS) and TB/HIV interventions, strengthening of Anti-TB drugs and laboratory supplies management including through introduction of Fixed-Dose Combination, continued provision of free TB diagnosis and treatment in public health services.

The *NMCP-SP* is developed around the strategic directions of Behaviour Change Communication; Long Lasting Insecticidal Mosquito Nets coverage; Early Diagnosis and Treatment expansion; capacity building; partnerships with international and national organisations including civil society; and mobilising human, financial and material resources. Malaria interventions to be delivered during the implementation of the strategic plan are grouped into four packages, with a number of components in each package. The *Prevention Package* will comprise of a Behavior Change Communication Programme and two complementary insecticide treated net services for high and low risk groups. The *Early Diagnosis and Treatment Package* will include interventions through public health facilities, private providers and village malaria workers. The *Research and Surveillance Package* will consist of malaria surveillance, improving quality of health information system and targeted Operational Research. The *Management Package* will include planning, resource management and coordination as well as robust monitoring and evaluation.

*EI-SP* is devoted to strengthening the national capacity for the surveillance and control of emerging diseases, through the development of national infrastructure and resources to detect, respond, monitor, prevent and control emerging diseases, as well as through training on the diagnosis and research on the epidemiology of emerging diseases. The *EI-SP* provides detailed strategies supporting five Goals: (I) To strengthen the framework of the early warning system for emerging diseases; (II) To develop the mechanism to respond to potential public health emergencies of international concern in a systematic and timely manner; (III) To strengthen national laboratory capacity for emerging diseases; (IV) To strengthen infection control during emerging disease outbreaks; (V) To promote communication and coordination with other sectors.

As can be seen in the table below, the strategies developed for each of the disease specific strategic plans are fully compatible with the sector wide strategies of HSP2.

HSP2 Strategy	Key CDC Strategic Components and Interventions
Health Service Delivery	<ul style="list-style-type: none"> <li>• Strengthen alignment and coordination of vertical service provision into MPA and CPA through integrating the program policy, planning, development activities, and resources into provincial and district plans; and joining appraisal and feedback mechanism according to the MoH planning process.</li> <li>• Provide technical support to PHDs and ODs to conduct joint monitoring and supportive, integrated supervision at health facilities.</li> <li>• Strengthen skills and competencies in forecasting and quantification of health commodities with strengthening drug management and support systems.</li> <li>• Strengthen quality assurance and control with relevance for communicable disease particularly related to private practice and to distribution of potent drugs to avoid harmful development of resistance to antibiotics (TB and malaria drugs).</li> <li>• Strengthen out-reach and community-based models of care, coordinated and, where possible, integrated with RMNCH and NCD, as an intermediate strategy for scaling up CDC interventions, especially in communities with limited access to health facilities; ensure effective involvement of local authorities and volunteers (VHSGs) in provision of selected services and information.</li> <li>• Support local structures (commune, district councils) and community to play a role of health promotion in general (fully integrated with RMNCH and NCD) including immunization and in particular for STI, HIV/AIDS, TB, malaria, dengue and other communicable diseases.</li> <li>• Strengthen the early warning system for emerging diseases, (event based surveillance, indicator based surveillance)</li> <li>• Develop mechanisms to respond to potential public health emergencies of international concern in a systematic and timely manner (Rapid response system, Provincial and central national Rapid response team, Rapid containment)</li> </ul>

	<ul style="list-style-type: none"> <li>• Invest in physical infrastructure and in logistic support for the delivery of appropriate services, including the national laboratory capacity for emerging diseases (Laboratories network for emerging diseases surveillance and response, capacity strengthening/training of central and provincial laboratories, medical laboratory services policy , laboratory based surveillance, operational research), TB wards, laboratory and X-ray facilities; and strengthen and expand laboratory network, including culture and DST facilities to ensure accessibility to quality laboratory services.</li> <li>• Strengthen infection control during emerging disease outbreaks (IC policy and national program on IC, National integrated IC guideline, Training and simulations on infection control for hospital staff and RRT, PPE distribution system/ process, Building/maintaining isolations wards at provincial level</li> <li>• Increased coverage of effective prevention, including such measures in health facilities as infection control and waste disposal, as well as comprehensive care and impact mitigation interventions.</li> <li>• Introduce the Fixed –Dose Combination (2,3,4-FDC) of anti-TB drugs to increase patient compliance, reduce workload of health workers, and improve drug management, and maintain good DOTS service delivery at all levels with the emphasis on health center level, expand the community DOTS, and expand the DOTS strategy to further involve community in TB control, including community members and former TB patients.</li> <li>• Provide dipstick/microscopic diagnosis and treatment with pre-packaged artesunate combination therapy and other antimalarial drugs at all public health facilities, Dipstick diagnosis and treatment with prepackaged artesunate combination therapy in hyperendemic villages through VMWs, and Social marketing of Malacheck and Malarine products in the private sector</li> <li>• Provide two complementary insecticide treated net services for high and low risk groups; free distribution of insecticide treated bed nets/long lasting insecticidal mosquito nets in endemic areas and social marketing of long lasting insecticidal mosquito nets and insecticide treatment kits in areas from which there are temporary migrations of people into forests</li> <li>• Revise and update the National Guidelines for clinical diagnosis and management of DF/DHF for use in referral and provincial hospitals, and produce a practical manual and schematic flow chart to facilitate health centers and district hospitals in early recognition and referral of severe DHF cases.</li> </ul>
Health Care Financing	<ul style="list-style-type: none"> <li>• Align the program funding with health sector priorities 2008-15 by using the same yearly and medium term planning and budgeting tools as well as financial management tools.</li> <li>• Ensure resource availability for continued provision of free services for TB, HIV and Malaria.</li> </ul>

	<ul style="list-style-type: none"> <li>Increased, sustainable and equitably allocated resources for the national response to communicable diseases.</li> </ul>
Human Resources for Health	<ul style="list-style-type: none"> <li>Develop comprehensive and coordinated approach to coherent training program of both pre and integrated in-service training with more focus on clinical and public health practices.</li> <li>Further decentralize in-service training to provincial trainers</li> <li>Build global provincial and district capacity (ex management skills) to improve methods for disease surveillance and outbreak preparedness and response:</li> <li>Strengthen technical capacity of central and provincial staff for CD disease surveillance and outbreak response: epidemiology training (AET), laboratory training, clinical management training for clinicians</li> <li>Organize refresher courses on important areas such as DOTS, TB/HIV, MDR-TB, Extra-Pulmonary, childhood TB and laboratory, and to include DOTS strategies into the curriculum of medical and nursing schools.</li> <li>Conduct training courses for hospital and health center staff on clinical diagnosis and management of DHF, and provide supervision of equipment supplies and human resources needed in all provincial and some specific district hospitals during outbreaks of DHF.</li> </ul>
Health Information Systems	<ul style="list-style-type: none"> <li>Strengthen the disease surveillance system (Early Warning system) and standards of procedures, including IT support, updating case definitions, notification, lab confirmation and response procedures, mapping of at-risk populations and data sharing and publication.</li> <li>Decentralize surveillance and outbreak preparedness with the central measures for flexible use of existing resources when outbreaks.</li> <li>Strengthen drug resistance monitoring and set up a national molecular resistance surveillance center</li> <li>Fully integrate the program monitoring and reporting system into the HIS at operational level.</li> <li>Develop mechanism for risk communication among MoH departments.</li> <li>Integration and coordination of clinical surveillance system, laboratory based surveillance system and animal health (for zoonoses) surveillance system already in place.</li> <li>Broaden the participation of private providers in the surveillance system, through inventorying them, and sensitizing and informing them about legislation, and providing them with the necessary standard forms.</li> </ul>
Health System Governance	<ul style="list-style-type: none"> <li>Clarify and formalize future roles, function and structures of the national programs in light of decentralization and de-concentration and the MoH Institutional Development Plan.</li> <li>Use agreed modalities and management systems for the delivery</li> </ul>

of external-funded program activity to support the health service delivery at provincial and district level.

- Develop and implement harmonized methods for monitoring and evaluation – as an integral part of Cambodian HAR-Action Plan.
- Develop an evidence-based comprehensive National Strategy for Dengue, including vector control, surveillance, outbreak response, and case management, and education and community awareness.
- Develop a comprehensive national policy and specific technical guidelines for Emergency and disaster response.
- Private practice policy for distribution of pharmaceuticals to mitigate development of resistance to antibiotics and malaria drugs.
- Effective leadership by government and non-government sectors for implementation of the response to HIV/AIDS, at central and local levels.
- Increased availability of information for policy makers and programme planners through monitoring, evaluation and research .
- In collaboration with Ministry of Agriculture Forestry and Fisheries as well as relevant private sector entities, develop a mechanism for addressing control of Rabies and other zoonoses.
- Cross-sectoral engagement for health stewardship, including especially water and sanitation and vector control.
- Develop specific strategies and plans to engage the private sector in TB control activities, as well as strategies and plans to deal with pulmonary TB smear negative, extra-pulmonary TB, Multi-Drug Resistant TB and TB in children.
- Conduct surveys that are critical for TB control such as TB Prevalence Survey, Drug Resistance Survey, etc., and organize other studies including clinical/operational research on health seeking behaviors of TB patients, impact of TB on socio-economic development, etc.
- Continuing the search for candidate ACTs through drug resistance monitoring studies, update national treatment guidelines based on emerging evidence
- Strengthen the framework of the early warning system for communicable disease control and notification by reviewing/developing/enacted national legislation and policies taking into account the newly revised IHR (International Health Regulation).

### 3.4 CDC Targets and Indicators

Indicator	Annual	Core JAPR	Baseline Value 2005-2008	2010/2011 MTR	2015 Evaluation
<b>CDHS</b>					
HIV prevalence rate among adult 15-49			0.6 (0.9)*	< 0.6 <(0.9)	<0.6(0. <(0.9)
TB death rate per 100,000 population			n.a	45	32
Malaria case fatality rate per 1,000 population			0.36	0.2	0.1
Malaria incidence rate per 1,000 populations			4.2	3.58	2.16
<b>HIS</b>					
# of Voluntary Confidential Counseling and Testing sites operating in public and non-for profit sector	ü		194 (2007)	250	>250
% People with advanced HIV infection receiving antiretroviral combination therapy	ü		50	> 85	> 85
% of HIV+ pregnant women receiving ART for PMTCT	ü	ü	7	50	75
% PLHAs on ART alive after a 12-month treatment.	ü	ü	n.a	> 85	> 85
Case detection rate of smear (+) pulmonary TB (%)	ü	ü	66	>70	> 70
TB cure rate (%)	ü	ü	> 85	>85	> 85
Malaria case fatality rate per 1,000 population	ü		0.36	0.2	0.1
# of malaria cases treated at public health facilities per 1,000 pop	ü	ü	4.2	3.58	2.16
% of families living in high malaria endemic areas (< 1 km from forest) of 20 provinces have sufficient (1 net per 2 persons) treated bed nets (LLIN/ITN)	ü		6.4	85	95
Dengue hemorrhagic fever case fatality rate	ü	ü	1	0.5	0.3

Note: "Blue" indicates "Core Indicators"

\* Expert Consensus Workshop on Estimation of HIV Prevalence, 2007, NCHAD

#### 4. NON COMMUNICABLE DISEASES AND OTHER HEALTH PROBLEMS

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Accidents are one of the leading causes of death for children, and mental health and substance abuse can be serious contributing factors to neglect, abuse and violence against women and children. Morbidity from chronic diseases decreases productivity and the costs of late treatment of conditions such as hypertension and diabetes can be disastrous for the economically vulnerable, and Diabetes itself is a contributing factor to pregnancy complications. Other health problems are related to environmental pollution and global climate change, poor hygiene and sanitation and well as lack of access to safe drinking water.

Non-communicable disease will rapidly claim increased involvement from the health system as a whole and will become an increasingly visible problem in the coming years. The main strategy to deal with non-communicable disease needs to be prevention, and the Ministry of Health will need to energize and monitor preventive measures across Government. Effective prioritization will be a key issue for continued programming of the non-communicable disease program, and diseases selected for prioritization will need to be included as basic elements of MPA and CPA.

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##### 4.1. Challenges

A mounting problem for Cambodian health services is the growing likelihood of population morbidity and mortality from non-communicable disease *before* a parallel decrease in communicable disease takes place – i.e. the emergence of a classic double burden of disease scenario.

The increase in registered non-communicable disease is explained by a variety of factors:

- Changing life style factors and the adoption of 'risk behavior' – smoking, changed nutritional habits, alcohol consumption, illicit drugs – will slowly but steadily increase the incidence and prevalence of cardio-vascular disease including hypertension, cancer, diabetes and stroke.
- Improved diagnosis and improved access to health care will unmask previously undetected non-communicable disease.
- In the absence of mitigating action, urbanization and the expansion of traffic will go 'hand in hand' with an increase in the number of road traffic accidents and diseases caused by pollution
- Non-communicable disease will emerge from population ageing and will, for example, result in higher levels of neuro-pathological disease. Disability caused by eye disease and arthritis of joints will also increase and become a major burden on individuals and health services.
- A change in awareness and values may make psychiatric disease more available for medical intervention.
- Rapid economic growth and industrialization pose increasing environmental health threats.

The increase in prevalence of non-communicable disease will play a major role for health system response for three reasons:

- The Cambodian health services are currently best equipped for handling communicable disease and maternal and child health care. To handle rapid increase in non-

communicable disease over a relative short time span, clinical experience needs to be accumulated and formulated as clinical guidance, staff re-trained and the general public made to understand the possibilities that can be offered to come to grips with these diseases.

- Treatment will often be lifelong and thus be very costly – both for the health system and for patients. The cost aspect of non-communicable disease will need to be an important element in the development of upcoming insurance elements in the health finance strategies. The prioritization measures discussed above are particularly important to achieve a reasonable position for non-communicable disease in the budget, in the training of staff in the pharmaceutical programs and in the design of prevention measures.
- Many of the non-communicable diseases can be controlled by preventive measures. Such measures call for a very high level of co-operation between ministries and sector in multi-sectoral approaches. Such “multi-sectoralism” is often made difficult by contradictory intra-sector objectives and call for intensive information dissemination on the health consequences of policy measures and investments. The Ministry of Health needs to find its special role in the network of involved ministries.

#### 4.2. NCD Health Priorities and Essential Services, Goals and Objectives

Goal 3	Reduce the burden of non-communicable diseases and other health problems
Objective	<p>10. To reduce risk behaviors leading to non-communicable diseases (KAP): diabetes, cardiovascular diseases, cancer, mental health, substance abuse, accidents and injuries, eye care, oral health , etc</p> <p>11. To improve access to treatment and rehabilitation for NCD: diabetes, cardiovascular diseases, cancer, mental health, substance abuse, accidents and injuries, eye care, oral health, etc</p> <p>12. To ensure Essential Public Health Functions: environmental health:, food safety, disaster management and preparedness</p>
Health Priority & Essential Services	
	<ul style="list-style-type: none"> <li>• Diabetes</li> <li>• Cancer</li> <li>• Cardio-Vascular Diseases</li> <li>• Mental health, including substance abuse</li> <li>• Blindness prevention</li> <li>• Oral health</li> <li>• Environmental health risks</li> <li>• Injury, trauma from accidents</li> <li>• Accident</li> <li>• Occupational health</li> <li>• Rehabilitation</li> <li>• Elderly</li> <li>• Food safety</li> <li>• Tobacco</li> </ul>



#### 4.3. NCD Implementation of the HSP2 Strategies

NCD relevant strategic plans currently being developed and finalized include: the *National Strategic Plan for Non-Communicable Diseases 2007-2010 (NSP-NCD)*, *National Environmental Health Action Plan for Cambodia 2007-2010 (NEHAP)*, *Mental Health Strategic Plan 2008-2012 (MHSP)*, and the *Cambodia National Strategic Action Plan for Tobacco Control 2006-2010 (NSAP-TC)*.

The draft National Strategic Plan for Non-Communicable Disease provides the overarching framework for all NCD planning. Its four goals are: (1) strengthened institutional management and implementation structure for NCD; (2) development of a surveillance system for non-communicable disease; (3) reduction in population risk-factors; and (4) equity based health delivery systems for non-communicable disease.

The NSAP-TC and NEHAP are multi-sectoral plans, engaging not only MoH but also other Ministries and National Authorities, including Environment, Education, Labor, Commerce, Justice, Water Resources, National Assembly, and the National Disaster Management Committee. Eight environmental health priority areas have been identified for Cambodia, for which cross-sectoral strategies and interventions are being developed. These are: Water supply and water quality; Hygiene and Sanitation; Air quality; Solid Waste; Toxic and Hazardous Substances; Occupational Health; Climate and ecosystem changes; Disasters & Emergencies.

The draft MHSP identifies three main objectives: (1) Expand, enhance and equitably distribution of basic curative, preventive and promotion services through MPA; and at referral hospitals through CPA; (2) Improve quality of undergraduate, post graduate and nursing training, equitably re/distribute staff, and enhance pay through the government's salary reform and personnel management measures; and (3) Develop laws and policies, and strengthen mental health institutional structures to promote effective service delivery, planning and coordination. Strategic interventions within each of the 5 HSP2 Strategies are developed, ensuring close alignment with other MoH Centers and Programs and allow greater synergies for this essential but under-resourced area.

In line with the NSP-NCD programming must focus particularly on prevention. Prevention strategies will need strong national guidelines and the adoption of international standards and models. In addition, national models need to be developed. The Tobacco convention is one of several important starting points for development of such guidelines. The guidelines must be cross-sectoral. The Ministry of Health needs to become a focus for inter-ministerial coordination to bring disease prevention aspects into policy formulation work in all ministries.

Higher incidence and prevalence of non-communicable disease, requiring long term and costly treatment, as well as rehabilitation and palliative care, calls for prioritization. Development of guidelines for the treatment and rehabilitation of non-communicable disease must be considered part of a revision of the MPA and CPA.

A general study of prioritization using a combined ethical, economical and epidemiological approach involved is proposed to become a platform for the development of these guidelines and for MPA/CPA revision. The MPA/CPA revision will have important effects on the general health budget and the costs for scaling up health services.

Efforts to survey the NCD epidemiological development will need resources inside the Health Information System.

HSP2 Strategy	Key NCD Components and Interventions
Health Service Delivery	<ul style="list-style-type: none"> <li>• Strengthen prevention through health promotion activities for NCD, including NCD awareness, healthy lifestyles.</li> <li>• Strengthen screening and disease management for NCD in MPA and CPA through strengthened referral systems and development of comprehensive Continuums of Care for NCD including guidelines for treatment and rehabilitation.</li> <li>• Align facilities and services to at risk population groups via Health Coverage Plan with data on expected service delivery needs including road traffic accidents and emergency care.</li> <li>• Develop and expand specialized service for mental health, including substance abuse, through promotion and prevention activities to all provinces, extension of psychiatric inpatient and outpatient service to all CPA Level 3, improvement of psychiatric coverage to levels 1 and 2 CPA hospitals, and establishing new additional regional psychosocial rehabilitation centers at selected Level 3 hospitals.</li> <li>• Develop, implement protocols, clinical practice guidelines, regulations, standards of care, ethics of clinical practice in psychiatry, including Good Clinical Practice (GCP) and Ethical guidelines in psychiatry for use by all doctors and nurses working with the mentally ill.</li> <li>• Develop a comprehensive national policy and specific technical guidelines for Emergency and disaster response</li> </ul>
Health Care Financing	<ul style="list-style-type: none"> <li>• Reduce financial barriers to NCD screening and treatment by regulation of user fee schemes, scaling-up HEF arrangements and expansion of CBHI as an intermediate measure before an effective implementation of universal social health insurance protection.</li> <li>• Mobilize additional resources to cover health care cost of traffic accident victims and non-communicable diseases prevention and health promotion.</li> </ul>
Human Resources for Health	<ul style="list-style-type: none"> <li>• Enhance technical skills and competence for NCD management and prevention through quality, comprehensive training, education, retention, licensing and registration systems, and support measures.</li> <li>• Develop comprehensive and coordinated approach to coherent NCD training programs with more focus on clinical and public health practices including especially prevention.</li> <li>• Deploy at least 1 GP with 3 months psychiatric training in ALL CPA level 2 Hospitals, and redistribute 3month-psychiatry-trained nurses and GPs (over 400) currently not working in mental health to allow equity in distribution of services in un-reached areas.</li> </ul>
Health Information	<ul style="list-style-type: none"> <li>• Develop the reporting of non-communicable diseases in the overall surveillance and case reporting and response system, in-</li> </ul>

Systems	<p>cluding accidents and injuries</p> <ul style="list-style-type: none"> <li>• Revise and strengthen patient record management (medical records, storage and retrieval facilities) in all public health facilities, including ICD coding.</li> <li>• Set up a mental health database for research, performance monitoring and accountability.</li> <li>• Develop surveillance system to monitor smoking prevalence and policy impact.</li> </ul>
Health System Governance	<ul style="list-style-type: none"> <li>• Comprehensive Burden of Disease assessment as basis for development of NCD policies</li> <li>• Intensify cross-sectoral engagement for health stewardship and NCD awareness and prevention, with special emphasis on road traffic accidents, hypertension, diabetes, mental health and substance abuse, as well as for</li> <li>• In partnership with relevant Ministries, strengthen of Tobacco and Alcohol laws, including Development relevant regulations for implementation of tobacco control law through regulation on smoke-free workplaces and public places as well as relevant penalty regulation and mechanism..</li> <li>• Develop a Mental Health Policy to ensure harmonized and orderly development of services for the mentally ill, and develop a National Mental Health Law to regulate practice of psychiatry, psychiatric nursing, and allied professionals and protect the patients and professionals.</li> <li>• Develop policies to protect vulnerable groups such as women and children from injuries and violence</li> <li>• Develop environmental health policies and related strategies including Health Impact Assessment Policy of development and projects.</li> </ul>

#### 4.4. NCD Targets and Indicators

Indicator	Annual	Core JAPR	Baseline Value 2005-2008	2010/2011 MTR	2015 Evaluation
<b>CDHS</b>					
% of deaths due to road traffic accident			3.5	3.0	2.8
<b>HIS</b>					
Incidence of cervical cancer reported from public health facilities	Ü		25	6.5	12.5
Incidence of diabetes reported from public health facilities	Ü	Ü	15		TBD
Percentage of population with head trauma due to road traffic accident received treatment	Ü	Ü	n.a.		TBD
Incident of hypertension	Ü		n.a.		TBD
Percentage of adult smoking	Ü		54 M 9 F	- 5%	- 10%

% of blindness	Ü		1.2	1	0.8
% Decayed missing filling teeth for children	Ü		8.9	<5	<5
# of mental health cases reported in public sector	Ü	Ü	14000	20000	28000
# IDUs enrolled in Opioids substitution treatment	Ü		150	400	1200

Note: "Blue" indicates "Core Indicators"



# *Framework for Implementation Monitoring and Evaluation*

Implementation. Monitoring. Evaluation. Indicator Framework

## 1. PHASE-BY-PHASE APPROACH TO IMPLEMENTING HSP2

There are several contextual factors for a sequenced implementation of the HSP2 toward achieving the HSP2 goals.

- First, policy context the MoH will make decisions over key policies in relation to financing and health system governance requirements under decentralization and de-concentration. Year 2008 is recognized as a preparatory year during which this policy formulation process will take place, with a subsequent period of consolidation and implementation.
- Second, institutional context, institutional arrangement and capacity building and strengthening will take place at all levels of the health system - national, provincial, and operating districts, as well as in facilities and communes.
- Third, economic context, resources will be scaled up in a tempo that is acceptable by both government and donors. The financing framework from medium to long term has to be linked to the country macroeconomic framework which will entail a sequenced introduction of the strategy.

As consequences, the HSP2 implementation will be undertaken in two phases.

Track	Consolidation 2008-2010	Scaling-up 2011-2015
<b>1 Decisions over a package of key policies</b>		
a. review/develop sub-sector strategic plan	←→	←→
b. develop implementation tools for existing policies/strategies	←→	←→
c. define "Policy Package"	←→	←→
<b>2 Institutional development with capacity strengthening</b>		
a. Institutional arrangement	←→	←→
b. capability strengthening	←→	←→
<b>3 Implementation and preparation for scaling-up</b>		
a. mobilize financial resources	selected ODs	All ODs
b. prepare for scaling up	CDHS10, MTR	HSP3

### 1.1 The Consolidation Phase, 2008-2010

The consolidation phase will follow three parallel tracks that will provide a robust platform for policy formulation and scaling-up.

- Track 1: Decide over a package of key policies and develop their implementation tools
  - A. Review/revise and develop sub-sector strategic plans to reflect the HSP2's priority and strategy
  - B. Develop implementation tools for existing policies/strategic framework/strategic plans
    - (1) HSP2 Implementation framework and roadmap
    - (2) Policy on Quality assurance (2006)
    - (3) Human Resource Strategic Plan 2006-2015 (2006)
    - (4) Health Coverage Plan (revision in line with D & D)
    - (5) Strategic Framework for Health Financing (2008-2015)
    - (6) HIS Strategic Plan 2008-2015 (2008)
    - (7) Institutional Development Plan (2008)
    - (8) Strategic Framework for Community Participation in Health (2003-under review)
    - (9) Health Impact Assessment Policy (initiated)
  - C. Define package of key policies and develop their implementation tools:
    - (1) Policy on implementation of Decentralization and Deconcentration
    - (2) Policy on harmonization and alignment for result including technical assistance;
    - (3) Policy on contracting (Special Operating Agencies and External Contracting)
    - (4) Policy on health equity funds and targeting interventions to the poor and vulnerable
    - (5) Staff management policies, including remuneration
    - (6) Policy on MPA/CPA continuums of care
    - (7) Regulation of autonomous hospitals, laboratories and support institutions
    - (8) Communication strategy

- (9) Regulation of procurement and management of drugs and other commodities
- (10) Discussion on public-private sector policy

- Track 2: Institutional development with capacity strengthening at central, provincial, district, health facility level and commune

As required by the above-agreed package of policies and other strategic frameworks with particular focus on:

- (1) Policy on implementation of Decentralization and Deconcentration
- (2) Policy on contracting (Special Operating Agencies and External Contracting)
- (3) Staff management policies, including remuneration
- (4) Strategic Framework for Community Participation in Health
- (5) Institutional Development Plan

Institutional development with capacity strengthening is formulated in the HSP2 Strategy 3 (Human Resource for Health) and 5 (Health System Governance). MOH structures will be re-examined and institutional arrangements will be made to allow HSP2 implementation, with greater attention to:

- a. Reassessment of roles and functions within MOH to allow for a single body responsible for health system delivery throughout the public system
- b. Strengthened Public Financial Management process throughout the MOH
- c. Strengthened MOH authority for personnel management, including alignment of lines of authority with resource flows and accountability structures
- d. Strengthened authority and accountability of the three program areas, especially alignment of lines of authority with resource flows and accountability structures.

- Track 3: Implementation arrangements and preparation for scaling-up
  - A. Mobilize resources to implement the agreed Policy Package in a subset of ODs based on defined selection criteria and within availability of financial resources:
    - Policy on contracting
    - Policy on health equity funds
    - Staff management policies, including remuneration
    - Policy MPA/CPA continuums of care
    - HIS
    - Institutional Development Plan
  - B. Preparation for scaling up
    - Participate in the preparation of CDHS 2010

## 1.2 Scaling-up Phase, 2011 – 2015

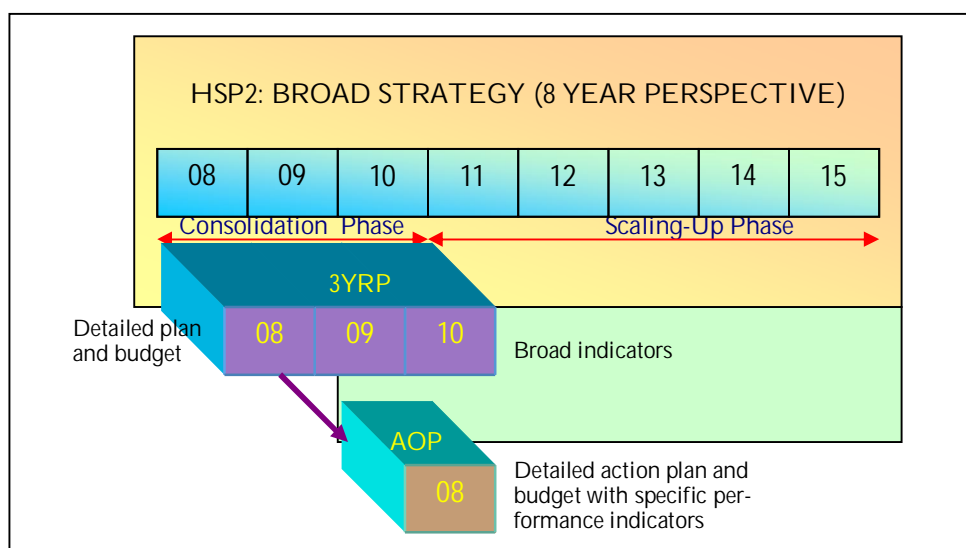
- Track 1: Decisions over key “Policy Package” and development of implementation tools - continue to discuss on:
  - H-A-R (moving toward Sector Wide Approach)

- Public and private partnership
- Other policy/strategic requirements identified during the course of the HSP2 implementation and from results of the CDHS 2010
- Track 2: Institutional development with capacity strengthening at central, provincial, district, health facility level and commune -will continue, focusing on the new ODs
- Track 3: Implementation arrangements
  - A. Continue to mobilize resources to implement the agreed Policy Package and -other key strategic frameworks in remaining ODs
  - B. Continue to support the Consolidation-phase ODs to ensure functional and financial sustainability and universal coverage by 2015.
  - C. Preparation for formulation of the HSP3 (2016-2020)
    - Perform the MTR of the HSP2 in 2011, in part, based on the results of the CDHS 2010
    - Participate in the preparation of CDHS 2015, and conduct the evaluation of the HSP2 based on the results of the CDHS 2015

## 2. IMPLEMENTATION FRAMEWORK

- Three Year Rolling Plan linked to the Budget Strategic Framework (MoEF) and Public Investment Program (MoP)
- Annual Operational Plan and program based budget

Figure XX: Link between HSP2 and 3YRP/AOP



### 2.1 Three Year Rolling Plan

A Three Year Rolling Plan (3YRP) is a medium term planning framework. The plan is built upon broader strategy of the HSP2 that sets longer-term goals and objectives. It is also based on the sector's financing needs (bottom-up) and projections of available resource envelope from all sources (domestic and external – top down). The bottom-up



costs and top-down resource envelope will be matched in the context of the annual planning and budget process to inform resource allocation decisions on priorities, both within and across sectors.

The process will be “rolling-forward” over every year in order to incorporate changes (changing policy, needs and resources) and take into account new priorities as informed by JAPR, but not for major deviations from the broad strategy or momentum already set. If appropriately applied, the process will considerably improve allocation and predictability of funding for the health sector and link allocated resources with outcomes of health service delivery.

Within the 3YRP framework, the AoP can then be developed with detailed activities (including budget) and timetable. From context described above, 3YRP is intended:

- to translate the HSP2 into action;
- to inform resource allocation/re-allocation for coming three years and guide resource commitments by the Government and health partners;
- to coordinate the aid program to the health sector through sector wide consultation and mandate for forward allocations via JAPR;
- to form a basis for the Budget Strategic Framework to determine Government budget envelopes by the MoEF; and
- to provide a framework for developing AoP

To strengthen integrated approaches and ensure that funding flows reflect lines of accountability and authority, each of the 3 Program Areas and each Province will prepare integrated 3 Year Rolling Plans, which will form the basis for the consolidated 3YRPs prepared by the Central Ministry.

The 3YRP will directly determine a single Priority Investment Plan for the MoH.

## 2.2 Annual Operational Plan

The HSP2 is the guiding framework for all actions in the health sector. The HSP2's goals and targets will be operationalized through the development and implementation of annual operational plans that link with program based budgeting at all levels of the health system to achieve these goals. As such, health management teams at all levels of the health system are required to consult the strategic components and strategic interventions listed under the program areas within the HSP2, and to use these to frame their own interventions and activities. This will enable a clear and direct link to be established between the stated goals and objectives enumerated in the HSP2, and those adopted by national and local budget management centers, and enable the sector AOP when consolidated, to better reflect the aims of the HSP2.

### Role of the AOP

The AOP is now in the fifth year of its sector-wide implementation. The AOP is designed to be a mechanism for influencing broader resource allocation decisions across the health sector (through participatory allocation of resources), as well as an information resource to all decision makers and program managers to enable them to continue to align their program activities with the common goals and health strategies set out in the HSP2. This will enable the MoH to achieve a greater level of integration in health planning and consistency in approaches across the health sector.

The AoP needs to be consistent with management processes and accountability mechanisms for program based budget. It also should provide a foundation for SOA and external contracting and monitoring, as well as support “provincial block grant” initiative.

The details of the plan will depend on a number of factors, in particular the level and degree of decentralization and deconcentration required by the Organic Law, and the MoEF's budgetary process

The key features of the AoP:

- annual action plans and budgets
- guided by sector priorities set by JAPR
- using Government and Partner budget envelopes from 3YRPs
- provides basis for SOAs, contracting, and provincial block grants
- inclusion of national program activities and resources in facilities level plans for consolidation at OD level upwards
- the MoH approval of Provincial action plan before submission of Provincial budgets

### Guiding Principles for Developing AOP

- 
1. Participatory process for plan development
  2. Priority setting as informed by JAPR and individual annual review
  3. Results oriented planning and budgeting
- 

- **Participatory Process for Plan Development**

The planning process is designed to be participatory, from the JAPR review of performance and identification of priorities to the development of activities by individual units based on an agreed common set of objectives and strategic interventions, to the face-to-face assessment and feedback process of individual AOPs. Also, the consolidated planning process offers each unit and their health partners the opportunity to influence broader resource allocation through sharing of information, while at the same time maintaining operational control over resources allocated to their own units.

- **Priority setting as informed by JAPR and individual Annual Reviews**

The strategic goals of HSP2 are reflected in the health sector priorities established each year at the Joint Annual Performance Review. These then form the basis for annual planning, subject to availability of resources each year. These priorities provide a focus on areas of urgent concern for the immediate future, recognizing that health sector activities are much broader and that operational planning must also take account of the strategic goals of the HSP2.

*Strategic objectives:* HSP2 has developed a set of strategic objectives for the health programs that will directly contribute to one or more of the priorities identified in JAPR. Many of these directly reflect the 5 health strategies and related strategic interventions, while others are focused on the prerequisite conditions for pursuing the recommended strategies effectively.

*Activities:* the independent development of activities for the AOP is one of the essential distinguishing elements of consolidated planning. Managers in health facilities and institutions across the country are required to develop activities based on a set of HSP2 strategic interventions that are most relevant to their facilities' roles, functions and capacities. These linkages in turn will enable sector wide steady progress toward the achievement of the HSP2 strategic objectives. The development of these activities thus, is an essential

“bottom-up” aspect of the planning process, and will make the AOP a potential tool for collaborative resource allocation across the health sector.

- Results Oriented Planning and Budgeting

One of the main benefits of bottom-up, collaborative planning processes such as the AOP is that it provides a mechanism for important information on specific challenges and opportunities at the operational level to inform decision making at the provincial and central levels. This information includes major challenges and needs to be addressed, available options for addressing these, given mid- to long-term constraints; resources available or expected as well as the sources of these resources; and expected costs of activities and related funding requirements.

## 2.3 Planning Process and Schedules

The AOP process is designed to promote a decentralized planning culture in the health system, enabling managers at facility level to make informed planning decisions to support sector/local priorities identified by annual reviews. Decentralized planning also calls for incorporation of the operational district plans (including AOP of HCs, RHs and ODOs) into the provincial plans.

The Department of Planning & Health Information (DPHI) in collaboration with the Budget & Finance Department takes the lead in appraising and providing feedback to individual AOPs and consolidates them into the Health Sector AOP, which is finally reviewed and endorsed by the Health Sector Steering Committee (HSSC, comprising of high level officials of the MoH, MoEF and MoP) prior to implementation. Table below shows the main activities and associated schedules for the AOP process sector-wide.

While the AOP development process is still evolving, there is a critical need for strengthening implementation of AOP processes for more effective bottom-up planning, in particular at OD and facility levels, where limited planning and budgeting skills are reported. This requires sustained capacity building efforts.

## 2.4 Program Based Budgeting

As part of the MoEF's Public Financial Management Reform, the MoH has begun pilot implementation of program based budgeting and planning at the Central level institutions since 2006.

Program Based Budgeting (PBB) is the classification of expenditures on the basis of programs. It is also a useful tool for resource allocation. This approach attempts to link program costs to outputs and increased accountability. It allows policy-makers to see how public money is being spent. Effective application of the PBB requires:

- Credible budget and individual institutional accountability
- Institutional and technical capacities
- Measurable outcomes
- Information and ability to do long-range planning
- Donor participation

The HSP2 set out goals and objectives for the health sector as well as annual progress monitoring (via JAPR) that are incorporated into the planning, monitoring and evaluation processes. The PBB contributes to strengthen these processes.

The HSP2 strategic and operational framework requires the AOP to be organized around 3 health programs reflecting HSP2 population health priorities, and 15 sub-programs corresponding to 12 HSP2 objectives. Planned activities for each unit of the MoH that

are assigned to sub-programs, together with targets and indicators, have to be aligned with the HSP2 strategic components and its strategic interventions, such that the 5 health strategies are applied consistently across the three health programs.

Table 10: The Sector Wide AOP Process and Schedule

Main Activity	Timing											
	J	F	M	A	M	J	J	A	S	O	N	D
1. Annual Review (HC, RH, ODO, PHD, Central level)												
2. Prepare 3 Year Rolling Plan (Sector Budget Strategic Framework) the Central and Provinces & RTCs												
3. National Health Congress/Joint Annual Performance Review (HSP2 Annual Review) and Joint Review of 3YRP												
4. Prepare individual AOP and budget												
Submittal of the Budget Strategic Framework to MoEF												
5. Pro-TWGH Review Provincial AOP												
6. Submit individual AOPs to the DPHI												
7. Conduct "Appraisal and Feedback"												
8. Re-submit revised individual AOPs to the DPHI												
Budget Negotiation at the MoEF												
9. Prepare the draft of the Health Sector AOP												
10. Joint MOH-HPs Annual AOP Review												
The MoEF presents the National Budget to the CoM												
11. Revise draft AOP after approved budget envelope by CoM												
National Budget submitted to Legislature												
12. Finalize Sector AOP after approved budget by legislature												
13. HSSC reviews and endorses the final Sector AOP												
14. Final review of individual AOP and prepare quarterly work plans for implementation, and re-start the next AOP process												
Financial Year Starts (1 Jan.) and Ends (31 Dec.)												
15. Monitoring AOP implementation through quarterly reviews												
16. Mid Year Review of AOP												

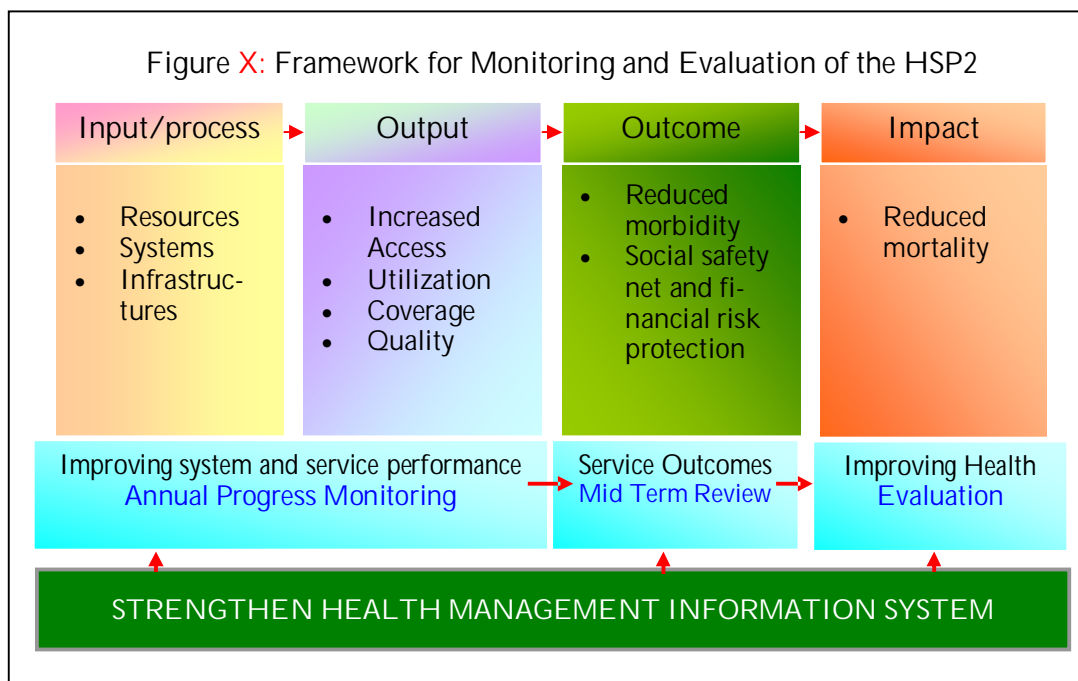
Q1 Q2 Q3 Q4

### 3. MONITORING & EVALUATION FRAMEWORK

The progress in implementing the HSP2 will be monitor through annual progress review and mid term review followed by end-cycle evaluation to determine impact of the HSP2 on improved health status.

The framework presented below is a tool for the MoH to monitor and evaluate the over-all health sector performance on a regular basis to gain information for making policy decisions. It promotes the use of both qualitative and quantitative information and evidence based decision making. The framework will be reviewed periodically to ensure that the information collected is useful for informing both policy-makers and managers across all levels of the health system.

It is envisioned that all health partners will use this framework (including a set of agreed indicators) to review progress of their programs/projects in the health sector.



### 3.1 Annual Review

The annual progress of HSP2 will be monitored through JAPR which has been regularly organized since 2004. The Annual Progress Report is developed (presented in the Guidelines for Preparation of AoP) and based on use of information from the annual reviews of the AoP implementation conducted by health institutions at all levels of the health system according to the annual planning process.

The main characteristics of JAPR are the following:

- Reviews past year's performance, focusing on selected core indicators
- Re--defines the HSP2 priorities to inform resources allocation/re-allocation and link priorities to annual planning and budget processes
- Strengthens the MoH role in guiding and mandating resource allocation via 3YRP and allows health partners to re-align to the maximum extent possible their programs and resources to the re-defined priorities in the 3YRP
- Provides key accountability mechanism for the MoH and health partners in planning, managing resources and improving decision-making for results.
- Aligns with the NSDP monitoring mechanism by updating the NSDP health related-targets annually (national sectoral targets are revised and presented in the NSDP Annual Progress report).

The Joint Annual Performance Review (JAPR) conducted in conjunction with the National Health Congress is attended by the MoH institutions at all levels, other relevant ministries, health development partners, provincial authorities, community councils, members of the community, professional associations, NGOs and for-profit private organizations and other stakeholders.

### 3.2 HSP2 Mid Term Review 2011

- Upon completion of Consolidation Phase, review and make recommendations for Scaling-Up Phase
- Next NSDP 2011-2015 formulation—HSP2 updates and informs this process
- CDHS 2010, informing the HSP2 MTR in 2011

The Mid Term Review (MTR) of the HSP2 will occur in 2011 based, in part, on the results of the Cambodia Demographic and Health Survey 2010 which will be available in 2011. The MTR will contribute to mid course corrections and updates of HSP2 for the 2011-15 period through the review of sector progress and achievements.

### 3.3 HSP2 Evaluation 2015

The HSP2 will also undergo an evaluation at the end of the plan period. Similar to the MTR, the evaluation of HSP2 also will be based on the CDHS 2015, and the results of final evaluation will be used for the formulation of the third HSP for the period of 2016-2020.

## 4. INDICATOR FRAMEWORK FOR MONITORING AND EVALUATION

### 4.1 The Purpose

The purpose of the framework is threefold:

- To monitor and evaluate health sector performance in improving health outcomes through the implementation of HSP2;
- To refine existing health policies considering the progress made over the course of the HSP2 implementation; and
- To enable policy-makers determine the effectiveness of different interventions and policy alternatives.

Evidence based decision-making is the use of accurate and timely information to make sound decisions. To understand the impact of policy interventions on health status, the MoH decision-makers need regular reliable data about health behavior, service utilization, coverage, quality and cost. Such information can be expressed in the form of indicators, carefully selected to measure the performance of the health sector and the impact of policy on health and development.

Through regular annual planning processes, the departments, national programs and all other central level organizations are allowed to collect minimum additional information, if actually needed, to plan, manage and monitor their programs. Likewise the provincial health departments and ODs including health facilities collect some additional information on key indicators for their management and service planning (quarterly and annual review). Some national level indicators are collected at provincial level and therefore serve two purposes: informing national policy and monitoring provincial/district planning.

The main sources of information for these indicators can be collected through HIS, with access to additional information from other ministries and surveys such as CDHS, SES, Population census etc.

## 4.2 Indicators for Monitoring and Evaluation

- Overall level of development

The indicators for monitoring and evaluation of the HSP2 are based on policies and priorities stated in the HSP2. The HSP2 clearly states the vision of the MoH *“to enhance sustainable development of the health sector for better health and well-being of all Cambodian, especially of the poor, women and children, thereby contributing to socio-economic development and poverty alleviation in Cambodia.”* To improve health the MoH must have information about Cambodian’s overall level of development. As the development is moving faster, the country is more able to provide the basic needs for the population. The following selected indicators provide a picture of overall economic growth and human development in Cambodia and can be used to compare with other countries.

1. Human Development Index
2. GDP per capita
3. % of households below the poverty line
4. Female literacy rate
5. Total fertility rate
6. Male/female life expectancy at birth
7. Crude birth rate per 1,000
8. Crude death rate per 1,000

- Improving health status

To show the changes in general health status and well-being of the Cambodian population overtime, the following impact indicators are selected for evaluating the impact of HSP2.

1. Infant mortality rate per 1,000
2. Neonatal mortality rate per 1,000
3. Under-five mortality rate per 1,000
4. % of children under 5 with chronic malnutrition (stunted)
5. Maternal mortality ratio per 100,000
6. HIV prevalence rate among adult 15-49 yrs-old
7. Tuberculosis death rate among 1,000 population
8. Malaria case fatality rate among 1,000 population
9. % of deaths due to road traffic accident

These indicators are disaggregated to show differences between socio-economic groups, geographical areas as well as gender.

- Improving system and service performance

As a means toward achieving improved health, core indicators are selected for measuring the annual progress in the five strategies and the three program areas:

- Increasing resources for health; measuring efficiency (allocative and technical)
- Improving systems functioning
- Increasing access, utilization, coverage and quality

- C1. % of population with access to full MPA
- C2. Bed Occupancy Rate
- C3. Average Length of Stay
- C4. % of essential drugs (15 items listed) at health centres that faced stock-outs
- C5. % client satisfied with quality of public services
- C6. Consultations (new cases) per person per year:
- C7. % of currently married women using modern contraceptive method
- C8. 2 or more ANC health personnel consultation
- C9. % of HIV+ pregnant women receiving ART for PMTCT
- C10. % births delivery by trained health personnel
- C11. % of deliveries by C-section
- C12. % of children under one year immunized against measles
- C13. % PLHAs on ART alive after a 12-month treatment.
- C14. Case detection rate of smear (+) pulmonary TB (%)
- C15. TB cure rate (%)
- C16. # of malaria cases treated at public health facilities per 1,000 pop
- C17. Dengue hemorrhagic fever case fatality rate
- C18. Incidence of diabetes reported from public health facilities
- C19. Incidence of cervical cancer reported from public health facilities
- C20. Percentage of population with head trauma due to road traffic accident received treatment
- C21. # of mental health cases reported in public sector
- C22. Share of provincial budget spent on PHDO, ODO, RH, HC
- C23. # cases covered by SHP schemes
- C24. # of HC with staffing level recommended by MPA Guidelines
- C25. % external funds for health included in 3YRP
- C26. % of private entities licensed: polyclinics, consultation cabinets, pharmacies
- C27. # of functioning Health Center Management Committee

The full set of indicators (including the core indicators) for monitoring the overall health sector annual performance are presented in the Annex, from the annual planning viewpoint, these indicators are included in the AoP, forming a basis for SOA and contracting of health services and incentives based performance. Budget management centers at all levels can add to these to monitor more closely their own interventions and activities.





# Costing & Funding for Strategic Interventions

Increased utilization. Contracting. Equity Funds. Reproductive Health.  
Child Survival. Merit-based Pay

This chapter sets out likely future costs for some of the key strategies being considered as part of HSP2. The aim of this costing review is to provide a broad framework on resource priorities as a means of informing donor and government allocations in support of HSP2 implementation. Detailed specific costing of activities within strategies and programs is not presented here and will be carried out through the HCP revision, and the 3YRP and AoP processes.

## 1. COST COMPONENTS AND ASSUMPTIONS

Strategic interventions which have major resource implications and considered as components of the HSP2 costing include:

- Increased utilization of services due to population growth as well as increased demand for public health services
- Scaling-up contracting
- Scaling-up equity funds
- Expansion of key interventions aimed at improving maternal and child health (as described in Reproductive Health and Child Survival strategies)
- Increased salary expenditures resulting from salary reform

Assumptions which underpin the estimated costs include:

- expected increases in utilization
- level of unit costs of different services at different facilities
- expected increase in unit costs to allow possible improvements in quality
- the extent to which services can be expanded at marginal cost only (i.e. on the assumption that there is spare capacity and existing staff in existing facilities will do more work) as compared to at full cost (requiring *additional* staff working in *existing* facilities as well as *additional* staff working in new facilities).

- the extent to which utilization can be met using existing infrastructure as against requirements for investing in new infrastructure

### 1.1. Utilization assumptions

Utilization rates have been growing rapidly in Cambodia albeit from a very low base.

**Table XX:** Trends in Out Patient Contacts

	Provincial Level	National Hospitals	Per Capita Contacts
2002	4,595,939	233,650	0.40
2003	4,597,876	368,517	0.39
2004	5,388,885	526,303	0.40
2005	6,254,726	697,646	0.50
2006	7,510,558	886,895	0.60
Average Annual Increase 2002-6	13.1	39.6	

Source: MoH Annual Statistics

### 1.2. Cost assumptions

#### Unit costs

Unit costs are based on unit cost analysis from facilities in contracting ODs which are assumed to operate at relatively high levels of efficiency and acceptable quality. Unit costs are assumed to remain constant in real terms over time. As such this makes no specific provision for additional efforts to improve quality.

**Table X:** Unit Costs

Facility	Service	Fixed	Variable	Total
Hospital	Cost per OPD	1.72	0.98	2.70
	Cost per IPD	2.01	7.64	18.89
Health Centre	Cost per OPD	0.57	0.59	1.16

Source: Childhood Scorecard Costing 2007

#### Marginal vs. Full cost

Bed occupancy rates in hospitals, although increasing, are still some way below optimum levels on average. This suggests that there is some scope for meeting future demand with existing infrastructure by making better use of existing capacity. This costing assumes that all services can be met at marginal cost only, and that no additional fixed costs are required.

In case investments in infrastructure are needed to meet increased demand, they will be covered under revision and implementation of the Health Coverage Plan.

**Table X:** Unit cost of specific interventions

Incremental cost of Contracting	
At health center level	\$0.48 per capita
At hospital level	\$0.60 per capita
Cost of Health Equity Funds	
Cost per capita	\$0.50
Cost per HEF member	\$1.40

Source Lane 2007 and URC

## 2. COST OF INCREASED UTILIZATION

Assuming utilization will increase at the same rate as in 2002-2006 and that existing facilities and staff can accommodate increased demand during the consolidation phase, the incremental cost of increased utilization is presented in the table below.

Incremental Recurrent Cost of Increased Utilization (in million US\$)

	2008	2010	2012	2015
Increased Utilization – Recurrent Costs	2.0	6.1	13.1	23.9

## 3. COST OF SCALING-UP CONTRACTING ARRANGEMENTS

Specific assumptions for cost of contracting expansion relate to the pace at which contracting arrangements are scaled-up. Considering the phased approach adopted in HSP2, complete coverage of contracting arrangements may be achieved by 2015.

The cost of scaling-up contracting arrangements includes population growth but assumes the incremental input per head remains the same.

The limitations of the costing are that the approach focuses purely on service delivery costs. Once a national contracting policy has been clearly defined, the costing must be revisited to consider requirements for strengthening provincial and district capacity as well as the changing roles of NGOs in a new contracting environment.

Incremental Costs Related to Contracting Expansion (in million US\$)

	2008	2010	2012	2015
Universal Coverage by 2015	2.02	6.05	10.09	16.15

## 4. COST OF SCALING-UP HEALTH EQUITY FUNDS

Scaling-up HEFs will follow the same pace as contracting expansion and will target universal coverage by 2015.

The total cost figure may vary according to predicted factors such as population growth but also less predictable elements such declining levels of poverty. Government policy on user fees will influence prices and will also have an impact on the HEF's bill. Moreover, costs must be revisited after a clear government policy on HEFs is issued. Elements of the future government policy that can influence total costs are:

- rapid scale up of HEFs focusing on hospitals only, or
- scale up of HEFs focusing on both hospitals and health centers
- intensified support to identified HEFs working in underprivileged areas while providing lower allocations to HEFs operating in more affluent settings (i.e. geographical targeting)
- impact of the interaction between health centers and hospitals (expansion to health centers diverting demand from hospitals, covering larger population for a smaller unit cost of treatment but potentially greater need for referral)
- decision on pre-identification and how often it should take place

Incremental Costs Related HEF Expansion (in million US\$)

	2008	2010	2012	2015
Universal Coverage by 2015	0.74	2.23	3.71	5.94

## 5. Cost of Reproductive Health Interventions

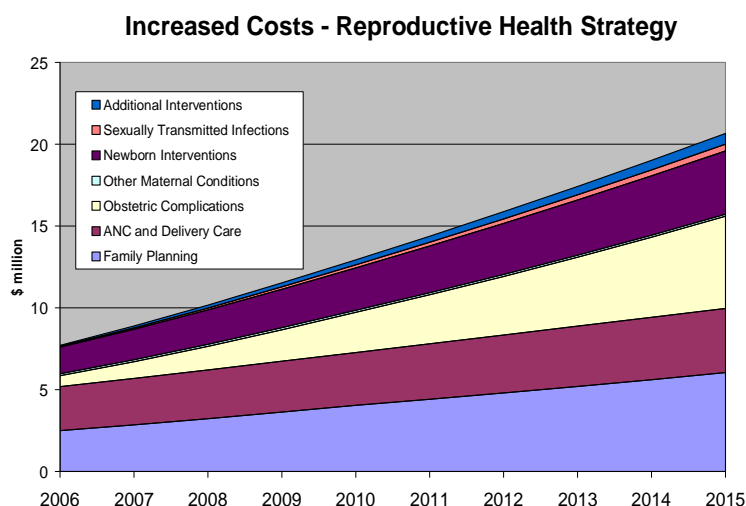
Costing of Reproductive Health Strategy considers service delivery costs as well as complementary requirements such as the cost of recruiting additional midwives, national programme operational costs as well as operational costs for RH/MCH at PHDs and OD level plus costs for outreach programmes and investment costs.

### Interventions included in the Costing Model

Family Planning	ANC and Delivery Care	Obstetric Complication
1 Oral contraceptives (Pill)	11 Antenatal Care	16 Prolonged labour (> 18 hours)
2 Injectables	12 Malaria Prevention within ANC	17 Forceps or Vacuum – Assisted Delivery (AVD)
3 Condom – male	13 Malaria Treatment within ANC	18 Caesarian Section (C-Section)
4 Condom - female	14 Delivery care	19 Postpartum Haemorrhage
5 IUD	15 Postpartum Care	20 Puerperal sepsis
6 Implant		21 Hypertensive disorders of Pregnancy
7 Sterilization – female		
8 Sterilization - male		
9 Other methods		
10 Emergency contraception		
Other Maternal Conditions	Newborn Intervention	Sexually transmitted infections and RTIs
22 Urinary Tract Infections	25 Routine newborn care	28 Chlamydia
23 Mastitis	26 Treatment of Neonatal Complications	29 Gonorrhoea
24 Comprehensive Abortion Care	27 Prevention of Mother-to Child Transition of HIV (PMTCT)	30 Syphilis
		31 Trichomonas
		32 Pelvic Inflammatory disease (PID)
		33 Reproductive Tract Infections (Candida and BV)

Source: RH Costing Study

Target coverage rates are in accordance with national targets. Costs are estimated through a bottom-up costing exercise. Although the original RH costing study distinguishes between current and ideal level of staffing costs (comparable to remuneration levels in contracted ODs), only current levels of staffing are considered here, in order to avoid double-counting with cost of expansion of contracting.



only current levels of staffing are considered here, in order to avoid double-counting with cost of expansion of contracting.

The results of the costing exercise show that spending

for RH services need to increase from US\$ 7.4 million per annum in 2006 to US\$ 16.6 million per annum in 2015. This equals an additional total spending of US\$ 104.9 million over the period 2008-15 and an incremental cost per capita of US\$ 0.9 by 2015.

#### 6. Cost of Child Survival Interventions

The Childhood Survival Interventions study assesses the costs of 11 of the 12 childhood scorecard interventions (the attended delivery intervention is included within the reproductive health costing study outlined above) within the context of the MPA and CPA package.

The approach assesses the costs of service delivery at a sample of “well performing” facilities but does recommend a more comprehensive analysis to be carried out to ensure the results are sound and representative. This would be an appropriate task for the consolidation period.

The study calculates costs by estimating unit costs at different levels (village, health centre and district hospital) and multiplying these by the coverage targets. Costs were allocated according to a relative weights approach derived from expert opinion on standard numbers of provider minutes used for each intervention. Again it was recommended that these weights be revisited in a more systematic way

The additional costs of scaled up interventions are shown in the table and chart below.

#### Net Incremental Costs of Scaling Up Childhood Scorecard Interventions

	2008	2010	2012	2015
Improving access to Childhood Survival interventions	(0.5)	1.7	4.7	10.6

#### 7. Merit-Based Pay Initiative

The Merit Base Pay is a mean of providing selected staff with levels of remuneration necessary to fulfill their responsibilities replacing a system of ad hoc supplements. The cost of MBPI is presented here as illustrative of the cost of a salary reform in the health sector. The assumption here is that MBPI is fully implemented in 2008.

#### Estimated Incremental Costs of MBPI Initiative

Annual Total and Incremental Cost of MBPI Proposal				
Level	Staff	Total Salary	Incremental Cost	
	No.	Riel bn	Riel bn	US\$ mn
MoH	160	3.30	2.50	0.61
PHDs	750	10.26	8.25	2.01
NPs	360	5.30	4.22	1.03
Total	1270	18.87	14.97	3.65

Source: Lane 2007 derived from Cambodia: Institutional Development and Performance Based Salary Incentive Component of the Health Sector Support Project. OPM. June 2006.

8. Total cost, Affordability and Fiscal Space

The following assumptions are used to calculate a base case scenario for implementing key strategies and estimating likely fiscal space.

Key strategies	Base case scenario assumptions
Increase utilization of public health services	Utilization increases at the same rate as experienced between 2002-2006 Increase in utilization can be accommodated within existing facilities during the consolidation phase. Requirements for new facilities will be considered in the revision and implementation of the Health Coverage Plan
Scaling up contracting	Universal coverage by 2015
Scaling up HEFs	Universal coverage by 2015 at unit cost of 0.5\$ per capita
Reproductive and child survival strategies implementation	RH strategy implemented to reach national targets set in the strategy and in HSP2 Child survival strategy implemented to reach national targets set in the strategy and in HSP2 Staffing needs (increased number and increased salary) excluded to avoid double counting with contracting expansion and MBPI coverage
Workforce remuneration	MBPI implemented in full in 2008

Fiscal space assumptions for the base case scenario

Illustrative Scaling Up Scenario, expressed in 2007 constant price dollars 2006-15											
		2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
GDP	US\$ mn	6,568	7,041	7,486	7,956	8,460	8,999	9,571	10,181	10,829	11,518
GDP growth	%		7.2	6.3	6.3	6.3	6.4	6.4	6.4	6.4	6.4
Recurrent Spending/GDP	%	9.0	9.8	9.7	9.8	10.0	10.2	10.4	10.6	10.8	11.0
Recurrent spending	US\$ mn	594.3	692.0	724.1	783.3	848.1	919.0	995.8	1078.9	1169.0	1266.7
Health share of recurrent spending	%	10.6	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Health budget	US\$ mn	63.2	83.3	87.1	94.3	102.1	110.6	119.8	129.8	140.7	152.4
Health Budget increase relative to 2007	US\$mn			3.9	11.0	18.8	27.3	36.6	46.6	57.4	69.2
Notes: Projections for GDP and recurrent spending from MEF MTEF. Health spending: 2006 estimate, 2007 budget, 2008-15 calculated as 12 percent of recurrent spending as indicated in NSDP 2006-10											

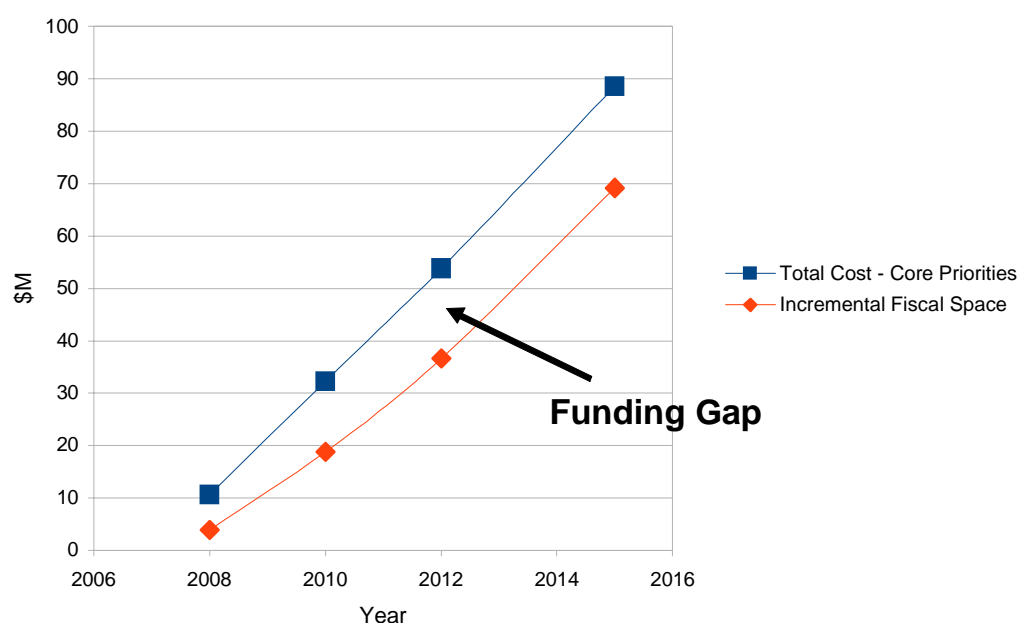
Applying those scenarios, estimated cost of key strategies and incremental fiscal space are presented in the following table.

Estimated Costs of Key Strategies (in million US\$)

	2008	2010	2012	2015
Increased Utilization - Recurrent Costs	2.0	6.1	13.1	23.9
Improving access to Reproductive Health Services	2.6	12.5	18.5	28.2
Improving access to Childhood Survival interventions	(0.5)	1.7	4.7	10.6
Contracting	2.02	6.05	10.09	16.15
Health Equity Funds	0.74	2.23	3.71	5.94
Merit Based Pay Initiative	3.7	3.7	3.7	3.7
Total - Core Priorities	10.6	32.3	53.8	88.5

Incremental Fiscal Space	3.9	18.8	36.6	69.2
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Affordability of strategic interventions  
Total cost of core priorities compared to likely fiscal space



The figure above compares the costs of the key strategies with the likely fiscal space available to Government in the coming years. These costs are beyond the means of Government and will need significant donor inputs although well within the range of donor support currently provided to the sector.