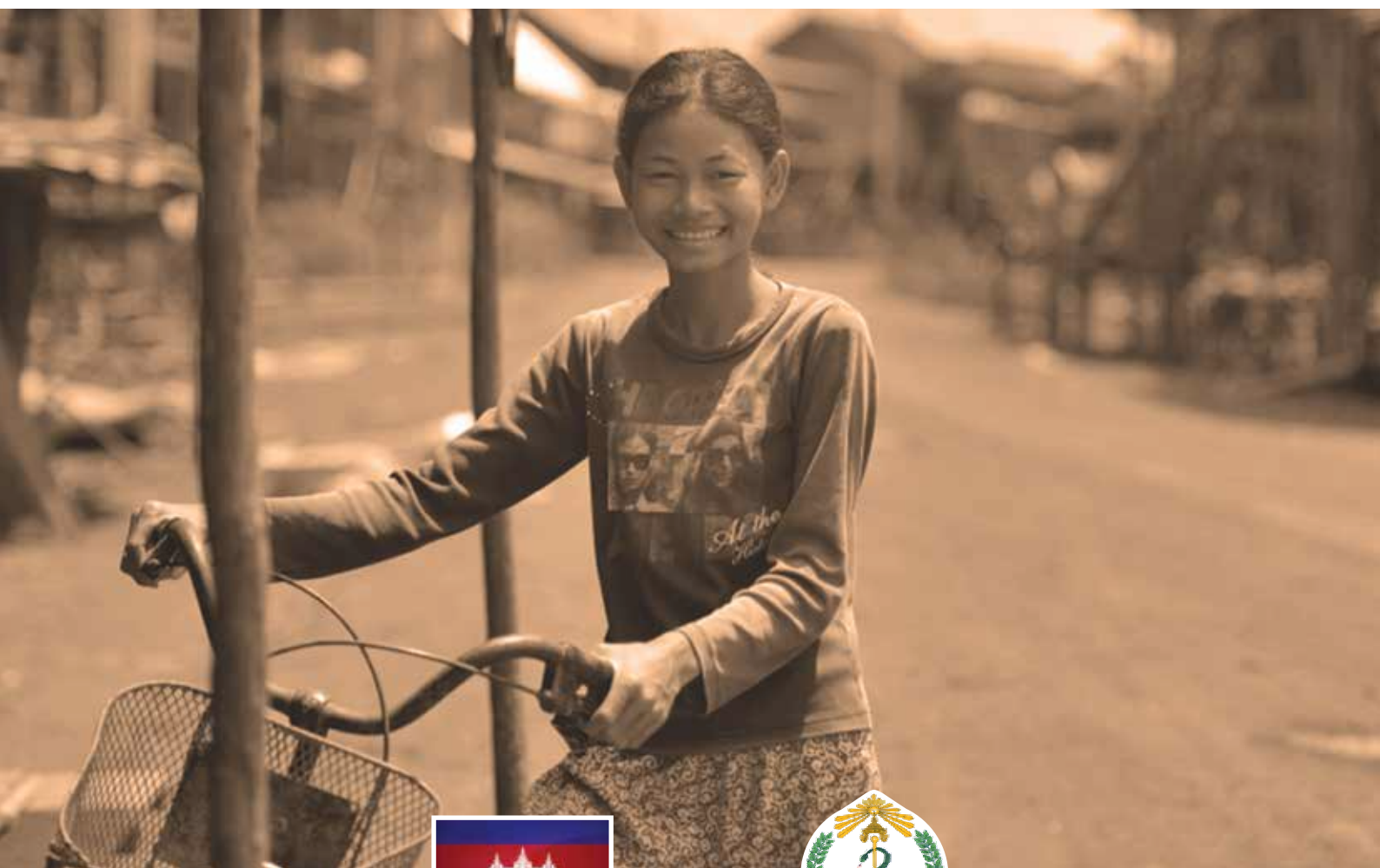


# Success Factors for Women's and Children's Health



## CAMBODIA

Ministry of Health, Cambodia



“Success factors for women’s and children’s health: Cambodia” is a document of the Ministry of Health, Cambodia. This report is the result of a collaboration between the Ministry of Health and multiple stakeholders in Cambodia, supported by the Partnership for Maternal, Newborn and Child Health (PMNCH), the World Health Organization, other H4+ and health and development partners who provided input and review.

Success Factors for Women’s and Children’s Health is a three-year multidisciplinary, multi-country series of studies coordinated by PMNCH, WHO, World Bank and the Alliance for Health Policy and Systems Research, working closely with Ministries of Health, academic institutions and other partners. The objective is to understand how some countries accelerated progress to reduce preventable maternal and child deaths. The Success Factors studies include: statistical and econometric analyses of data from 144 low- and middle-income countries (LMICs) over 20 years; Boolean, qualitative comparative analysis (QCA); a literature review; and country-specific reviews in 10 fast-track countries for MDGs 4 and 5a.<sup>1, 2</sup> For more details see the Success Factors for Women’s and Children’s health website: available at <http://www.who.int/pmnch/successfactors/en/>

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## 1. Executive Summary

### Overview

Cambodia has made significant progress in improving the health of women and children and is on track to achieve Millennium Development Goals (MDGs) 4 (to reduce child mortality) and 5a (to reduce maternal mortality). This review provided an opportunity for the Ministry of Health (MOH) in Cambodia to synthesize and document how these improvements were made, focusing on policy and programme management best practices. Lessons learned will be used to inform further improvements.

### Under 5 child mortality

Reductions in mortality are associated both with improved coverage of effective interventions to prevent or treat the most important causes of child mortality – in particular essential immunizations, malaria prevention and treatment, vitamin A supplementation, early and exclusive breastfeeding – and with improvements in socioeconomic conditions. Reductions in severe stunting and underweight are also noted. The rate of decline in newborn mortality has been considerably slower than that of under 5 mortality and in 2010 represented 50% of all under 5 mortality. Mortality declines are much slower among the poor, less educated and rural populations. This equity gap remains an important challenge.

### Maternal mortality

Declines in maternal mortality are associated with a halving of the total fertility rate between 1990 and 2012 – from six to three - and associated increases in birth interval and reductions in births to very young and very old mothers. Fertility declines are associated with improvements in the contraceptive prevalence rate – and socioeconomic and educational improvements. There have been significant increases in the proportion of women attending at least four antenatal care visits, making more of these visits early in pregnancy, delivering with a skilled birth attendant and delivering at health facilities. The number of facilities able to provide basic and comprehensive Emergency Obstetric and Newborn Care (EmONC) has increased considerably. Declines in maternal mortality are therefore associated both with declines in fertility and other socioeconomic improvements; and with improved availability of and demand for skilled maternity care.



## Health sector initiatives and investments

Cambodia has put in place policies and programmes in three areas to improve delivery of key reproductive, maternal, newborn and child health (RMNCH) interventions to women and children: laws, standards and guidelines; essential health systems; and improved delivery strategies. Laws standards and guidelines have focused on supporting universal coverage with a package of high-impact interventions, developing technical standards, and mechanisms for improving coordination. Systems, policies and programme inputs have focused on improving health care financing, the health workforce, and use of data for tracking progress. Health financing efforts include increasing government allocations to health, and the development and expansion of three health care financing schemes: performance-based financing; health equity funds; and vouchers. These have contributed to improvements in access to essential RMNCH services and reduced inequity. Health workforce policy efforts have focused on improving numbers, and capacity and distribution of workers, particularly midwives. At the centre of the midwifery improvement strategy has been a government delivery incentive scheme, which is associated with a dramatic improvement in deliveries at facilities and with a skilled birth attendant. Key delivery strategies have included: development of improved health infrastructure, including more health facilities of all categories, and improved structural capacity of these facilities to provide quality of care; implementation of an integrated routine primary health care delivery system through provinces and districts; vertical programmes for immunizations, malaria and dengue; and health promotion and behaviour change campaigns for exclusive breastfeeding and antenatal care-seeking.

## Investments and initiatives outside the health sector

Sectors outside of health have been central to mortality declines and improvements in health. Cambodia has seen improvements in education (primary school enrolment, time spent in school, literacy), nutrition and access to improved water and sanitation. A 60% reduction in poverty was seen across all population groups between 2004 and 2011. Policy and programme inputs in these areas have included increased resource allocation and partnerships with development partners, nongovernment organisations (NGOs) and civil society; clear policies and strategies; identification and targeting of high risk groups and populations, with an emphasis on reaching the poor; and forming links between different sectoral areas.



### Political economy

Political commitment to health has been driven by progress at four levels. First, political stability has allowed initiatives and investments to be made and sustained in the long term. Second, Prime Ministerial commitment to maternal and reproductive health has helped promote and sustain progress. Third, there is high level recognition, acceptance and commitment to international targets and initiatives – and a willingness to be held to global standards. Fourth, there is a culture of collecting and using data to evaluate progress and make programme decisions at the highest level by national consensus. This approach has allowed problems to be both identified and accepted and has resulted in important programme initiatives – including the 2004 child health benchmark report and subsequent action to scale up child survival efforts and the 2006 midwifery review and subsequent actions to improve the availability of midwives and to develop the Government Midwifery Incentive Scheme (GMIS).

### Governance and leadership

Direction is set at the highest level by establishing clear development goals. The Sector Wide Management (SWiM) mechanism for health is used to align and direct the contribution and activities of the development partners in achieving MOH objectives. The Technical Working Group for Health and other sub-technical working groups and task forces have helped with coordination and development of technical content. The NGO support organization, MEDiCAM, has helped facilitate collaboration between government activities and activities at the grassroots level. The MOH provides leadership and plays a central role as a technical advisor to the Provincial Health Departments (PHD) and the Operational Health District (OD) health offices. The ODs are the key actors for activities implemented at health facilities and community level – and are responsible for translating national policies into local actions.

### Challenges

Inequity is a key challenge which must be addressed to ensure that all population groups in the country see health gains. Technical priorities are improving child nutrition, preventing newborn deaths and improving the quality of care at all levels, with an emphasis on the quality of intrapartum, essential newborn and postpartum care. Priority areas for future action include:

1. Reducing socioeconomic inequities;
2. Improving quality of care for both newborns and children;
3. Scaling up the midwifery and nursing workforce;
4. Decreasing high out-of-pocket expenditure;
5. Developing or expanding community-based approaches to improving nutritional status and management of children with pneumonia and diarrhoea; and
6. Continued investments in education, water and sanitation and poverty reduction.



## 2. Introduction

Cambodia has made considerable progress in improving health in the last 20 years and is on track to achieve MDGs 4 (to reduce child mortality) and 5a (to reduce maternal mortality). This review provided an opportunity for the Ministry of Health (MOH) in Cambodia to synthesize and document how the country achieved these health gains and to identify remaining challenges. The aim was to use findings to inform programming and future priorities in the country.

The primary objective of the review was to identify factors both within and outside the health sector that have contributed to reductions in maternal and child mortality in Cambodia – focusing on how improvements were made, and emphasizing policy and programme management best practices. It was recognized that it can be difficult to establish causal links between policy and programme inputs and health impact. For this reason, plausibility criteria for defining success factors were developed based on an impact model which linked policy and programme inputs with potential mortality reductions (Annex 1). Research is needed to better quantify how policies and programmes contribute to improved health outcomes. More data in this area would enable the analysis to be further refined.

The review included both quantitative and qualitative methods. The first draft was developed by local and international experts. One-on-one interviews and

group meetings with stakeholders to further review, revise and get consensus on findings were conducted between February and April 2014. A stakeholder review meeting was conducted on 1 April 2014. A final draft was developed and approved by the MOH in April 2014.



### Methods used for the Success Factor Study in Cambodia

**A literature review** based on peer-reviewed and grey literature, policy documents, programme evaluations and sector strategies and plans.

**A review of quantitative data** from population-based surveys, routine data systems, international databases and other sources.

**One-on-one interviews and meetings with key stakeholders** to inform and help validate findings and to identify factors based on local knowledge and experience.

**A review of the draft document** by stakeholders and local experts to finalize findings.

### Defining criteria for success factors

To be included as key factors, policy and programme inputs had to meet four plausibility criteria including:

- Potential impact (likely to have contributed to mortality reduction based on an impact framework and available data);
- Temporal association (had been implemented long enough to have influenced mortality);
- Scale (had reached a large enough target population to influence mortality); and
- Consensus (broad agreement between key stakeholders within and outside the health sector).



### 3. Country Context

#### Overview

Cambodia is situated in South-East Asia and is comprised of lowlands and mountainous terrain.<sup>3</sup> Cambodia gained independence from France in 1953. In 1975, five years after a military coup, the Khmer Rouge came to power and applied a radical and genocidal regime. The Khmer Rouge was defeated in 1979, after causing the deaths of almost two million civilians, including significant numbers of health care staff.<sup>4</sup>

Following the signing of the Paris Peace Accords in 1991, which included a Declaration on the Rehabilitation and Reconstruction of Cambodia,<sup>5</sup> the Ministry of Health embarked on health sector reform through a Strengthening Health Systems Project with the assistance of development partners.<sup>6</sup> A free election was held in May 1993 and the country became the Kingdom of Cambodia, a constitutional monarchy, marking its progress towards democracy.<sup>7</sup> This was the beginning of a long process toward growth and development that continues today.

At the centre of Cambodia's development has been a period of sustained peace and stable government, coupled with policies aimed at rebuilding essential infrastructure and institutions. Cambodia's economy has improved dramatically, with gross domestic product per capita increasing from \$608 in 1993 to \$2454 in 2012 (purchasing power parity (PPP, Int\$)) (see Table 1: Key country indicators). Economic growth is associated with a decline in the national poverty rate from 53% in 2004 to 21% in 2011,<sup>8</sup> and with improved access to education, water and sanitation. A large proportion of Cambodia's population of 15 million continues to live in communes (social units) in rural areas (80%); and 90% of the country's poor are rural dwellers. Reaching these populations remains a high priority.





**Table 1: Key country indicators – health and development\*+**

	<b>INDICATOR</b>	<b>1990-1999</b>	<b>2000-2009</b>	<b>2010-PRESENT</b>
<b>Population</b>	TOTAL POPULATION (millions)	9 (1990)	12 (2000)	15 (2012)
	TOTAL FERTILITY (births per woman)	6 (1990)	4 (2000)	3 (2011)
<b>Health Financing</b>	TOTAL HEALTH EXPENDITURE PER CAPITA (PPP, constant 2005 international \$)	41 (1995)	58 (2000)	135 (2011)
	OUT-OF-POCKET HEALTH EXPENDITURE (as % of total expenditure on health)	69 (1995)	71 (2000)	57 (2011)
<b>Economic Development</b>	GROSS DOMESTIC PRODUCT PER CAPITA (PPP, constant 2005 international \$)	608 (1993)	939 (2000)	2454 (2012)
	FEMALE PARTICIPATION IN LABOR FORCE (% of females age 15-64)	81 (1990)	80 (2000)	82 (2012)
	GINI INDEX (0 equality to 100 inequality income distribution)	38 (1994)	36 (2009)	N/A
<b>Health Workforce</b>	PHYSICIANS (per 1000 population)	0.1 (1992)	0.2 (2000)	0.2 (2010)
	NURSES AND MIDWIVES (per 1000 population)	N/A	0.9 (2000)	0.9 (2010)
<b>Education</b>	GIRLS' PRIMARY SCHOOL NET ENROLLMENT (% of primary school age children)	76 (1997)	95 (2003)	97 (2012)
	ADULT LITERACY RATE (% of males (M) and % females (F) aged 15 and above)	79 (M) 57(F) (1998)	85 (M) 64 (F) (2004)	83 (M) 66 (F) (2009)
<b>Environmental Management</b>	ACCESS TO CLEAN WATER (% of population with access to improved source)	31 (1990)	44 (2000)	67 (2011)
	ACCESS TO SANITATION FACILITIES (% of population with improved access)	9 (1990)	18 (2000)	33 (2011)
<b>Urban Planning/ Rural Infrastructure</b>	POPULATION LIVING IN URBAN AREAS (% of total population)	16 (1990)	19 (2000)	20 (2012)
	ELECTRIC POWER CONSUMPTION (kilowatt hours per capita)	13 (1995)	33 (2000)	164 (2011)
<b>Human Development Index</b> (Composite of life expectancy, literacy, education, standards of living, quality of life)	VALUE (reported along a scale of 0 to 1; values nearer to 1 correspond to higher human development)	N/A	.45 (2000)	.54 (2012)
	COUNTRY RANK (2012)	138		
<b>Good Governance</b> (Reported along a scale of -2.5 to 2.5; higher values correspond to good governance)	CONTROL OF CORRUPTION (extent that public power is used for private gain)	-0.96 (1996)	-0.85 (2000)	-1.04 (2012)

\*See Table 2 for data on coverage of key RMNCH indicators

+Source: World Development Indicators, UNDP, World Bank (Worldwide Governance Indicators)

**Table 2: Coverage indicators for maternal and child health**

PERIOD	KEY INDICATORS	CDHS 2000	CDHS 2005	CDHS 2010	MOST RECENT
Preconception	% of married women (15-49) currently using modern contraceptive methods	19	27	35	34 (HIS 2013)
	Unmet need	32		17	
Pregnancy	% of women receiving at least four antenatal care visits during pregnancy from any provider	9	27	59	56 (HIS 2013)
Delivery and immediate post-delivery	% of births attended by a skilled provider	32	44	71	84 (HIS 2013)
	% of births given in a health facility	10	22	54	80 (HIS 2013)
	% of newborns breastfed within one hour	11	35	66	74 (HIS 2013)
	% of HIV-positive pregnant women receiving ART for mother-to-child transmission			56 (HIS)	67 (HIS 2013)
Newborn period and childhood	% of mothers receiving a postnatal contact within 48 hours of birth	30	64	70	-
	% of infants under 6 months of age receiving exclusive breastfeeding	11	60	74	-
	% of children (12-23 months) fully vaccinated by 12 months of age	31	60	74	-
	% of children <5 receiving vitamin A supplement in the previous six months	29	36	71	-
	% of children (<5) with ARI for whom treatment/advice was sought	35	48	65	-
	% of children <5 with ARI who received AB	-	-	39	-
	% of children (<5) with diarrhoea for whom treatment/advice was sought	22	37	59	-
	% of children < 5 with diarrhoea receiving ORT	74	58	53	-



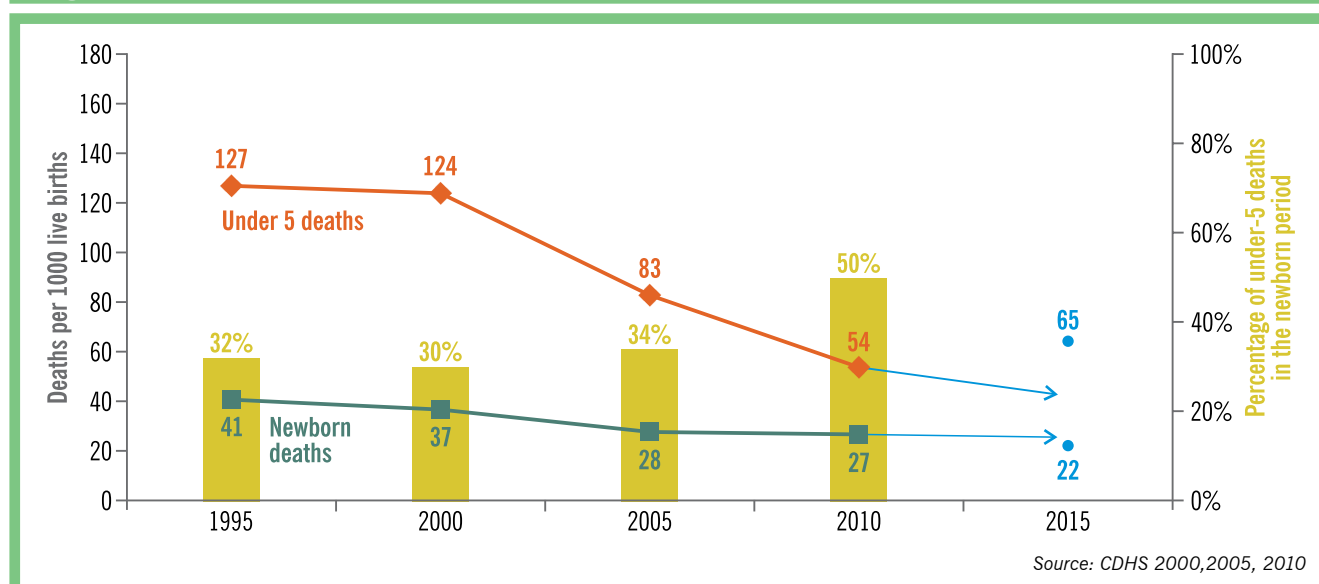
## 4. Key Trends, Timelines and Challenges

### Under 5 child deaths

Between 1995 and 2010, national data estimate that under 5 child mortality in Cambodia declined by 57% from 127 to 54/1000 live births<sup>7</sup> (Figure 1). Mortality estimates calculated by the UN Inter-Agency Group for Childhood Mortality Estimation show an even greater decline between 1990 and 2012, with under 5 child mortality falling by 66% from 116 to 40 per 1000 live births, an average annual rate of mortality reduction of 4.9%.<sup>9</sup> Both data sources indicate that Cambodia has achieved its national MDG goal (65/1000 live births) and is on track to achieving its global MDG goal (39/1000 live births).

The rate of decline in newborn mortality has been considerably slower than that of under 5 mortality. For this reason, the proportion of under 5 deaths occurring in the newborn period has risen steadily – and in 2010 represented 50% of all under 5 mortality. A high proportion of newborn deaths occur around delivery and in the first 24 hours of life, highlighting the challenge of delivering effective interventions to mothers and newborns during delivery and in the early postnatal period. Mortality declines are much slower among the poor, less educated and rural populations – and this equity gap remains an important challenge.

**Figure 1: Trends in under 5 and newborn mortality, 1995-2010**



### Child health policy and programme inputs 1995-2013

1995-2000	2001-2005	2006-2010	2011-2013
<p><b>1990 – onwards</b> Immunization policies and plans</p> <p><b>1994, 1996 and ongoing</b> Vitamin A policies; vitamin A linked with routine immunization (1996)</p> <p><b>1996</b> Health Coverage Plan</p> <p><b>1996-2006 and ongoing</b> Health Workforce Development plan</p> <p><b>1997</b> National policy on ARI/CDD and Cholera control</p> <p><b>1997</b> National malaria and dengue control programmes</p> <p><b>1998</b> Policy &amp; Guidelines on Integrated Management of Childhood Illnesses (IMCI) in health centres</p>	<p><b>2002, 2008</b> National Policy on Infant &amp; Young Child Feeding</p> <p><b>2003-2007</b> Cambodia Nutrition Investment Plan</p> <p><b>2003-2008</b> Health Strategic Plans</p> <p><b>2004</b> Child Survival Benchmark review and high level consultation</p> <p><b>2004</b> Child Survival Steering Committee and Management Committee</p> <ul style="list-style-type: none"> <li>- Child survival scorecard</li> <li>- Exclusive breastfeeding campaign</li> </ul> <p><b>2005</b> Sub-decree 133 on Marketing of Products for Infant &amp; Young Child Feeding</p>	<p><b>2006-2015</b> Child Survival Strategy</p> <p><b>2008-2012</b> The Strategic Framework for Food Security &amp; Nutrition</p> <p><b>2008-2015</b> Health Strategic Plans</p> <p><b>2009-2015</b> The National Nutrition Strategy</p>	<p><b>2010-2015</b> Fast Track Initiative Road Map for Reducing Maternal and Newborn Mortality</p>



For example, children in the poorest quintile are three times more likely to die before their fifth birthday than those in the wealthiest quintile. Children born in rural areas are three times more likely to die in the newborn period than those born in urban areas. Children born in Preah Vihear/Steung Treng and Mondol Kiri/Rattanak Kiri provinces have more than a six times risk of dying before age 5 than a child born in Phnom Penh City. Reaching high-risk populations will be essential for continuing mortality declines into the future.<sup>7</sup>

Reductions in mortality are associated both with improved coverage of effective interventions to prevent or treat the most important causes of child mortality; and with improvements in socioeconomic conditions. Some improvements in childhood nutritional status, particularly in severe stunting and underweight, are likely to have contributed to mortality declines; as well as improvements in rates of exclusive breastfeeding, early breastfeeding and coverage with vitamin A supplements.



### Maternal mortality

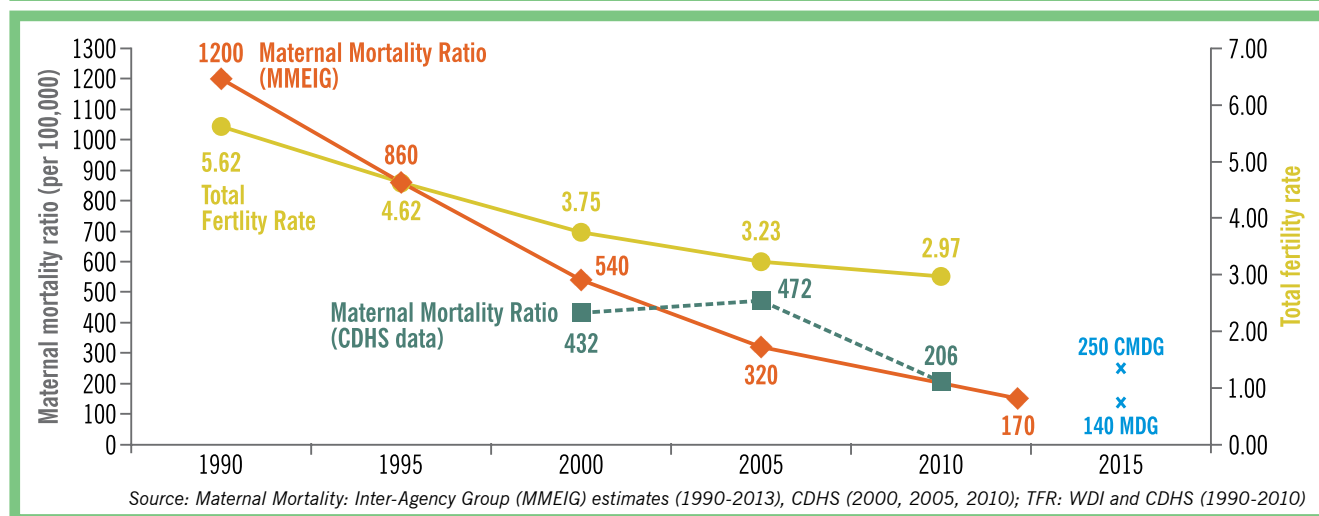
Between 2000 and 2010, national data estimates show that maternal mortality in Cambodia declined by 52% from 432 to 206 per 100 000 live births.<sup>7</sup> Mortality estimates calculated by the Maternal Mortality Estimation Inter-Agency Group show an even greater decline for the period 1990 to 2013, with maternal mortality falling 86% from 1200 to 170 per 100 000 live births, an annual rate of decline of 8.1%.<sup>10</sup> In 2010 the country met the national MDG maternal mortality target of 250/100 000 live births using both global estimates and national DHS estimates and is on track to achieving the global MDG target of 140/100 000 live births by 2015 (Figure 2).

Declines in maternal mortality are associated with a halving of the total fertility rate between 1990 and 2012 – from six to three – and associated increases in birth interval (the median estimated birth interval in 2010 was 40 months) and reductions in births to very young and very old women.

Fertility declines are associated with improvements in the contraceptive prevalence rate and socioeconomic and educational improvements.<sup>7</sup>

In addition, there have been significant increases in the proportion of women attending at least four antenatal care (ANC) visits, making more of these visits early in pregnancy, delivering with a skilled birth attendant and delivering at health facilities. Available data also suggest that the number of facilities able to provide basic and comprehensive Emergency Obstetric and Newborn Care (EmONC) has increased considerably from 25 and 19 in 2009 to 96 and 36 respectively in 2013; although, there are limited data on the current quality of intrapartum and early newborn care available<sup>11</sup> (Table 2). Overall, declines in maternal mortality are therefore associated both with declines in fertility and other socioeconomic improvements; and with improved availability of and demand for skilled delivery care.

**Figure 2: Trends in maternal mortality and fertility, 1990-2010**



### Maternal health policy and programme inputs 1995-2010

1995-2000	2001-2005	2006-2010	2011-2013
<p>1995 Birth Spacing Policy</p> <p>1996 Health Coverage Plan</p> <p>1996-2006 and ongoing Health Workforce Development plan</p> <p>1997 Safe Motherhood Policy</p> <p>1997 Legalization of abortion</p>	<p>2005 Midwifery forum</p>	<p>2006 Comprehensive midwifery review</p> <p>2006-2010, 2013-2016 National Reproductive and Sexual Health Strategies</p> <p>2007 High level midwifery taskforce</p> <p>2007 Midwife salary scale increased</p> <p>2007 Prakas – Government delivery incentive Scheme</p> <p>2008 Midwifery training – three year direct entry</p> <p>2008-2009 EmONC and delivery care quality assessments</p> <p>2009 ANC behaviour change campaign</p>	<p>2010-2015 Fast Track Initiative Road Map for Reducing Maternal and Newborn Mortality</p> <p>2010-2015 EmONC Improvement Plan</p>





**Table 3: Factors associated with mortality declines, 2000-2010**

	Factors influencing child mortality declines	Factors affecting maternal mortality declines	Challenges
<b>Improved coverage of effective interventions to prevent or treat the most important causes of maternal and child death</b>	<ul style="list-style-type: none"> <li>Essential immunizations (children fully immunized rose from 40% (2000) to 79% (2010)). Cambodia was certified Polio free in 2000 with no measles cases since 2011</li> <li>Newborns protected against NNT (85% 2010)</li> <li>Exclusive breastfeeding: rose from 11% (2000) to 74% (2010)</li> <li>Early BF (within 1 hr of birth): rose from 11% (2000) to 66% (2010); pre-lacteal feeds fell from: 57% (2000) to 19% (2010)</li> <li>Children receiving vitamin A supplements: rose from 29% (2000) to 71% (2010)</li> <li>Children with suspected pneumonia seeking treatment from a trained provider: rose from 48% (2005) to 64% (2010); % suspected pneumonia treated: 39% (2010)</li> <li>Children with diarrhoea seeking care from a trained provider: rose from 22% (2000) to 59% (2010)</li> <li>Birth spacing</li> </ul>	<ul style="list-style-type: none"> <li>Improved contraceptive prevalence: use of modern methods rose from 19% (2000) to 35% (2010)</li> <li>Increased median birth interval: to 40 months</li> <li>Increased antenatal care visits: ANC 4+ visits rose from 9% (2000) to 59% (2010). The median gestational age for first ANC visit: declined from 5.8 months (2000) to 3.4 months (2010)</li> <li>Improved skilled attendance at birth: rose from 32% (2000), to 71% (2010)</li> <li>Improved facility deliveries: rose from 10% (2000) to 54% (2010)</li> <li>Improved availability of BEmONC facilities: rose from 25 (2009) to 96 (2013) and CEmONC: rose from 19 (2000) to 36 (2013)</li> </ul>	<ul style="list-style-type: none"> <li>Limited improvements in treatment practices for pneumonia and diarrhoea. Zinc not widely used for management of diarrhoea</li> <li>Wide variations in coverage and nutritional status by geographic area; and reduced coverage in poor, less educated and rural populations</li> <li>Quality of care for routine delivery, immediate postpartum and postnatal care needs improvement</li> <li>Inequities in income, infrastructure and availability of education continue; remote, rural and less educated populations are more difficult to reach</li> </ul>
<b>Economic, environmental and educational improvements</b>	<ul style="list-style-type: none"> <li>Proportion of the population that is below the poverty line (53% in 2004 to 21% in 2011)</li> <li>Per capita income (\$774 in 1993 to \$2150 in 2012)</li> <li>Female literacy (57% in 1998 to 66% in 2009)</li> <li>Girls net enrolment in primary education (76% in 1997 to 97% in 2012)</li> <li>Access to clean water (31% in 1990 to 67% in 2011)</li> <li>Access to improved sanitation (9% in 1990 to 33% in 2011)</li> </ul>		

Sources: See Tables 1 and 2



**Nutrition**

The nutritional status of children in Cambodia improved between 2000 and 2010. Improvements were greatest for severe undernutrition (< -3 Z-score) than for moderate undernutrition (< 2 Z-score) (Figure 3). Severe stunting (height for age <-3 Z-score) decreased by half during this period (from 25.5% to 13.6%) with similar reductions observed for severe wasting (weight for height <-3 Z-score) and underweight (weight for age <-3 Z-score). Most of the changes in wasting and underweight took place between 2000 and 2005 with little further improvement over the following five years to 2010. In addition, improvements have been noted in early breastfeeding (within one hour of birth), reduced prelacteal feeding, and in rates of exclusive breastfeeding and vitamin A supplementation. Taken together these improvements are likely to have contributed to child mortality reductions in Cambodia. Undernutrition including fetal growth restriction, stunting, wasting, and deficiencies of vitamin A and zinc along with suboptimal breastfeeding accounted for 45% of all child deaths globally in 2011<sup>12</sup> – children with severe and/or multiple deficits are more at risk.

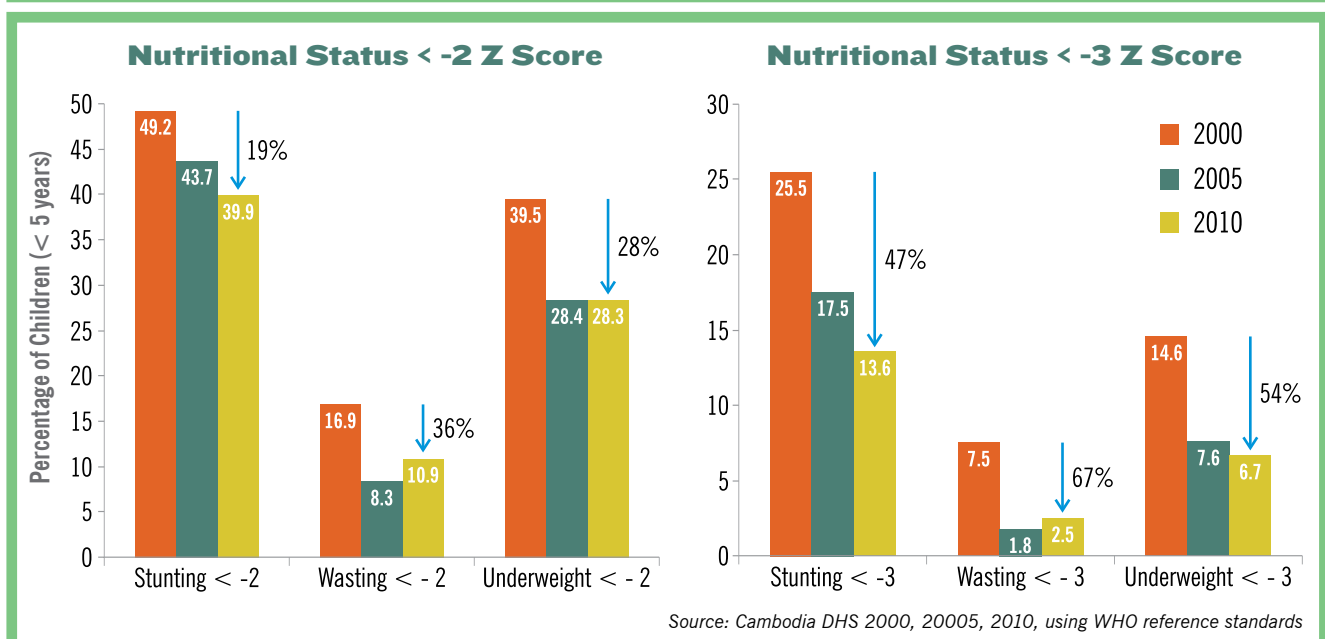
In 2010 around 40% of children remained stunted or underweight in Cambodia (<2 Z-scores); and 19% of women were underweight. In addition, the prevalence of anaemia is high in children under 5 (rates of any anaemia were estimated to be 55% in 2010, with rates in some provinces of 65%) and in women of



childbearing age (rates of any anaemia were estimated to be 44% in 2010) – with higher rates in rural areas and in poor and less educated populations.<sup>7</sup>

Chronic undernutrition in Cambodia is associated with a number of factors including: reduced food security (18% of the population was estimated to live under the food security poverty line in 2007);<sup>13</sup> lack of improved sanitation facilities and high rates of open defecation; less household wealth; less education; short birth intervals and reduced maternal nutritional status.<sup>14</sup> Poor sanitation, in particular, increases the incidence of diarrheal disease. Associated cycles of reduced food consumption, and decreased absorption contribute to weight loss, highlighting the importance of improving water and sanitation infrastructure in high-risk areas to improve nutritional status.

**Figure 3: Trends in childhood stunting and underweight, 2000-2010**





## 5. Health Sector Initiatives and Investments

Health sector advances have been driven by policy and programme inputs in three areas:

- laws, standards and guidelines;
- health systems; and
- delivery strategies.



### 5.1 Laws, standards and guidelines to support implementation of RMNCH interventions

#### Focusing on universal coverage with a package of high-impact interventions

At the centre of health improvements is a focus on delivering high-impact interventions along the continuum of care. In 2003, the Government issued the Cambodia Millennium Development Goals (CMDG) Report, outlining country-specific goals to be reached by 2015.<sup>15</sup> Achieving the MDGs provided direction for the National Strategic Development Plans 2006-2010 and 2009-2013 and Health Strategic Plans 2003-2008 and 2008-2015, which prioritized maternal and child health (MCH) and focused on improving delivery of a package of high-impact health interventions. These strategies were supported by a Fast Track Initiative Road Map

for Reducing Maternal and Newborn Mortality (2010-2015) which was designed to guide domestic and external investments around interventions known to enhance survival. General high-level strategies support health goals. The Rectangular Strategy (2003-2008) is an overarching policy of the Cambodian Government which places good governance at the heart of its approach for the advancement of sustainable development.<sup>16</sup> The strategy recognizes the broader environment required for the reduction of poverty and meeting of MDG targets: the rule of law and political stability are necessary components.

**Establishing technical standards**

*Reproductive and maternal health*

The pronatalist policies that dominated between 1979 and 1991 were reversed in the early 1990s and a focus was placed on increasing access to family planning methods to respond to maternal and reproductive health needs.<sup>17</sup> A birth spacing policy was implemented in 1995. A National Safe Motherhood Protocol was developed in 1997, which established standards for maternal health, and standards were consolidated in National Reproductive and Sexual Health Strategies (2006-2010 and 2013-2016). These strategies defined targets for contraceptive use, ANC, and skilled attendance at birth, among others, and influenced priorities in the two Health Strategic Plans (HSPs) and the National Strategic Development Plans (NSDP), each geared towards achieving the MDGs. In 1997, abortion was legalized. The law is one of the most liberal in Asia; however, it was not implemented until 2005, with the help of external partners.<sup>18</sup> In 2010, medical abortion was registered as a standard procedure.

*Newborn and child health*

The year 2004 was a turning point for child survival in Cambodia. Slow progress in reducing child mortality was analysed and findings summarized in a benchmark report.<sup>19</sup> The findings were presented at the High-Level Consultation on Millennium Development Goal 4, which brought together representatives from all major child survival partners in Cambodia – and was followed by an NGO consultative workshop. The consultation noted that child health interventions had been implemented well by some vertical programmes (Expanded Programme on Immunization, nutrition/vitamin A, malaria/dengue control, HIV/AIDS). These programmes had established clear targets, strong commitment from government and donors, clear responsibilities, and adequate funding. However, it was also noted that health interventions addressing the most important killers of children, including pneumonia, diarrhoea, neonatal causes and undernutrition, had not been given sufficient attention or resources. Subsequently child health received renewed attention. The Ministry of Health established a Child Survival Steering Committee and a Child Survival Management Committee (CSMC) to better coordinate planning and resources; a national child survival strategy was developed and finalized at a national workshop in March 2006 and disseminated in April 2007. This strategy outlines approaches to improving child health including interventions and methods of delivery. It focuses on the delivery of 12 priority child survival interventions, tracked using a child survival scorecard. In addition, the Health Strategic Plan 2 (2008-2015) further focuses on the continuum of care in Programme 1 for reproductive, maternal, newborn and child health and nutrition. Technical standards for Integrated Management of Childhood Illness (IMCI), nutrition, immunizations, malaria and HIV/AIDS were developed and used to guide programme activities in each of these areas.





### Developing mechanisms for improving coordination and sector-wide management

In 1999 the government implemented a Sector-Wide Approach (SWAp) to support the health sector. This approach was designed to facilitate collaboration and coordination between the Ministry of Health (MOH) and health partners around sector-wide planning and financing of health services. Subsequently, the MOH adopted a modified version of sector coordination – sector-wide management (SWiM) – which refined features of the initial SWAp concept.<sup>20</sup>

A number of structures support partnerships under the SWiM. A Technical Working Group for Health (TWGH) is the main forum for consultations between government and development partners (DPs). Its membership includes government, NGOs, bilateral donors and development agencies. Chaired by the Secretary of State, and cochaired by WHO, it meets on a monthly basis. A number of sub-technical working groups are responsible for development of guidelines, planning and tracking progress in specific areas. At the provincial level the Pro-TWGH also meets on a monthly basis, bringing together key players from provincial government, DPs and NGOs. An RMNCH task force is responsible for tracking progress towards the MDGs. Four MOH Task Forces (TFs) on each of the HSP2 priorities are made up of relevant technical experts who monitor

implementation progress of the Fast Track Initiative and HSP2. Several other groups coordinate technical activities in particular areas.

Key processes in the annual calendar also facilitate dialogue and coordination between government and DPs. In March the Joint Annual Performance Reviews (JAPRs), conducted in conjunction with the National Health Congress, is attended by institutions at all levels, other relevant ministries, health partners, provincial authorities, community councils, members of the community, professional associations, NGOs and for-profit private organizations and other stakeholders. Annual operational plan (AOP) reviews, in which DPs participate, provide an opportunity for partners to assess the draft Health Sector AOP for the following year (based on a budget envelope negotiated with the Ministry of Economy and Finance) and to work toward alignment of their support to AOP needs.<sup>20</sup>

Although the SWiM approach continues to need improvement, it has resulted in improved coordination and has helped ensure that development partners align with government priorities and plans. It has also contributed to increased resource allocation and action in RMNCH.



## Summary of health sector policy and programme inputs that have contributed to improvements in maternal and child health, 1990-2012

### Laws, standards and guidelines

#### Universal coverage with package of high impact interventions

- Rectangular strategy (2003-2008)
- Health Strategic Plans (2003-2007) (2008-2015)
- National Strategic Development Plans (2006-2010) (2009-2013)
- Fast Track Initiative Road Map for Reducing Maternal and Newborn Mortality (2010-2015)
- Child Survival Strategy (2006-2015)
- National Reproductive and Sexual Health Strategies (2006-2010), (2013-2016)

#### RMNCH technical standards

##### *Reproductive and maternal health*

- Birth Spacing Policy (1995)
- Safe Motherhood Policy (1997)
- Abortion law (1997)
- EmONC Improvement Plan (2010-2015)

##### *Newborn and child health*

- Policy & Guidelines on Integrated Management of Childhood Illnesses (IMCI) in health centres (1998)
- Sub-decree 133 on Marketing of Products for Infant & Young Child Feeding (2005)
- National nutrition program, policies and plans (1994 onwards)
- National policy on ARI/CDD and Cholera control (1997)
- National malaria and dengue control programs (1997)
- Immunization policies and plans (1990 onwards)
- HIV/AIDS prevention and control plans (1992-1993), (1993-1998)

#### Mechanisms for improving coordination

- RMNCH task force
- Child survival management committee
- Health Sector Support Project (HSSP 1 and 2)
- Technical working groups for health (national and provincial)
- Sub-technical working groups for MCH (nutrition, ARI/CDD, IMCI, immunizations etc)



### Strengthened health systems

#### Health care financing

- Increased per capita expenditure on health and reduced out-of-pocket expenditure
- Introduction and scaling up of financial protection schemes; Performance-based contracting, HEF, vouchers
- Government delivery incentive scheme
- Sector-wide funding coordination mechanism (HSSP)

#### Health workforce

- Health Workforce Development plan (1996-2006), (2006-2015)
- Comprehensive plan to improve availability of midwives: improved recruitment, deployment standards, incentives (GMIS)
- Improving staff competence: improved technical standards; pre-service curricula; in-service training methods

#### Tracking progress with data

- HIS strengthening
- Joint Annual Performance Reviews
- Regular population-based surveys and QOC assessments
- Sub-national MDG tracking
- Maternal death reviews and reporting



### Delivery strategies

#### Improved essential health infrastructure

- The health coverage plan (1996) and subsequent investments have improved availability of facilities providing key services at all levels

#### Integrated routine system through provinces, districts and health centres

- MPA and CPA run through provinces, districts and health centres with emphasis on reaching all communities using VHVs, outreach, and links with NGOs and community groups

#### Targeted vertical programmes

- Immunization and malaria programmes have focused intensively on establishing supply chain, outreach and micro-planning

#### Health promotion and behaviour change campaigns

- Comprehensive campaigns using multiple channels and methods – linked with policies and programmes – have improved exclusive breastfeeding and ANC practices



## 5.2 Strengthened health systems



### Health financing

Since the 1990s, the MOH has delivered major reforms, including the 1996 Health Financing Charter to regulate point-of-service payment. Total health expenditure per capita increased from \$41 in 1995 to \$135 in 2011 (PPP, Int\$),<sup>6</sup> and there has been a gradual increase in national budget allocations to the health sector from US\$ 49 million in 2005 to about US\$ 200 million in 2012 (around 12% of total government expenditure and 1.4% of GDP). Although out-of-pocket expenditure has been decreasing since 1995, it accounted for 57% of the total expenditure on health in 2011 (see Table 1: Key country indicators).

A range of financial protection measures have been developed and implemented to improve access to RMNCH services, including performance-based contracting, health equity funds, and vouchers.<sup>19</sup>



An analysis of six reproductive and maternal health services in Cambodia found that between 2000 and 2010, inequity was substantially reduced across several services, including uptake of ANC, facility-based deliveries and births attended by skilled birth attendants, met need for family planning, and abortions by a skilled provider.<sup>22</sup> In 2007, a national incentive scheme was launched to encourage facility deliveries with a skilled birth attendant (see highlight box). Skilled birth attendants are paid US\$ 10-15 for each live birth in a health centre or a referral hospital.<sup>23</sup> The approach was associated with a substantial rise in health facility deliveries between 2006 and 2009.<sup>24</sup>

Donor alignment and harmonization has been important for improving efficiency of resource allocation. Donors contribute a sizeable amount to Cambodia's health budget;<sup>18</sup> however, resources have not always been aligned with national health priorities.<sup>25</sup> The Council for Administrative Reform has worked closely with ministries and donors to coordinate external resources. Through the sector-wide management (SWiM) approach, coordination of funding streams for MCH from external partners is done through various coordinating mechanisms, including the Health Sector Support Project (HSSP) – and aligned with key priorities set out in the government's Health Strategic Plans (HSP1 and 2).

A number of challenges remain, including continued high out-of-pocket expenses. More could be done to ensure transparency and efficiency of public spending – and to ensure that vulnerable populations are targeted. Central procurement mechanisms for medicines and other medical supplies need strengthening to improve efficiency and cost effectiveness. Harmonization and integration of the existing major health financing schemes, which are fragmented, remain a challenge along with development of new social health insurance schemes for the formal sector. The Government of Cambodia has recently developed a National Social Protection Strategy (2011-2015), which was signed by the Prime Minister in 2011. This outlines an approach to provide a social safety net system for the poorest populations. Plans to pilot this approach are currently being developed.



## Health sector spotlight

### PRINCIPAL HEALTH FINANCING SCHEMES USED IN CAMBODIA

**Performance-based contracting (PBC)** has been developed as a supply-side financing strategy to improve the performance of public health facilities. Since 1999, two contracting arrangements – outsourcing management of districts to international organizations; and use of the existing government management structure - have been implemented in Cambodia. Several studies showed that both contracting models contribute to improved facility performance and increased health service utilization.<sup>26, 27, 28</sup> However, Cambodian policy makers were concerned that outsourcing management to international organizations was expensive and would undermine the development of sustainable institutions. Therefore, a decision was made to scale up the contracting model without an external contractor (internal contracting). Public health facilities are given a certain level of autonomy as Special Operating Agencies (SOAs) and provided with a performance-based payment on the top of regular government subsidies. The contracting approach has been financed by donor and domestic funding. To date, it has been implemented in 36 health districts and provincial hospitals. A Global Alliance for Vaccines and Immunization (GAVI) health system strengthening PBC approach has been implemented in 10 health districts, and a case study suggests that such PBCs also contribute to improving health facility performance and health outputs.<sup>26</sup>

**Health equity funds (HEFs)** are a demand-side health financing mechanism to promote access to priority public health services for the poor. The management of the funds is entrusted to a third party, usually a local NGO, which operates independently of the health facility. HEF beneficiaries are identified according to eligibility criteria either in the community before health care demand (pre-identification) or at the health facility through interviews by NGO staff (post-identification). At the health facility, eligible poor patients get support from HEFs to cover costs including: user fees, transportation and food. Since the first pilots in 2000, HEFs have been gradually scaled up. By 2013, HEFs were implemented in 48 health districts, covering 70% of referral hospitals (RHs) and 45% of health centres. Available evidence suggests that hospital-based HEFs effectively address financial barriers to accessing public health services for the poor and reduce their out-of-pocket health expenditures.<sup>29-33</sup>

**Reproductive health vouchers** are a demand-side health financing mechanism to stimulate demand for these services. Subsidies go directly to the consumer in the form of a voucher or token that is redeemed when using services. The first voucher scheme for safe motherhood services was introduced in early 2007 in three rural health districts, as an extension of HEFs, targeting poor pregnant women for safe motherhood services (antenatal care, delivery and postnatal care) and referral services in case of complications. In addition to the payment of user fees, voucher holders also get support for transportation. Findings from recent studies suggest that vouchers are effective in improving access to institutional deliveries for poor pregnant women, especially when implemented together with HEFs and contracting.<sup>34, 35</sup> By 2013, reproductive health vouchers had been implemented in 27 health districts in Cambodia. The remaining challenges for vouchers are financial sustainability – the scheme is currently funded by external subsidies - and integration with HEFs.

**Government delivery incentive scheme** is a government initiated and funded supply-side and output-based health financing mechanism aimed at motivating skilled birth attendants (including midwives, doctors or other trained health personnel) to promote deliveries in public health facilities. It became operational nationwide in late 2007, following a joint *Prakas* (directive) by the Ministry of Health and the Ministry of Economy and Finance to allocate government budget to the payment of an incentive for skilled birth attendants of US\$ 15 for each live birth attended in health centres and US\$ 10 in hospitals. The incentives are shared with other health personnel in the facility and with others including Village Health Support Groups, village chiefs and traditional birth attendants (TBAs). This approach has encouraged communities to refer women to facilities for delivery. The number of deliveries is reported monthly by health facilities through the routine health information system. The report must be signed by the director of the health facility and, for health centres, also by the commune chief. Based on the number of reported deliveries, incentives are disbursed quarterly to the facilities through public financial disbursement channels. A recent evaluation showed that the introduction of the incentive scheme contributed to significant improvements in institutional deliveries as well as skilled birth attendance rates.<sup>34</sup>



### Human resources

A comprehensive approach to strengthening Cambodia's health workforce has been undertaken since the 1990s through Health Workforce Development Plans. Well-defined targets based on reliable data influenced the Council of Ministers to increase the number of civil service workers in the health sector by 50% in mid/late 2000. In particular, Cambodia had an alarming shortage of midwives.<sup>37</sup> In 2007, a High-level Midwifery Taskforce was convened in response to findings from a 2006 comprehensive midwifery review and the high maternal mortality ratio (MMR). Increasing the number of midwives was found to be a key priority: the MOH adopted the slogan "place midwives in all health centres" as the cornerstone of its efforts to reduce maternal mortality. From 2008, midwifery training was changed from a three-year nurse training plus one-year midwifery training, to a three-year direct entry midwifery training to boost the number of secondary midwives. By 2009, all health centres (HCs) had at least one primary midwife (with one year's training) and over half had a secondary midwife (with three years' training).<sup>38</sup> By 2011, Cambodia met the minimum global benchmark for provision of midwives: 6/1000 births per year, and by 2013 75% of health facilities had at least one secondary midwife.<sup>39</sup>

While midwives and other skilled birth attendants are crucial for the reduction of maternal and neonatal mortality, nurses are also important for delivering primary health care, including essential health care for children at health centres, and thus key to the reduction in child mortality. Of a total of 19 457 civil servants employed by the MOH in 2012, 46% were nurses, while another 24% were midwives. Doctors represent approximately 14% of the total public health workforce.

Improving the technical skills and competence of the health work force, including midwives and nurses, through preservice training is one of the strategic interventions in the Health Strategic Plan 2008-2015. Considerable efforts have been made to improve the training curriculum, teaching and coaching methodologies used at the University of Health Science, Technical School for Medical Care and other Regional Training Centres in the country. In-service training, including on-the-job training for midwives and nurses is as important as preservice training. MOH and health partners have provided a wide range of in-service training programs for midwives, based on updated safe motherhood clinical protocols. Development of continuing medical education and coaching has been strengthened by collaborations with professional associations including Obstetrics and Gynaecology, Paediatric, Nursing, Medical, and Midwifery Associations. Involvement of these groups has supported adoption of guidelines and practices more widely.



## Health sector spotlight

### IMPROVING AVAILABILITY OF MIDWIVES IN CAMBODIA – A COMPREHENSIVE APPROACH

Improving availability of midwives did not happen by chance, but by using an evidence-based process and policy dialogue. Data suggested that the MMR had not improved over time. Qualitative research of trained birth attendants highlighted a number of constraints; including attitude problems and absenteeism of midwives at facilities, at least partly associated with low remuneration. These problems were then raised and discussed at the first Midwifery Forum in 2005 with the presence of high-level policy makers. One of the many outcomes of this high-level Midwifery Forum was the decision to commission a comprehensive review of midwifery,<sup>40</sup> which outlined approaches for further progress. Findings from this review were used to inform policy and programme decisions. In subsequent meetings between line ministries and development partners, an agreement was reached to increase the government midwife salary scale by three levels and to provide midwives with cash incentives. Since development partners could not pay staff incentives, it was decided that the government would allocate funds. This decision was publicly announced by the Prime Minister at the National Health Congress in early 2007. Consequently, the Ministry of Economy and Finance and the Ministry of Health jointly issued a *Prakas* (directive) on 2 April 2007 to officially adopt the delivery incentive scheme. In order to make it operational, the MOH issued a circular on 28 June 2007 providing guidance on the implementation and monitoring of the delivery incentive scheme to related public institutions and health facilities.

With highest level political commitment and support, the MOH established and implemented a number of midwifery policies in the following areas:

- **Improved recruitment:** midwives have represented more than half of all health personnel recruited since 2005. The maximum entry age was extended from 28 (as for other health personnel) to 30 years for midwives. Recruitment policy focused on midwifery candidates from areas where they intend to work after training.
- **Standards for midwife staffing:** all HCs should begin with at least one midwife and work towards an additional midwife and a secondary midwife.
- **Incentives:** the salary scale for midwives increased to level 11 (three levels higher than other equivalent cadres), which gives midwives not only a better income but also recognition for their public work. In addition, government delivery incentives for live births at public health facilities (US\$ 15 at HCs and US\$ 10 at RHs) were introduced nationwide in late 2007. In some health districts, there have been additional payments to midwives and other health personnel by Service Delivery Grants (through contracting/SOA) and GAVI HSS. In addition, midwives also get additional income from user fees and other demand-side financing schemes such as HEF.
- **Improved training/capacity building:** technical standards have been reviewed and revised to be consistent with international standards; preservice and in-service training programmes have been developed – with an emphasis on improved clinical practice.





### Tracking progress with data

The use of data to track progress is central to all planning activities. Targets have been established for key maternal and child health indicators. The health strategic plans and Fast Track Initiatives for Reducing Maternal and Newborn Mortality include output and impact indicators and targets.

The RMNCH Task Force tracks progress towards MDGs, and the Technical Working Group for Health and Sub-Technical Working Groups track progress in specific programme areas. A number of types of data and methods have been used to support improved use of data for decision-making, including:

#### *Strengthening health information systems (HIS) to track progress with RMNCH:*

Efforts to strengthen routine data collection have been ongoing since 2007 and are supported by regular HIS reviews conducted by the Department of Planning and Health Information, Ministry of Health and WHO. Quality and completeness of HIS data have been assessed since 2011 and currently demonstrate high completeness of reporting (99%) and internal consistency of data, and fair consistency of denominators. Many coverage indicators correspond well with data from population-based surveys, but others do not (in particular measles immunization).<sup>41</sup>

#### *Regular performance reviews using data:*

Joint Annual Performance Reviews are conducted each year with central, provincial and district staff to track achievements against targets in Annual Operational Plans (AOPs), using HIS data. The Fast Track Initiative for Reducing Maternal and Newborn Mortality is assessed during annual performance reviews. Findings are used to identify gaps and develop approaches to addressing gaps. In addition, regular reviews of the National Health Strategic Plans are conducted. A Child Survival Scorecard for tracking progress with 12 priority child survival interventions was introduced as part of the Child Survival Strategy in 2007 – data are used by provincial and district level staff for tracking progress each year – in order to identify gaps and inform planning.





*Regular collection and use of survey data:*

National population-based surveys remain the primary approach for collecting representative data on key demographic, impact and coverage measures. Demographic and Health Surveys have been conducted in 2000, 2005 and 2010, and another is planned for 2014. Secondary analysis of data is conducted to identify high-risk populations; and factors associated with poor outcomes. Data are used for tracking progress in all RMNCH areas. In addition, health facility quality of care assessments have been conducted for IMCI (2006, 2009), routine delivery care (2009) and EmONC (2008). The EmONC assessment identified shortages of services in rural areas and minimal implementation of evidence-based interventions as key problems. An EmONC improvement plan (2010-2015) was subsequently developed to support the implementation of an evidence-based package. The MOH upgraded guidelines on the management of eclampsia and newborn asphyxia to reflect international evidence, and expanded the number of health facilities able to provide EmONC services.

*Special studies:*

Research and impact evaluations are regularly conducted to inform both policies and programming. Examples of key research studies include a verbal autopsy study on causes of newborn and child deaths; a trial to investigate the use of micronutrient sprinkles to improve nutritional status; studies on micronutrient status and other aspects of nutrition; and analyses of health care financing schemes.<sup>26-35, 42, 43</sup>

*Subnational tracking of MDGs:*

The Commune Database (CDB) facilitates the use of local data for monitoring and decision-making, by collecting subnational data on key areas including poverty, health, water supply and sanitation, education, and governance. In 2011, using CDB data, the Ministry of Planning and the United Nations Development Programme (UNDP) developed scorecards to help track Cambodia's progress on MDGs. Disseminated to all 24 provinces, the scorecards enable a comparison of performance over time in each commune, district and province. Data are used to support planners in prioritizing resources and tailoring responses in order to reach MDG targets.

*Maternal death surveillance and death audits:*

Reporting maternal deaths through the routine health information system and Maternal Death Audits (MDA) have been one of the National Maternal and Child Health Centre's (NMCHC) key activities since 2004. The Maternal Death Surveillance and Response System is one of seven key approaches included in the Fast Track Initiative Road Map to Reduce Maternal and Neonatal Mortality 2010-2015. This system includes a weekly reporting system on maternal deaths in communities and health facilities across the country through completion of a notification form immediately upon initial report of a death, followed by a maternal death audit carried out by a provincial and district team. Data are collected and analysed at provincial and national levels. A detailed expert review of maternal death audits in 2010 found that information collected through the maternal death audits were useful for tracking progress, planning and improving quality of services. It noted, however, that over one quarter of the cases did not have sufficient information to classify cause of death and many other vital data were often missing; many recommendations made during the audits did not specifically address the key moments where a woman's life could have been saved. Recommendations to improve the quality and value of audits included revision of the national maternal death audit protocol, training of provincial Maternal Death Audit Committees, conducting annual MDA review workshops, and doing data quality reviews at national and provincial levels.<sup>44</sup>

### 5.3 Delivery strategies



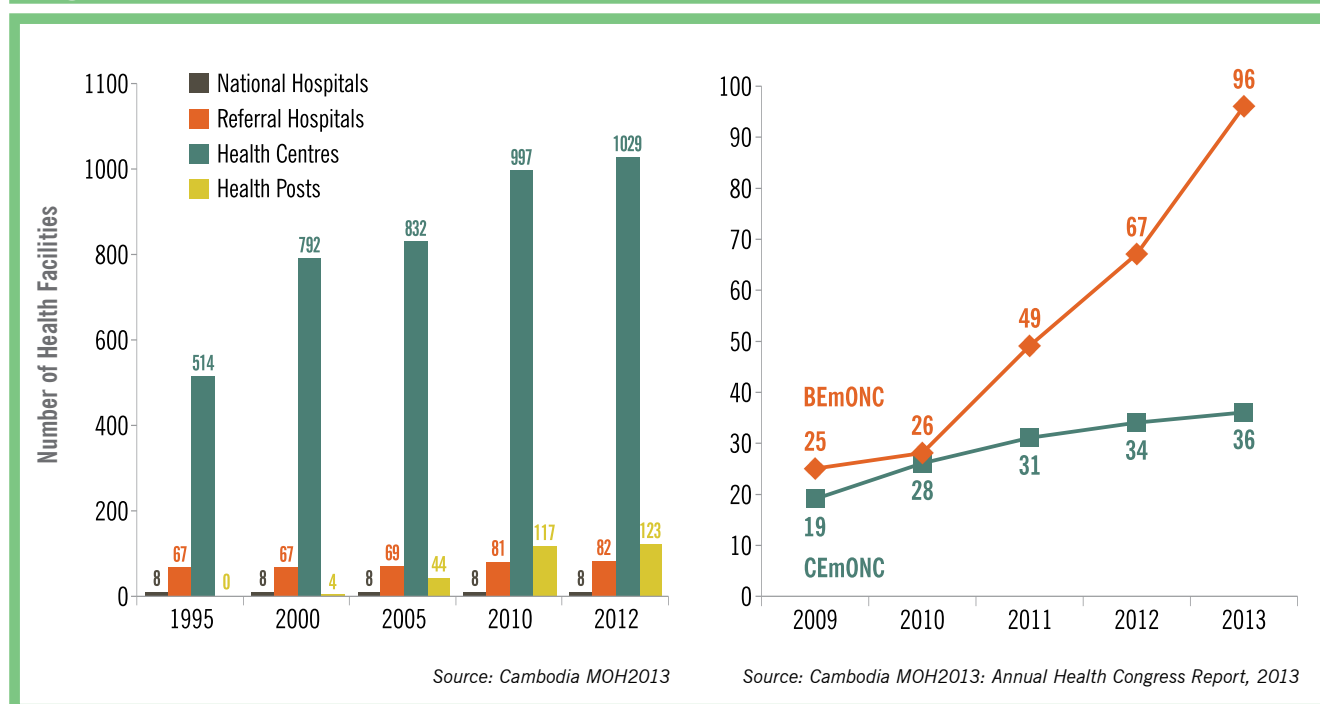
#### Improved essential health infrastructure

Policies and plans have guided improvements in health infrastructure to support delivery of the minimum package of services. The Health Coverage Plan (1996) guided the construction of health facilities, particularly in rural areas,<sup>45</sup> based on population and geographical accessibility. The availability of public health facilities increased substantially in Cambodia between 1995 and 2012. During this period the number of health centres and health posts almost doubled, and the number of referral hospitals increased from 67 to 82. In 2012, there were eight national hospitals, 82 referral hospitals (24 provincial hospitals + 58 district hospitals), 1020 functioning health centres and 86 functioning health posts, organized in 81 operational districts (Figure 4). The construction of maternity waiting homes and delivery rooms at some health centres has improved the accessibility and availability of maternal health services for women in remote areas.<sup>23</sup> The number of facilities capable of providing EmONC services increased from 44 (25 BEmONC and 19 CEmONC) in 2009 to 132 (96 BEmONC and 36 CEmONC) in 2013.<sup>11</sup> In addition to the public sector, there are also a growing number of private health facilities – in 2013 there were estimated to be 5500 licensed private facilities.



A Health Facility Assessment Tool has been used to accredit hospitals and health centres as meeting a required structural criteria to provide quality services. The tool was initially developed in 2007 and revised and updated in 2012. Annual facility surveys are conducted to ensure that appropriate medical supplies, basic equipment and infrastructure are in place, according to guidelines set out for a Minimum Package of Activities and/or an augmented Complementary Package of Activities. About 80 referral hospitals in the country are assessed annually through this tool; about 50% of the 1004 health centres in the country were assessed from 2008 through 2011. Data are used to identify gaps, and to support investments by national, provincial and district authorities to strengthen facility capacity.

Figure 4: Number of health facilities in Cambodia, 1995-2012





**Integrated routine system through provinces, districts and health centres  
– to reach all communities and households**

A comprehensive package of maternal, neonatal and child health services is being implemented in a phased approach by the MOH in close collaboration with several development partners. The aim is to reach coverage of the entire country, district by district, through a uniform approach. The principal delivery strategies for achieving universal coverage with child survival interventions are: behaviour change communication (BCC), integrated outreach, health centre-based delivery of a minimum package of activities (MPA), and referral hospital-based delivery of a comprehensive package of activities (CPA). Delivery strategies at the community level include: community-based groups or volunteers to give counselling and health education; village malaria workers to conduct case management of malaria, pneumonia and diarrhoea; and social marketing of oral rehydration salts (ORS) and other health supplies. An outreach package of interventions has also been developed that responds to the needs of remote communities. Activities are supported by the National Policy on Primary Health Care (2002).

Currently, there is no single RMNCH programme. Responsibilities are shared between different national programmes and departments which support provincial and health districts. Collaborations with local and international NGOs have helped build community-based structures using community-based distributors of family planning methods, village health volunteers, and other available community resources. The MOH supports district facility-based outreach activities and routine supervision. Links with other ministries, including the Ministry of Education, Youth and Sport, and the Ministry of Women’s Affairs, have promoted health through other sectors. The Ministry of Women’s Affairs, for example, promotes women’s access to formal and informal education, family planning in rural and poor communities, nutrition practices and gender equality, through commune councils.







### Targeted vertical programmes

Malaria, dengue, and immunization programmes have focused on building systems to support delivery of vaccines, insecticide treated bed nets and improved diagnosis and treatment of malaria and dengue. They have required dedicated staff and funding for activities. These programmes have included development of distribution systems; micro-planning which targets populations at higher risk; community-based distribution systems; dedicated systems of routine supervision; and use of data for tracking progress. The dengue programme has focused on improving clinical treatment of cases and community awareness to seek care for suspected dengue – as well as widespread distribution of the larvicide Abate, to prevent breeding of the vector. Improvements have been demonstrated in use of insecticide treated bed nets by children under 5, and in the proportion of malaria cases treated effectively; and in decreases in the reported numbers of malaria cases. Case fatality rates for dengue have declined.<sup>19, 46</sup>

Cambodia was certified as poliomyelitis free in 2000 and no measles cases have been reported since 2011. Vaccination coverage rates have shown steady improvements. A number of challenges remain, including better identifying and reaching high-risk populations; building subnational planning and management capacity; better integrating these vertical programmes with other routine programme activities; and reducing the reliance of these programmes on external funding. Although the government has assumed an increasing responsibility for financing programme activities, it is recognized that long-term sustainability will require that the government takes an increasing proportion of the financial burden.

### Health promotion and behaviour change campaigns

Health promotion and behaviour change approaches have been particularly effective in improving exclusive breastfeeding practices and antenatal care-seeking. Exclusive breastfeeding of infants under 6 months increased from 11% in 2000 to 60% in 2005 and to 74% by 2010. A concerted effort to promote early initiation of breastfeeding with no prelacteal feeds, and exclusive breastfeeding, began in 2004. A mass media campaign was developed by the MOH and the National Centre for Health Promotion, focusing on the themes of diarrhoea, acute respiratory illness, immunization, child nutrition including the promotion of early initiation and exclusive breastfeeding, and pre and postnatal care. Communication methods included: TV spots with messages on exclusive breastfeeding emphasizing that “not even water” should be given to young infants; radio spots using a breastfeeding song; and a 24-episode TV soap opera which included breastfeeding messages. Messages were further emphasized at World Breastfeeding Week activities which included a toolkit for health staff and NGO partners which promoted the same messages using leaflets, posters, banners and songs. A BBC World Service Trust evaluation of the mass media campaign was conducted in 2006.<sup>47</sup> The proportion of respondents who believed children should receive food or liquids other than breast milk decreased from 60% to 18%, and knowledge of immediate breastfeeding increased from 38% to 67%. Health system support to train health staff in nutrition and breastfeeding topics began in earnest in the early 2000s with efforts to scale up training to all health staff over the next decade. NGO’s simultaneously provided nutrition breastfeeding education to families at the community level. In 2004 the Baby Friendly Hospital and Baby Friendly Community Initiatives were launched at health facility and community levels.

A health promotion and behaviour change campaign specifically targeting early care-seeking for ANC was developed in 2007. Similar to the breastfeeding campaign, this adapted a range of methods and materials to best reach the target populations; as well as improved ANC training for facility staff.<sup>48</sup> The campaign was launched in 2009. Dramatic increases in the proportion of pregnant women attending antenatal care visits have been noted (see Table 2 – coverage indicators). In addition, the median gestation of pregnant women attending their first ANC visit has progressively declined from 5.8 months in 2000 to 4.2 months in 2005 and 3.4 months in 2010, with almost 60% of women attending before four months of pregnancy duration. Taken together these data suggest that behaviour change strategies – linked with policy and programme support - can impact key practices.





## 6. Initiatives and Investments Outside the Health Sector



### 6.1 Education

*What has been seen:* Infant mortality rates in Cambodia among children of mothers with no schooling are approximately two times higher than children of mothers with a secondary education.<sup>7</sup> Educated Cambodian women (with seven or more years of education) are six times more likely to deliver in a facility than those without any schooling.<sup>49</sup> The government has placed a high priority on facilitating equitable access to good-quality education since the 1980s. Improvements are noted in net primary education admission and enrolment rates.<sup>13</sup> Female adult and youth literacy rates have improved since 1998, reaching 66% and 86% respectively in 2009, while gender disparities have been eliminated in enrolments to primary and lower secondary schools. In general, educational improvements have reached all segments of society, but gaps are noted by a number of socioeconomic factors, with remote and rural communities being the most often excluded from education services.

*What has been done:* Cambodia has put in place a number of laws, policies and programme actions to support improved education. Main strategies have included:

#### *Policies and plans to guide what is done and how:*

The policy development process began in 2001 with the adoption of the first Education Strategic Plan 2001-2005, the Education Sector Support Program 2001-2005, and the development of the National Education for All Action Plan in 2003. These three programs outlined a number of educational goals for all Cambodian children by 2015. In addition, a work plan was created to outline specific areas of engagement. The second

version (Education Strategic Plan 2006-2010) had three objectives: (i) achieving equitable access to education services, (ii) improving the quality and efficiency of education, and (iii) strengthening institutional capacity to deliver education. Subsequently, the third version (Education Strategic Plan 2009-2013) aimed to accelerate efforts within the sector to meet the Cambodian Millennium Development Goals and the Education for All National Plan 2003-2015.





***Improved financing and infrastructure:***

Public expenditure on education has increased six fold in the last ten years. National budget allocations to the education sector have increased from US\$ 44 million in 2000 to US\$ 280 million in 2012/13. During the same period, the proportion of the public budget allocated to education has increased. School infrastructure, including making functional bathroom and toilets available, has been expanded for both primary and secondary schools. The government target is one secondary school per commune.

***Strategies to promote the education of children from poor families:***

Strategies have included school feeding programmes aimed at encouraging poor students to attend, and promotion of early childhood education. Commune preschool education funds support families to enrol children in preschool. In addition, scholarships for poor students have been made available based on selection criteria and are administered at the commune level. Informal education programmes are directed at those outside of the formal sector, particularly adults. The importance of education is promoted through a number of channels using communes, village groups, and through promotions during World Literacy Day and at sporting events.

***Increase the training and deployment of female teachers:***

An increased emphasis has been placed in training more female teachers, expanding total teacher numbers, and on improving the quality of training. Approaches to improving the numbers of female teachers include scholarships to support female students, improved accommodation for female teacher trainees, and public education to reinforce that female teachers are competent and valuable. Deployment of teachers to remote and rural areas – and equitable distribution of staff – is a key issue that is a focus of teacher workforce efforts. An increased emphasis has been placed on developing teacher training curricula and teacher training, to ensure that teachers are able to teach basic skills.

***Development and promotion of health:***

As part of the school health program, a sexual and reproductive health and life skills curriculum has been developed. This is taught to students at all levels and aims to increase knowledge of key topics and to promote better preventive care and health awareness. A textbook series has been developed and is used in all schools. Child Youth Councils at each school disseminate information and promote key health messages.



## 6.2 Food security and nutrition

*What has been seen:* Improvements are noted in rates of stunting and underweight, particularly in severe stunting; and reductions in maternal and child anaemia, and rates of vitamin A deficiency. The proportion of Cambodian households using iodized salt was 83% in 2010<sup>7</sup> and the country is on track to achieve the MDG target of 90%. The prevalence of anaemia in children aged 6-59 months declined from 63.4% (2000) to 55% (2010). The prevalence of anaemia in pregnant women declined from 66.4% in 2000 to 52.7% in 2010. Cambodia has made considerable progress in reducing vitamin A deficiency in children. A national micronutrient survey in 2000 reported a vitamin A deficiency prevalence of 22% among children 6-59 months of age.<sup>50</sup> A study conducted among young children in Svay Rieng health district between 2008 and 2010 reported a vitamin A deficiency prevalence of less than 3.5% at any time point.<sup>51</sup>

*What has been done:* Nutrition policies and strategies have focused on both general nutrition and micronutrient deficiencies. They have recognized that management of nutrition requires an understanding of cultural norms and practices, as well as food security and health system factors. Key policy and programme inputs include:

### **General policies and strategies for nutrition:**

A number of policies have supported action in the area of nutrition, and are regularly revised and updated. The Cambodia Nutrition Investment Plan (2003-2007) was instigated to address the high rates of malnutrition and micronutrient deficiencies and to help line ministries and relevant stakeholders identify key strategies and interventions. The National Policy on Infant and Young Child Feeding (2002, 2008) makes links with maternal and child health programming. The Strategic Framework for Food Security and Nutrition (2008-2012) and the National Nutrition Strategy (2009-2015) established clear targets, indicators, and strategic areas of focus.

### **Recognition that nutrition is a multisectoral problem:**

Policies make links with agriculture, water and sanitation, and poverty reduction as well as health. Adequate sanitation and elimination of open defecation, and a number of other risk factors associated with poverty, rural residence and lack of education need to be addressed.<sup>14</sup>



**Specific actions to address micronutrient deficiencies:**

In 2003, a Sub-decree on the Management of Iodized Salt Exploitation was developed to increase salt consumption and reduce iodine deficiency disorders. In 2007, the MOH developed National Guidelines for the Use of Iron Folate Supplementation to prevent and treat anaemia in pregnant and postpartum women. National vitamin A policies (1994, 1999, 2002, 2007) were also developed during this time. Twice-yearly vitamin A supplementation for children under 5 years in Cambodia was initiated in 1994 and in 1996 was incorporated into National Immunization Days. Later vitamin A supplementation was routinely given twice-yearly through outreach services.

**Actions to address food security:**

The government's commitment to enhance food security for all Cambodians at all levels was confirmed during the 2nd National Seminar on Food Security in May 2003. The Resolution (Circular No 5) of this Seminar outlines government recommendations and priorities in the fields related to health, nutrition and education, irrigation, land issues, agriculture and rural development. Food security as a crosscutting issue is further integrated in the national poverty reduction strategy (NPRS) of Cambodia. A National Program of Food Security (NPFS) was established to help poor farmers to improve their food security and income generation options. Development projects include Farmer Field Schools and diversification of agricultural production. The Council for Agriculture and Rural Development (CARD) plays a key role in coordinating food security issues and facilitating regular meetings of the Food Security Forums. These Forums offer an opportunity for all stakeholders engaged in food security in Cambodia (line ministries, donors, UN agencies, NGOs, research institutions). Food security is a cross-sectoral problem and requires coordination and alignment of strategies between different sectors.







### 6.3 Water and sanitation

*What has been observed:* Nationally, access to clean water rose from 31% in 1990 to 67% in 2010; and the proportion of households with access to improved sanitation facilities increased from 9% in 1990 to 33% in 2010. Coverage in urban areas remains higher than in rural areas. Access to clean water in 2010 was 85% in urban areas and 64% in rural areas; access to improved sanitation was 77% in urban areas and 24% in rural areas. These urban-rural gaps are mirrored by differences in availability of roads and infrastructure, household income and access to education. Addressing these gaps remains an important priority.

*What has been done:* Gains in access to water and sanitation infrastructure have been driven by three key policy and programme inputs:

#### Clear policy focus:

The National Strategic Development Plan (2006-2010 and 2009-2013) articulates a clear focus on improving infrastructure, agriculture and rural development (in addition to health and education) and outlines objectives and targets. This plan has provided a road map for sectoral investments – and these priorities have been maintained over time.

#### Engagement of communes in local development:

Engagement of communes has been important for committing community level resources to development of water and sanitation projects. In addition to financial support, this support can include labour, and local procurement of materials and supplies.

#### Allocation of resources:

Government capital spending on infrastructure increased from 88 billion Cambodian riels (CR) in 2004 to 612 billion CR in 2010, and decreased to 216 billion CR in 2011 (CR 4 is approximately equal to US\$ 1). This represents an increase from 4.7% of total government expenditure in 2004 to 9.5% of government expenditure in 2010 – and reflects a substantial commitment to improving essential infrastructure. Resources are provided by government, development partners and local communes and communities, with the highest proportion from development partners.







## 7. Political Economy Implications for Women's and Children's Health

Political commitment to health has been driven by progress at four levels. First, political stability has allowed initiatives and investments to be made and sustained in the long term. Second, Prime Ministerial commitment to maternal and reproductive health has helped promote and sustain progress. Third, high level recognition, acceptance and commitment to international targets and initiatives – and a willingness to be held to global standards – has helped fuel major programme initiatives that have required substantial investments and changes in direction. Fourth, there is now a culture of collecting and using data to evaluate progress and make programme decisions at the highest level by national consensus.

This approach has allowed problems to be both identified and accepted and has resulted in important programme initiatives – including the 2004 child health benchmark report and subsequent action to scale up child survival efforts; and the 2006 midwifery review and subsequent actions to improve the availability of midwives and to develop the Government Midwifery Incentive Scheme. These programme shifts required a political willingness to use data to drive a coordinated policy response.





## Spotlight of a sector outside of health

### POVERTY REDUCTION IN CAMBODIA: POLICIES HAVE SUPPORTED PRO-POOR DEVELOPMENT <sup>8</sup>

Between 2004 and 2011, Cambodian economic growth increased dramatically, and Cambodia's per capita GDP (in constant US\$) grew by 54.5%, ranking 15 among 174 countries. As a result, the poverty rate dropped from 52% to 21%. Increases in consumption were higher among the poor than the rich; and after 2007 income inequality declined. Although many households are no longer classified as poor, many are highly vulnerable to falling back into poverty; for example, in 2011 a reduction in income of 1200 CR per day (US\$0.30) would cause Cambodia's poverty rate to double. Gains need to be further consolidated in the future.

Policy lessons learned included:

- Actions were focused on where the poor live. Improvements reached rural Cambodia (where 90% of the poor live) and supported improvements in activities in which they were already engaged – principally cultivation of land and labour.

Policies that removed price controls and placed no taxes on the production of rice were drivers of poverty reduction in rural areas where the price of rice increased by 37%. This in turn drove increases in rice production. In addition, policies to improve rural infrastructure (roads, communication, rural irrigation) supported improved productivity.

- Poverty reduction in urban areas was driven by increases in salaried employment.

The share of urban workers in salaried employment increased, and was over 50% in 2011. Salaried workers had more years of education than other workers. Improvements in industrial production were driven by business-friendly industrial policies, which promoted investments in industry.

- Women benefited from minimum wage standards in the garment industry.

The garment industry is one of the largest salaried employers in the country. About 85% of workers in the industry are women, and higher wages have benefited this group. Never-the-less, the gender wage gap remains about 30% and this needs to be addressed in the future.

Improvements in income have driven household consumption and, as a result, improvements in household availability of electricity, water and sanitation and piped water - as well as motorbikes and mobile phones – all of which can drive improvements in health and access to health care. Never-the-less, a large proportion of the population remains close to poverty. Financial protection for all women and children remains an important priority. Public investments in essential infrastructure including roads, accessible health facilities, and water and sanitation must continue, as well as improved education services, to consolidate poverty gains and build further on them.



## 8. Governance and Leadership

Direction is set at the highest level by establishing clear development goals. The Cambodia Government has a long-standing commitment to development goals including the CMDGs (including MDG4 & 5a), NSDP 2006-2010 and 2009-2013 and the Rectangular Strategy (2003-2008). The government has been open to adopting international cost-effective and evidence-based interventions (best practices); and to collecting national evidence on how to best scale up these interventions to improve essential RMNCH, such as the development of a Child Survival Strategy to include 12 scorecard interventions; and development of approaches to improving midwife deployment.

The Sector Wide Management (SWiM) mechanism for health is used to align and direct the contribution and activities of the development partners in achieving MOH objectives. This mechanism involves high-level membership from government, and development partners and operates at three levels: policy, operational, and the technical level. The Technical Working Group for Health and other technical working groups have helped with coordination and development of technical content. The NGO umbrella organization, MEDiCAM, has helped facilitate collaboration between government activities and activities at the grass roots level. See section 5.1 for more information on the SWiM approach.

The HSP2 2008-2015 establishes medium-term goals, objectives and indicators for measuring sector performance. The Annual Operational Plan (AOP) is the instrument used by MOH at all levels of the system for the purposes of bottom-up annual planning. The MOH provides leadership and plays a central role as a technical advisor to the Provincial Health Departments (PHDs) and the Operational Health Districts (ODs). AOPs are prepared by all health facilities (health centres and hospitals), ODs, PHDs, and MOH central departments, training institutions, and National Centres. They are aggregated at the provincial and central levels and used by the Department of Planning and Health Information (DPHI) to negotiate the budget with the Ministry of Economy and Finance in July. The ODs are the key actors for activities implemented at health facilities and community level. RMNCH strategies are implemented through a number of specialized programmes via the provincial and district maternal and child health sections. Development partner contributions to RMNCH are coordinated through MCH sub-technical working groups. Other sub-technical working groups and task forces contribute in system areas including human resources, financing and essential medicines.



## 9. Lessons Learned and Future Priorities

Cambodia has demonstrated that progress in women's and children's health requires action at a number of levels, beginning with political commitment and sound governance that emphasizes the delivery of high-impact interventions and the use of data to drive decision-making. Investments have been made both within the health sector and in sectors outside of health. Improvements have been driven by reduced poverty and improved infrastructure. Progress in maternal health has been driven by decreasing fertility, improved education of women and improved per capita income – as well as improved access to skilled delivery services. Progress in child health has been driven by reductions in severe undernutrition and improved coverage with key interventions – in particular essential immunizations, malaria prevention and treatment, vitamin A supplementation, birth spacing, early and exclusive breastfeeding - and by improvements in socioeconomic conditions. These improvements have been supported by a number of policy and programme inputs, documented in this report.

Key technical challenges are nutrition, newborn health and quality of care. Stunting and underweight remain significant concerns in Cambodia. Despite the efforts made to date, the percentage of children younger than 5 years of age that are underweight has remained high. Chronic malnutrition, or stunting, is a major issue and affects 40% of children under 5. Nutrition requires urgent and continued attention by both government and the development community. Newborn deaths now represent 50% of under 5 child deaths and most newborn deaths occur in the very early post-delivery period. Reducing newborn deaths will require increased attention on improving the quality of intrapartum, early essential newborn care and postnatal care for routine deliveries as well as for high risk newborns with prematurity and low birth weight, birth asphyxia and neonatal sepsis.

In order to address these gaps, areas of programme focus will include:

### *Reducing socioeconomic inequities:*

Cambodians living in rural areas, from poorer households, and without an education suffer the greatest inequities in RMNCH coverage, services and outcomes. Efforts being made to reduce inequities in RMNCH service use in Cambodia, including through HEFs and vouchers, should continue to help redress socioeconomic differences in health outcomes.

### *Improve quality of care:*

Demand for health care has increased with the rapid expansion of health facilities and greater use of RMNCH services. Complementary efforts are needed to improve quality of care and, in particular, routine delivery and immediate postpartum and postnatal care, and EmONC services. Mechanisms are needed for improving quality, including regular supervision, self-assessment and improved training methods using clinical coaching.





### *Scale up the midwifery workforce:*

While substantial progress has been made in increasing the number of midwives, Cambodia needs to double the midwifery workforce and ensure its equitable distribution across the country in order to reach MDG targets. A continued focus on building capacity and equitably deploying the health workforce is required.

### *Decrease high out-of-pocket expenditure:*

Alternative health financing mechanisms have shown positive results; however, out-of-pocket expenditure still comprises a large share of total expenditure on health, and disproportionately impacts the poor. Further efforts to expand health services to underserved populations are needed to ensure universal health coverage.

### *Develop community-based approaches to improving nutritional status and management of children with pneumonia and diarrhoea:*

Continued high rates of stunting and underweight require both food security and the targeting of other risk factors, such as lack of sanitation, in high-risk communities. Management of pneumonia and diarrhoea, including use of zinc for treatment of diarrhoea and dysentery, also need further attention. Behaviour change interventions delivered through a range of communication channels should be considered, including existing community groups and volunteers, which have shown impressive results in the area of exclusive breastfeeding.

### *Continued investments in education, water and sanitation and poverty reduction:*

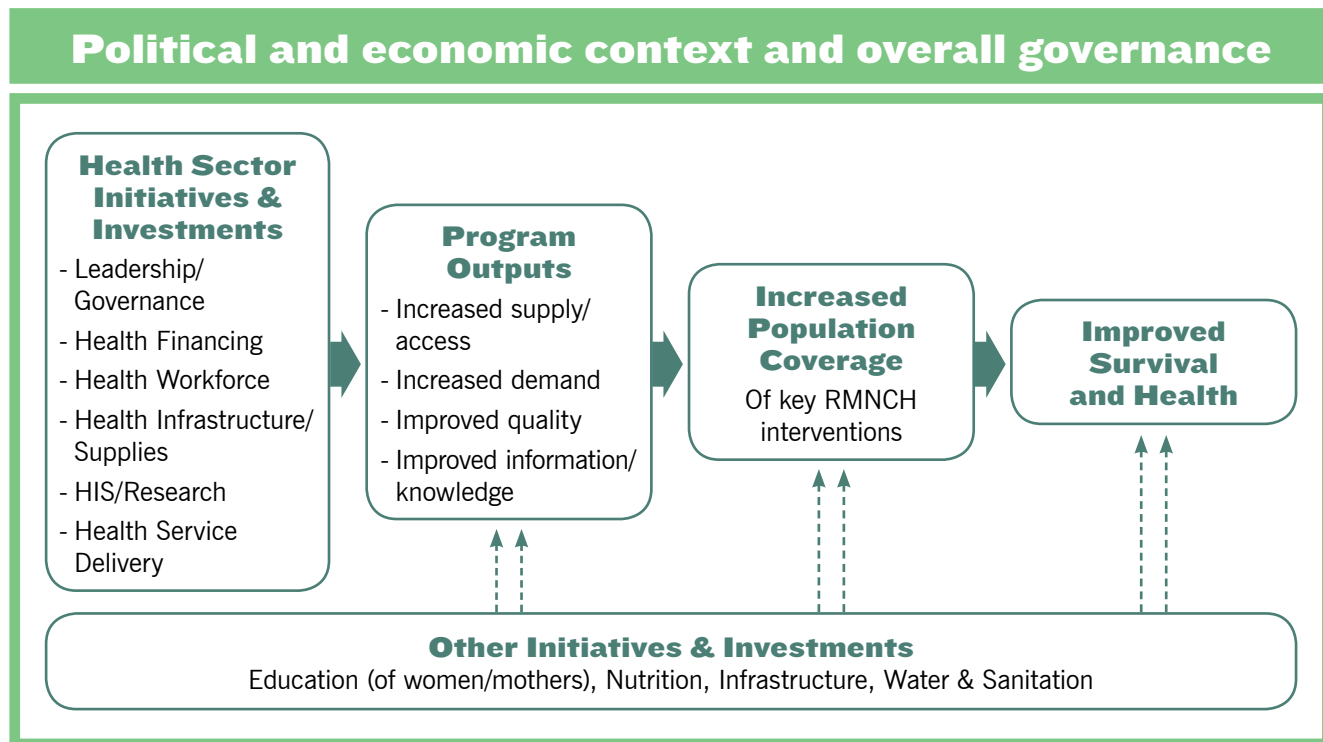
These are essential for supporting health gains. Established programmes need to be continued and scaled up to reach all segments of the population.



## 10. Annex I

### Conceptual framework:

Defining policy and programme success factors for women’s and children’s health



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## 12. Acronyms

AB	Antibiotic
ANC	Antenatal Care
AOP	Annual Operational Plan
ARI	Acute Respiratory Infection
BCC	Behaviour Change Communication
BEmONC	Basic Emergency Obstetric and Neonatal Care
BF	Breastfeeding
CARD	Council for Agriculture and Rural Development
CDB	Commune Database
CDD	Diarrhoeal Disease Control
CEmONC	Comprehensive Emergency Obstetric and Neonatal Care
CMDG	Cambodia Millennium Development Goals
CPA	Comprehensive Package of Activities
CR	Cambodian Riel
CSMC	Child Survival Management Committee
DHS	Demographic and Health Survey
DP	Development Partner
DPHI	Department of Planning and Health Information
EmONC	Emergency Obstetric and Neonatal Care
GAVI	Global Alliance for Vaccines and Immunization
GDP	Gross Domestic Product
GMIS	Government Midwifery Incentive Scheme
HC	Health Centre
HEF	Health Equity Fund
HIS	Health Information System
HIV/AIDS	Human Immunodeficiency Virus/ Acquired Immunodeficiency Syndrome
HSP	Health Strategic Plans
HSS	Health System Strengthening
HSSP	Health Sector Support Project
IMCI	Integrated Management of Childhood Illness
JAPR	Joint Annual Performance Review
LMIC	Low- and Middle-Income Countries
MCH	Maternal and Child Health
MDA	Maternal Death Audit
MDG	Millennium Development Goal
MMR	Maternal Mortality Ratio
MOH	Ministry of Health
MPA	Minimum Package of Activities
NGO	Nongovernment Organisation
NMCHC	National Maternal and Child Health Centre
NNT	Neonatal Tetanus
NPFS	National Program of Food Security
NPRS	National Poverty Reduction Strategy
NSDP	National Strategic Development Plans
OD	Operational Health District
ORS	Oral Rehydration Salts
ORT	Oral Rehydration Therapy
PBC	Performance-Based Contracting
PHD	Provincial Health Department
PMNCH	Partnership for Maternal, Newborn and Child Health
PPP	Purchasing Power Parity
QCA	Qualitative Comparative Analysis
QOC	Quality of Care
RH	Referral Hospital
RMNCH	Reproductive, Maternal, Newborn and Child Health
SOA	Special Operating Agency
SWAp	Sector-wide Approach
SWiM	Sector Wide Management
TBA	Traditional Birth Attendant
TF	Task Force
TWGH	Technical Working Group for Health
UN	United Nations
UNDP	United Nations Development Program
US	United States
VHV	Village Health Volunteer
WHO	World Health Organization



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