Health Sector Review (2003-2007)

Cambodia

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Acronyms

ADD	Accelerated Disbursement District
ANC	Ante Natal Care
AoP	Annual Operational Plan
CAAFW	Cambodian Association for Assistance to Families and Widows
CAR	Council for Administrative Reform
CBHI	Community based health initiatives
CDC	Council for the Development of Cambodia
CDHS	Cambodia Demographic and Health Survey
CENAT	National Centre for Tuberculosis and Leprosy Control
CHHRA	Cambodian Health & Human Rights Alliance
CMR	Comprehensive Midwifery Review
CMS	Central Medical Stores
CPA	Complementary Package of Activities
CSES	Cambodia Socio Economic Survey
D&D	Deconcentration and Decentralisation
DFID	Department for International Development
DHRD	Department of Human Resource Development
DP	Department of Personnel
DPHI	Department of Planning and Health Information
DPT	Diphtheria, pertussis and tetanus
EmOC	Emergency Obstetric Care
EPI	Expanded Programme of Immunisation
GDP	Gross Domestic Product
GFATM	Global Fund to fight HIV/AIDS, Tuberculosis and Malaria
GRET/SKY	Research & Technological Exchange Group/"Health for our Families"
HEFs	Health Equity Funds
HIS	Health Information System
HRD	Human Resource Development
HSP	Health Sector Strategic Plan
HSSP	Health Sector Support Programme
ICPD	International Conference on Population and Development
IDP	Institutional Development Plan
IEC	Information, education and communication
IMR	Infant mortality rates
ISAR	Operating Theatre Nurses and Nurse Anaesthetists
IUD	Intra-uterine device
JAPR	Joint Annual Performance Review
JICA	Japan International Cooperation Agency
LSS	Life Saving Skills
NCD	Non Communicable Disease
NIPH	National Institute of Public Health
MBPI	Merit Based Pay Initiative
MCH	Maternal and Child Health
MDG	Millennium Development Goals
MEF	Ministry of Economy and Finance
MMR	Maternal mortality ratio
MoEY&S	Ministry of Education, Youth and Sports
MoH	Ministry of Health
MoU	Memorandum of Understanding
MPA	Minimum Package of Activities
MoSVY	The Ministry of Social Affairs, Veterans and Youth Rehabilitation
MTEF	Medium Term Expenditure Frameworks
NCD	Non Communicable Disease
NCHADS	National Centre for HIV.AIDS, Dermatology and STDs

NHA	National Health Accounts
NMCHC	National Maternal and Child Health Centre
NPRS	National Poverty Reduction Strategy
NRHP	The National Reproductive Health Programme
ODs	Operational Districts
PAP	Priority Action Plan
PBB	programme based budgeting
PETS	Public Expenditure Tracking Survey
PER	Public Expenditure Review
PHD	Provincial Health Department
PIP	Public Investment Plan
PFMRP	Public Financial Management Reform Programme
PMTCT	Prevention of Mother to Child Transmission
PRS	Poverty Reduction Strategy
RACHA	Reproductive and Child Health Alliance
RGoC	Royal Government of Cambodia
RTC	Regional Training Centre
SBA	Skilled Birth Attendants
SEDP	Socio-Economic Development Plan
SES	Socio-Economic Survey
SHI	Social health insurance
SRH	Sexual and Reproductive Health
STI	Sexually Transmitted Infection
SWAps	Sector Wide Approaches
SWiM	Sector Wide Management
TFR	Total fertility rate
ToR	Terms of Reference
TSMC	Technical School for Medical Care
VHV	Village Health Volunteer

Summary and Strategic Recommendations

Introduction

This Health Sector Review for Cambodia was originally planned as a Midterm Review but changed to a Health Sector Review upon request by the Ministry of Health. The character of a sector review differs from a mid term review due to its emphasis on strategic analysis and recommendations for the next strategy formulation period. Primary research and analysis are often required for this purpose. However, the number of studies already completed in Cambodia was found to be so large that a sector review was considered feasible to undertake by using available knowledge and report findings, whilst keeping within the pre-agreed timeframe and resource allocation.

Summary of Observations

Progress in Health Outcomes and Utilisation of Health Services

Cambodia has, because of catastrophic conflict and war, been slow to improve the health status of its population through access to quality health services and effective preventive health interventions. The HSP (2003-2007) has been, and continues to be, a good platform from which to launch a 'catch up' to reach levels of health comparable to other countries in the region, and worldwide.

Improvements in terms of population health status and health service utilisation have not been as rapid as originally foreseen in the HSP. Nor can progress made be solely attributed to HSP implementation. Important positive developments – such as a decline in infant mortality – started earlier. However, the HSP has undoubtedly contributed to the progress made.

Equity and health is an area where progress has been slow. Clear signs of progress in women's health are difficult to see at this point in time. In contrast, progress in child health (infant mortality rate and under 5 mortality rate) demonstrates encouraging signs of policy impact, but again is clouded by uncertainty regarding equity disparities – both regional and social.

The analysis of utilisation of services is considerably weakened by lack of data from the private sector, and few initiatives were identified to address and improve this during the course of HSP implementation, despite its sector wide focus. The private sector dominates the "health market" but lack of data on the scope of its services makes observations of how well the Cambodian population is served very uncertain.

Utilisation of both outpatient and inpatient services has improved considerably over the period 2003-2007 – although overall levels remain generally low. There is continued uncertainty about regional utilisation patterns due to the unclear role of national hospitals. The rapid increase in both the resources and utilisation of national hospitals may indicate a risk for a focus on tertiary care health services for urban based residents. Traditionally the private sector is particularly strong for that same group of patients, which may further contribute to service inequities.

It is difficult to judge the current profile of non-communicable disease related health service utilisation and the change over time, because of lack of data. Efforts have been made to increase the focus on non-communicable diseases, and continued efforts will identify further important, and financially demanding, needs. The need for stronger burden of disease information is pressing.

The forthcoming health strategy for 2008-2015 is recommended to accentuate the stewardship role of the Ministry of Health for stronger integration of the private sector into the realisation of the next strategy. This would also have direct relevance to strengthening the focus on equity issues and also be related to the efforts to improve the quality of health service provision.

To better facilitate the effective monitoring of the HSP mission, a reform of the health information system – including elements of the private sector – is of fundamental importance. More strategic information can also be gleaned through a more robust interrogation of the Cambodian Demographic and Health Survey (e.g. more sub-analyses of target groups).

Progress in Maternal and Child Health

Improved maternal health is high on the Cambodian Government priority list for attention and a major public health problem. However, no progress has been made in maternal mortality rates during the HSP implementation period. There is significant political will to reduce maternal mortality and the policy environment is enabling. Plans, standards and protocols have been devised, and are based on standards of international practice and have a good evidence base. Pilots have also been conducted. The 'scaling up' of activities along the recommended lines are therefore possible, but there is a need for priority setting and a costed workplan.

Demand creation activities and strategies to engage communities around maternal and newborn health issues are needed. This will require a multi-sectoral approach, including the "private for" and "private not for" profit sector. A partnership between government and NGOs on issues that influence equitable access to services such as gender, education and poverty is essential. In particular, the needs of more vulnerable groups such as adolescents and young people should be addressed.

While progress has been made in relation to under 5 mortality, there is concern regarding wide discrepancies between the educated and uneducated, urban and rural communities. In addition, mortality amongst the newborn and up to 28 days of life has to be addressed. A comprehensive Child Survival Strategy exists which describes how 12 scorecard interventions can be scaled up through 6 defined strategic initiatives[1]. However, the health of the mother, newborn and her older children are closely linked, and it is essential to ensure that maternal, newborn and child health programmes are fully integrated at all levels. Priority setting is required, and intensified support is needed for many of the provinces that have the poorest health outcome and utilisation indicators, in particular to address equitable access to services and community interventions.

The main elements of care that require integration and scaling up are identified to be:

- Availability of comprehensive quality birth spacing services – which should also involve men in order to increase joint decision making between men and women
- Improved abortion and post-abortion services – which needs to include and address the needs of adolescents
- Widespread and accessible antenatal care – which is integrated with PMTCT services, and addresses the continuing needs for HIV treatment and care of the mother and baby in the post partum period
- Increased access to skilled attendants for deliveries – with particular focus on rural areas
- Focus on the early initiation of and exclusive breastfeeding
- Developing and implementing approaches to working more extensively with volunteer health workers (e.g. provision of Vitamin A) and addressing the transition between use of the traditional birth attendant and the skilled attendant
- Ensure the WHO recommendations for the minimum numbers of Comprehensive and Basic Obstetric Facilities are applied
- Improve the referral between all levels of the system, including the community
- Review and improve monitoring of maternal newborn and child deaths– including maternal and newborn death audits, and the reporting from the private sector
- Increase the focus on immunisation for pregnant women, babies and children
- Increase linkages with the malaria programmes to scale up prevention and treatment
- Focus on early detection and treatment of childhood ailments e.g. pneumonia and diarrhoea

[1] Early initiation of Breastfeeding, Exclusive Breastfeeding, Complementary Feeding, Vitamin A, Measles Vaccine, Tetanus Toxoid, Insecticide Treated Nets, Vector Control, ORT, Antibiotics for pneumonia, Malaria treatment and Skilled Birth Attendance

Progress in these areas will call for strengthened institutional arrangements, including the national reproductive and sexual health programme, and improved involvement and co-ordination of work of the donors in particular between MOH Reproductive and Child Health departments and the health promotion department, UN agencies and bilateral agencies responsible for maternal, newborn and child health.

Progress in HSP Achievements - Monitoring & Evaluation
The HSP is a land mark event for Cambodian health care. Critical remarks below should not overshadow the great value of this first systematic planning effort.

The analysis – strategy by strategy – demonstrates a mixed picture of achievements. None of the 20 strategies fully managed to meet all its targets, although 5 strategies came close (in the areas of health financing, quality improvement, and institutional development). There are features in the HSP structure and implementation process that may explain this:

- The HSP structure is not closely related to the structure of programmes and budgets, thus decreasing accountability for the implementation of the strategies
- Linkages between strategies, that are critically important for their realisation, have not been made clear in the original HSP.
- Risk management – identified via insightful forecasting of possible implementation hazards in the HSP – were not obviously proactively managed.
- The "learning" character of the monitoring and evaluation system for HSP has been overburdened by a multitude of indicators. The changing of indicators over time, and lack of baseline data for over 20% of indicators posed a significant challenge for a meaningful evaluation of progress. Furthermore, the mechanism by which issues identified by the Joint Annual Performance Reviews were followed up, and acted upon, was not clear.
- Important strategic areas – such as the private sector and the equity issues – have not been given adequate weight in either the strategy formulation, or subsequently the monitoring and evaluation system.

These five areas are recommended for systematic development in the forthcoming HSP2.

Progress in *Health financing:* What were the resources for Health (2003-2007)?
The main problem in almost all health systems is not too few economic resources but the use to which these resources are put to. Cambodia is no exception from this. While the HSP strives to allocate funds rationally, there exists a complex financial architecture in which donors play a strong role through project financing, in combination with a generally unregulated private health market. Both critically important drivers which may not be synergised and working in harmony.

The vast majority of health care is paid for through out of pocket expenditure. This is internationally recognised as an inequitable and inefficient way of financing. HSP has seen some welcome development, as the declining unit cost of accessing health care and increasing incomes, have made health care more affordable and less likely to cause impoverishment. Initiatives to develop insurance based mechanisms also offer the potential to reduce the reliance on out of pocket spending, although these are still at an early stage and not without risk.

The government budget has increased – although not quite in line – with strategic targets. Increases have been driven by increases in public spending as a whole – although the share allocated to health has actually declined and has remained well below HSP targets.

In terms of allocation the picture is mixed. A relatively low share of public spending is allocated to the provinces (although figures tend to underestimate actual releases, as they do not routinely pick up resources channelled through central programmes). What is allocated tends to be allocated according to need, with the poorer provinces generally receiving higher per capita allocations. Yet, a relatively low share actually reaches the facilities – partly because of financial management

problems. Most resources tend to be used at the provincial centre – and financing remains a major constraint at this level.

The Public Expenditure Tracking Survey provides evidence of widespread inefficiency and misuse of funds. This was not unexpected but the survey has at least attempted to quantify the problem and provide a baseline for assessing progress in future. Trends in the direction of devolved budget control and management and increased allocation of resources to provinces would, in our view, strengthen the pro-poor direction of health financing.

A range of public management reforms should contribute towards more effective public expenditure management, although it is too early to see results yet, and some problems are being experienced during the transition to the new systems. Budget execution has improved gradually over time (although not without setbacks), with both higher and more timely releases. However, there is scope for further progress.

The sector is heavily dependant upon donor funding which accounts for around 2/3 of total public spending. Reliance in specific areas is even higher. Health equity funds (HEF) are almost exclusively donor funded, and the salaries of service delivery staff are highly dependant on support from various initiatives, such as HEFs and contracting.

Donor funding remains extremely fragmented and poorly aligned with stated national priorities, and the situation is not improving, despite efforts under the SWiM process. This reflects in part the priorities and mandates of the key donors and the earmarked nature of their funding. It also reflects the fact that some institutions have been able to develop credible, costed plans and have strong leadership. They have thus become a particularly attractive option for donor funding. This has led to major distortions in the overall allocation of resources. As a result the HIV/AIDS programme is well funded (although there are still identified resource gaps) whilst other programmes remain chronically under funded. The scaling up of efforts to achieve health MDG's, and targets in the next HSP, will call for continued and strengthened donor involvement but provided in a more systematic manner.

Further work on the cost implications of policies across the sector may serve to strengthen links between different strategic areas, avoid problems of volatility, better balance sub-sector funding, and improve allocative efficiency.

Such costing work could also establish closer links with both long and medium term economic planning frameworks. Ongoing programme budgeting efforts may be one technical instrument to help realise such ambitions.

Efforts to strengthen the Annual Operational Plan (AoP) process to incorporate more donors, and bolster efforts to give the AoP a stronger position in terms of programme prioritisation, may be one way to deal with the problem. It will also be important to develop a comprehensive financing strategy which considers the many possible linkages between the various financing mechanisms some of which are already being piloted (e.g. using HEFs to pay insurance premiums for the poor)

Progress in *Human Resource Development:* What were the Resources for Health (2003-2007)?

Human resources – numbers, quality, attitudes, location – is always a key factor in realisation of health strategies.

The strategic focus in the HSP on increasing the numbers of midwives has overshadowed the need to strengthen the health workforce in its entirety, and has had limited impact on the ratio of midwives to the population as a whole. Although a number of actions have been taken to address recruitment and retention of midwives, and the challenge of mal distribution of staff between urban and rural areas, there remain shortfalls in the numbers and distribution of midwives. It is estimated that unless recruitment is increased, and training capacity increased, that from 2007 and to 2010

the shortfall of midwives may rise to 1,327. While efforts to recruit and train midwives are to be applauded, unfortunately these have been to the expense of quality in some instances. The Comprehensive Midwifery Review (2006) demonstrated that the levels of competency amongst Primary Midwives are inadequate.

In addition, placing primary midwives in rural areas has failed to address broader health needs, in particular those of children. Rural areas need a more multi-skilled staff cadre, such as a secondary nurse/midwife. Available multi-skilled staff also need to be given broad multi-skill tasks. In addition, the narrow definition of a skilled attendant as being a 'midwife' has not taken into account the opportunity of using the skills of both doctors and nurses with obstetric skills to provide delivery services.

It is difficult to assess accurately the shortfall in the public health workforce. Many of the midwives and other health professionals work in both public and private practice, which is not adequately documented. The relationship between public and private service delivery needs to be addressed in HSP2. Large-scale absenteeism in the public sector is partly caused by an imbalance between remuneration possibilities in public versus private sectors. Experiences from the contracting pilot schemes indicate that reasonable improvements in salaries can contribute to increased productivity of public sector health staff. An integrated approach to reviewing both sectors is required, so as not to create new problems for those patients who rely on private sector providers for their health services.

A number of important and difficult policy decisions are required during a consolidation phase of HSP2– not least that workforce planning needs to include both public and private sectors. The strategic focus of HSP2 should address the needs of the health sector as a whole, and not focus on one specific cadre of staff.

A number of key issues need to be addressed, these include:

- The recommendations of the Comprehensive Midwifery Review, including that of establishing a high-level multi-disciplinary taskforce should be actioned, as soon as possible. However, this taskforce should address the issue of 'skilled attendance' more broadly than just midwifery.
- Establish and implement an accreditation system for training institutions (both public and private) and ensure there is constituency in training curricula and training approaches for all health workers. Standards of training and education need to be established and reviewed regularly. Increase the remit of the Medical Council and establish a nursing/midwifery council to protect the Cambodian public by licensing and regulating practitioners.
- Involve professional associations in creating and maintaining standards for continuing professional development and education. Implement the recommendations of the recent review of the institutional capacity of the Cambodian Midwifery Association – to provide continuing professional education and development, support insurance, provide professional (trade union) services.
- Review institutional arrangements to clarify issues of responsibility and accountability between the different MOH departments dealing with different human resource functions. A more functional arrangement has been suggested in the health workforce development plan 2006-2015 which should be considered.
- Establish a comprehensive approach to workforce planning which includes the whole health sector and all the different staff cadres within the workforce. Conduct a number of in-depth reviews to address issues such as public health workers absenteeism and how to create the right terms and conditions to attract workers into the public health sector.

Progress in *Innovative Systems Development & Health Financing:* A Time of Experimentation in Systems Development (2003-2007)

Cambodia has shown a remarkably open and positive attitude to health system experimentation often heavily driven by the donor community. Cambodia is thus contributing not only to its own

development but also to developing a 'global public good' of knowledge which is of great interest to the international community as a whole.

Experimentation with contracting, equity funds and different forms of health insurance, has been rather ad hoc, and heavily dependant on donors for funding, which has created serious sustainability problems. Whilst these approaches have tended to be focused on the poorer provinces and districts their scope is limited and most of the poor still rely on exemptions through traditional government systems as a way on ensuring their financial protection. Exemption policies are widely recognised to be ineffective.

There is a case to be made for further experimentation and the close monitoring of existing approaches, especially where reform start is fairly recent. Having said that, much is already known about many of the reforms, and it is now time to put these on a firmer footing. Government is recommended to make decisions about what will be continued and developed via a step wise series of sustainability planning. Such planning sets out how Government expects to assume responsibility for both the management and financing of the adopted approaches over the coming years. Decisions need to be taken on the long term future of these initiatives, including their institutional and funding arrangements, with agreement on the extent to which the approaches should be scaled up, and the criteria adopted for doing so.

It is unclear if consensus on the way forward exist although recent policy decision indicate that a way forward is being developed. A failure to take, and clearly communicate, such decisions runs the risk of undermining the achievements and knowledge gained to date. The health system is rapidly approaching a point of "no return".

It is recognised that many of these reforms have been a response to perceived weaknesses in government systems. The need for them would decline were government systems to operate more effectively. In this respect HSP has seen the development of a framework and programmes to address many of these issues.

The merit-based pay initiative is intended to help address difficult and sensitive remuneration issues. These issues may need to be at the centre of the next HSP, and call for specific forms of monitoring and evaluation to allow for gradual course correction over a difficult period of implementation. The government has been presented with visionary ideas about the possible long term future for institutional arrangements in the health sector and is currently discussing a road map for change. It might be useful to consider these issues as a matter of incremental development, where above mentioned monitoring mechanisms would play a very important role.

Decisions in the near future on the HSP2 will increase financial demands on the government unless partial solutions (at least) are acquired to the present fragmented donor financial support for the health sector. This near future situation puts the discussion on co-operation structures and donor aid architecture in focus.

The SWiM process has had some success – notably in the establishment of the Joint Annual Performance Review process. However, donor support continues to be fragmented and generally poorly aligned with national priorities and the situation may well worsen. Not only has this resulted in imbalances in the allocation of resources – it has also helped create a system of incentives which do little to ensure the effective delivery of essential services. Future progress in this area is likely to require a clearer, more operational, plan which donors could buy into. Furthermore, a step by step development of current joint financing arrangements focussed on key themes (e.g. HEFs, MBPI, increasing provincial level allocations) is required, as well as more proactive approaches to programming donor resources, better tracking of donor funding and their relation to national priorities, and more explicit agreement on ways of working between donors. The memorandum of understanding (MoU) – an element in regulating relationships and obligations in a SWAp – has a weakness for Cambodia through its traditional budget support content. Such a content may tend to exclude important donors from active support to HSP2 implementation. A much needed agreement

on a more balanced health aid architecture may thus have to take a different form than the MoU but still include many of its main features.

Strategic Recommendations

Each chapter in this report concludes with recommendations pertaining to the strategic area of review. They are not repeated here. These specific recommendations require linking to each other and form a higher level of strategic formulation. It is this synthesis that is addressed here.

Experience and development efforts over the past five years has accumulated important knowledge and created a platform for a new health strategy – HSP2 - that can build upon the mission and vision conceived for HSP1. Normally this would mean that capacity has been built for a major "scale up" of services, which would be the defining feature of the period to 2015. However, some important limitations have been identified by this review which need to be addressed as a pre-condition for successful scale up:

- Decisions on the format of provincial/local management of health services (the "contracting" issue) have not been taken. Without such decisions, major problems will be encountered for scaling up strategy

- More permanent implementation of new health provision strategies – such as a reformed contracting approach - will call for costly reforms of the remuneration policies. Remuneration policy overhaul is thus necessary for the implementation of comprehensive contracting and the financing of remuneration reforms need to be included in the HSP2 strategy.

- The links between the strategy and its monitoring system have included certain weaknesses that call for correction/development before a major scaling up exercise can successfully be undertaken. The design of the strategy to better reflect the main implementation structures and mechanisms – particularly the budget and the medium term expenditure framework - is recommended.

- Donor financing will be a decisive feature for most of the period to 2015. Its present fragmented status and the general problems of the aid architecture (outlined in the "SWiM" study) call for major efforts to bring about co-ordination and long term commitments from donors.

- More general changes in the health provision format, changes in remuneration policies, a need to bring donors into a more co-ordinated aid architecture - all these matters are also related to the position of the private health sector – an area where little progress has been made during the first five HSP years.

A brief period of consolidation is advisable to tackle these difficult and important problems before a general scaling up period is initiated at full force. It is envisaged that a period of 2-3 years - at the beginning of HSP2 – is required to address these matters and which would be programmed into the strategic plan of work for HSP2 with a sequence of appropriate timelines, targets and indicators. This will allow for a more rapid improvement in utilisation of health services, better value for money and improve chances of reaching the Millennium Development Goals in time for their target year 2015.

A strong involvement of the private sector in the implementation of HSP2 is a complex and demanding task. It involves addressing particularly the following issues:

- A balancing of the role of the private sector as independent health entrepreneurs, as well as their role as partners in serving the country's health care needs. This in turn calls for a definition of the financial relationship between the public and private sector in terms of equity funds, health insurance and patients' fees and related matters.

- The development of licensing, accreditation and quality control – including strong organisational measures to develop and implement policies covering areas such as the role of an independent body for health service monitoring, and the role of medical associations and councils.
- The formation of policies on "dual employment" in both private and public sector and associated human resource policies.
- Integration of the private sector into the broader health information system

Equity is a front issue for the HSP1. Results of the review indicate that results have been achieved. The 'out of pocket' financial burden of Cambodian households for health services demonstrates reduction, and there is increased utilisation of health services in low income provinces - to mention two important steps made. Yet data also indicates serious areas of limited progress – and there is evidence of health status development following a path of "trickle down" rather than "general equitable development".

Some specific measures to address these equity challenges are recommended, and should include:

- To agree and identify equity targets which include an effort to:

  Assess MDG achievements by provincial level (or on aggregated provincial level as done in the CDHS)

  Utilisation targets for each province in which, stepwise, private sector data are included and utilisation of national hospitals is redistributed according to the location of patients' home province

  Improve the health information system - to address routine measurement of equity target progress and attainment. This could include a re-analysis of the CDHS to create a better base line for strategy monitoring with particular emphasis on equity issues related to women's and children's health.

Chapter 1: The Health Sector Review - Introduction & Methods Used

Introduction

This Cambodia Health Sector Review was originally planned as a mid term review of the first Health Sector Strategic Plan (HSP, 2003-2007). At the outset of fieldwork in Cambodia (June 2007), the team were asked by the Ministry of Health (MoH) to change the general scope of our work from a Mid Term Review to a Health Sector Review.

The arguments for this were sound, as HSP implementation is finished within six months of the start of this review, and drafting of the next strategic plan (HSP 2) is underway.

There is a clear distinction between a Mid Term Review and a Health Sector Review. Both focus on strategy content, implementation (including monitoring and evaluation) and impact. However, a Mid Term Review normally supports and identifies corrections in strategy implementation, whilst a Health Sector Review attempts to draw conclusions to inform the development of the new strategy.

Although the Terms of Reference (ToR - Annex 1) remained largely unchanged, we were required to focus more on the strategic aspects of the ToR and give less priority to those issues of lesser strategic importance.

The **main purpose of this review** was to: measure progress towards achieving the goals and objectives of the HSP; derive lessons from the 5 year implementation period; and thereby inform and contribute to policy and strategy development for the new HSP due to start in 2008. Ultimately, the findings from this review should also inform the Institutional Development Plan (2007-2010) currently being formulated by the Ministry of Health (MoH).

Importantly, this review drew upon the findings of four earlier sub-sector reviews which were commissioned in key areas of interest: a Midwifery Review, a strategic review of Health Services Contracting, an assessment of the Sector-wide Management approach, and a review of the Health Sector Support Project. A range of other literature sources also informed the review (Annex 2).

HSP (2003-2007) – a Land Mark Event

The Health Sector Strategic Plan (2003-2007) is a land mark event in Cambodian health care and should be strongly commended for several reasons:

- It was the first national health strategy and sets out a clear vision and mission, with objectives and medium term sector wide strategies
- Equity and pro-poor health care were cornerstone values
- It was proposed as a ‘sector wide’ strategy to be inclusive of all stakeholders and the public/private sectors
- The conceptual design was logical, i.e. key cross-cutting themes, or priorities of work, were clearly identified and earmarked for action

A number of other ‘first time’ steps were taken with the expectation that they should guide the formulation and implementation of the strategy:

- Health outcomes were identified for the whole health sector rather than on the basis of individual programmes
- A mission statement, values and working principles were developed.
- The strategic plan was linked to the planning-budgeting cycle of MoH.

The HSP consisted of twenty strategies. All strategies were considered important, although 8 of the twenty strategies were identified as core strategies, and grouped into six key areas of work. Namely, health service delivery; behavioural change; quality improvement; human resource development; health financing and institutional development. Section 1.5 (Report Structure) explains how these strategies are examined in this review.

The Health Sector Review: Methods Used

A mix of methods was used to conduct this review (Box 1).

Box 1

- Document Review
- Secondary data analysis of key sources (e.g. Cambodia Demographic and Health Survey, National Health Statistics Reports)
- Interviews with a range of key stakeholders
- Health service observation via provincial visits
- Participative interaction with key stakeholders during key stages of the review process (i.e. inception meeting, 'early findings' presentation, and feedback on the draft report)

This combination of methods enabled the review team to formulate hypotheses and lines of enquiries (e.g. drawing upon document review and key informant interviews), which could be examined via secondary data analysis, direct observation (provincial visits) and triangulated with further key informant interviews. It also allowed key stakeholders to input into the review process – i.e. to provide information and correct any mis-understandings. In this way, the validity and quality of findings was assured.

More specifically,

- **Document Review**: The review team collected and reviewed a comprehensive document databank (Annex 2). Key documents were identified and provided by stakeholders and augmented by a selected literature review undertaken by the team. The majority of documents were gathered in electronic format. Given the valuable nature of this information, and the time taken to gather it, a CD of this library of documents will be given to the Department of Planning and Health Information for their future use and reference.

- **Secondary data analysis of key sources**: The Cambodian Demographic and Health Survey (2000 & 2005) and National Health Statistics Reports (1998-2006[2]) were the main data sources used to examine both changes in population health status and health utilisation behaviour for the period of the HSP. Descriptive statistics were used to explore these changes.

  For population health status change the Cambodian Demographic and Health Survey (2000) was used as the baseline. This was considered the most reliable and comprehensive source available and provides a direct comparator with those produced in 2005. Limitations to the data analyses undertaken are explained below.

- **Interviews with a range of key stakeholders**: Individual semi-structured interviews were conducted with a wide range of government and other stakeholders. On occasion, some key informants were interviewed in pairs and/or small focus groups for practical and logistical reasons. The key informant list was agreed with the Ministry of Planning and Health Information, and they facilitated the logistics around many of the appointments.

[2] Health Statistics data for 2006 were only partially available for inclusion in the analyses undertaken (see Chapter 2).

A total number of 57 interviews were completed (Annex 3), along with further interviews with representatives from Takeo and Kampong Cham provinces.

Generally speaking, the content of interviews were captured via hand written notes (not tape recorded) made by the interviewer who was a member of the review team. These notes were typed and transcripts circulated within the review team. This served to share information across the team and to develop further lines of enquiry for the review.

- **Health service observation via provincial visits**: Visits were made to the provinces of Takeo and Kampong Cham by the review team members. This provided a good opportunity to observe 'action on the ground,' and to meet provincial, Operational District, Referral Hospital and Health Centre staff representatives and patients.

  These provinces were purposively selected. Criteria determining selection were:

  - Ability to 'show case' examples of health systems innovation – e.g. contracting, equity fund provision, staff incentives.
  - Pragmatics – time and resources were limited – so provinces closer to Phnom Penh were chosen

  Both contracting and non-contracting Operational Districts were visited. Review team members were accompanied by Ministry of Health staff who also helped with translation, when necessary. Ideally, independent translation would have been preferable.

- **Participative interaction with key stakeholders**: This was an interactive review process which allowed for a 'two way' flow of information at key stages of the review process. It included:

  An **inception meeting,** chaired by the Department of Planning and Health Information, and attended by a range of development partners, at the onset of the review to discuss and agree process and approach. Key documents for the review were identified as part of this meeting

  An **early findings presentation,** held at the end of the review team's data collection visit to Cambodia (June 2007). This was attended by 44 representatives from Government and Development Partners (Annex 4).

  Feedback on the draft report: The Government circulated the draft report to Government colleagues and Development Partners for review and comment. The review team were pleased to receive responses from: Ministry of Health (Kingdom of Cambodia); WHO; JICA; UNFPA; UNAIDS; DFID; World Bank, GTZ.

Strengths & Limitations of the Health Sector Review

Strengths of the Health Sector Review

These were:

- Extent of pre-existing documentation: There is a rich source of documentation available on the Cambodia's health sector. This was invaluable to the review team.
- The blend of methods adopted for the review allowed for data triangulation with opportunities for validity /quality checks (e.g. interactive process with stakeholders)
- The high levels of co-operation and assistance provided to the review team by Ministry of Health and all partners

- The composition of the review team which was multi-disciplinary and complementary in skill mix and experience.

Limitations of the Health Sector Review

The following are limitations of this review:

- Despite great effort, we were unable to conduct the sub-analyses on the Cambodia Demographic and Health Survey that we hoped to undertake. Most of the time was lost trying to solve problems opening the databases (2000 and 2005). When that was solved, it was evident that the structure of the database is not very user friendly to 'outsiders,' and it would take more time than permissible under the review period, to conduct the analyses required. This is a significant shortcoming because the intended sub-analyses sought to examine patterns and changes over time in equity and health status and health service utilisation.

- Statistical data on the utilisation of public health services for 2006 was only partially available at the end of the review period. This means the statistical series' is short for some of the completed analyses and the conclusions drawn more uncertain.

- The analysis of equity funds and contracting could also benefit from access to data from the 2006 Health statistics

- The analysis of human resources is well covered with data on midwives but lack data on other staff categories.

- The analysis of physical (capital) infrastructure for the health sector is weak because of lack of data and policy details.

- Interviews with respective representatives of the Council of Ministers and the Ministry of Economy and Finance would have contributed to the comprehensiveness of this review. Although efforts were made, it was not possible to meet within the available timeframe.

Report Structure

This report consists of six chapters which are preceded by a separate section that addresses *Summary and Strategic Recommendations*

Chapter 1 sets the scene and outlines the methods adopted for the health sector review;

Chapters 2-4 serve as a caucus of chapter which analyse ***overall sector progress*** made during HSP (2003-2007). More specifically, Chapter 2 examines population health status and service utilisation for this period, and the attainment of overall outcomes set by HSP; Chapter 3 reviews progress in policy development and implementation for the case of maternal and child health – a key focus of HSP; where as Chapter 4 studies the monitoring and progress gains for all 20 HSP strategies.

Chapter 5 presents an analysis of resources for the health sector for the period 2003-2007. Finances and human resources are the thematic areas of inputs singled out for attention.

Chapter 6 considers examples of health system experimentation taking place in Cambodia during the review period. Amongst others, this includes topics of contracting, health equity funds, pay incentives. Arguably, these topics could have been woven into and discussed in early chapters (e.g. Chapter 5). However, given the innovative nature of these initiatives they were singled out for particular attention.

Each of these six chapters concludes with a summary of key observations, proposals for further studies (if appropriate) and policy recommendations for HSP 2. This - in conjunction with the overview of *Summary and Strategic Recommendations* - meant a separate concluding chapter on summary and recommendations was not included, as it was considered repetitious and redundant.

This report reviews progress for all HSP strategies. Table 1 maps out how the report structure addresses and links to HSP's key areas of work.
Table 1

HSP Key Areas of Work	Location in Report
Health Service Delivery	Chapters 2-4
Behavioural Change	Chapter 3 & Chapter 4
Quality Improvement	Chapter 4 & Chapter 6
Human Resource Development	Chapter 4 & Chapter 5
Health Financing	Chapter 4 & Chapter 5
Institutional Development	Chapter 6

Chapter 2: Overall Sector Progress: Population Health Status and Health Service Utilisation

2.1 Overview

The stated goal of the Health Sector Strategic Plan of 2003-2007 is to:

> *Enhance health sector development in order to improve the health of the people of Cambodia, especially mothers and children, thereby contributing to poverty alleviation and socio-economic development.*[3]

This chapter of the Sector review focuses on the output and outcome of this policy. It provides the background to the analysis of resources used and the systems established to reach the ambitious goals that were set. The focus is thus on progress – or lack thereof – in terms of improving the health status of the Cambodian population and their utilisation of services to both prevent and cure ill health.

Fundamentally, the analysis in this chapter examines progress against what the HSP set out to achieve in terms of health status gains for the population of Cambodia.

Box 2a describes the outcomes and targets sought by the HSP:[4]

Box 2a

Outcome	Target
Reduced infant mortality rate	84/1000
Reduced child mortality rate (U5MR)	111/1000
Reduced maternal mortality rate	305/100000
Improved nutritional status among children and women	31%
Reduced total fertility rate	3.5
Reduced household health expenditure for the poor	
Reduced adult HIV/AIDS prevalence rate	2.1 %

These outcomes were largely compatible with those sought by the health related *Millennium Development Goals* for Cambodia – although with some variation – and particularly vis-à-vis target specification:

- Reduce the proportion of under-weight children aged less than 5 years from 45% to 31%
- Reduce infant mortality from 95 to 84 deaths per 1000 live births,
- Reduce mortality for under 5 children from 125 to 111 deaths per 1000 live births
- Reduce maternal mortality ratio from 437 to 305 deaths per 100.000 live births
- Increase modern contraceptive prevalence rate from 19 % to 35 % for women aged 15-49
- Reduce HIV infection ratio from 2,8% to 2,1 % among 15-49 years old
- Reduce incidence of malaria from 11% to 8 % and mortality from 10 % to 7 %

The ensuing analysis of outcomes is also conducted with a strong equity focus because of the prominent position accorded to equity within the general mission statement of the HSP (see below). An analysis of the wellbeing in the population is also considered given the pace of development or 'modernisation,' and whereby increases in wealth is regarded as a possible alternative explanatory factor to that of HSP impact, in terms of changes in population health outcomes

[3] Health Sector Strategic Plan 2003-2007, volume 1, p 21f
[4] For a detailed analysis of targets and their achievement – see chapter 4 below and its attachement

Data Sources
The Cambodia Demographic and Health Surveys (CDHS - 2000 and 2005), in conjunction with the Health Statistics yearly statistics, were the data sources used to complete the analysis described below. The time points of the CDHS and the HSP are slightly out of phase with each other. Whilst this is recognised, it was necessary to work with the data available and not considered a fundamental problem because the time frames were considered close enough, and the type of health status indicators of interest 'slow moving' and subject to incremental change. If anything, the findings of the full impact of the HSP may be 'diluted' in the reported analysis because the CDHS was completed two years short of the implementation period for the HSP.

2.2 Epidemiology of Health Status Changes[5]

General wellbeing
Comparing CDHS 2005 and 2000 data, it is seen that the percentage of women not reached by or exposed to the mass media, at least once a last week, and the percentage of women with no education at all, decreased over time. Whereas, percentages of households owning a television set in rural and urban areas, and the percentage of children under 5 possessing a birth certificate increased substantially over time. Consistent with other observations, the general wellbeing of the Cambodian population seems to have been improved over time as measured by these 'markers' of development and wellbeing. On the other hand, the reported percentage of households who were ill or injured in the last 30 days increased from 9.5% to 16.2% over the 5 years. As these figures were self-reported, the observed change was unlikely to reflect an increase in incidence and may well be explained by differences in perceptions or definition of illness.

Health of women and children
The health status of women and children is the main epidemiological focus of the HSP. Results over the five years period differ for some key aspects of health status.

In terms of infant mortality rate (IMR) calculation, in the CDHS the IMR was not estimated for a particular year (say 2000 or 2005) but instead was estimated for a period of time (e.g. 0-4, 5-9 and 10-14 years preceding the survey). Therefore, the IMR for the years 2000 and 2005 was not reported. Instead, the 2005 survey estimated IMR for the period 0-4 years preceding the 2005 survey (66 per 1000 live births) and this figure was compared to a similar IMR estimate for the period 0-4 years preceding the 2000 survey (95 per 1000 live births). Alternatively, the IMR was also estimated for the 5-9 and 10-14 years preceding the 2005 survey, using only the 2005 dataset. The IMR for these 2 periods was respectively 109 and 93 per 1000 live birth (as compared to the figure 66 per 1000 live birth for the 0-4 year period preceding the survey).

The IMR in Cambodia declined substantially over time and between-survey estimates, as well as within-survey estimates. The declining trends were visually presented by centring the estimates over the period of time (see Table 2.1).

Similar estimates were made for the under-five mortality rates. The under-five mortality rate for the period 0-4 years preceding the 2005 and 2000 surveys was respectively 83 and 124 per 1000 live births. Alternatively, the 2005 0-4 year figure can also be compared to the 2005 5-9 year figure (127 per 1000 live births). See Table 2.1.

In terms of women, the total fertility rate (TFR) decreased from 4 to 3.4 over the 5 years (2000 to 2005). It is however, not evident that maternal mortality rates (.50 versus .55 per 1000 women-year of exposure) and maternal mortality ratios (472 versus 437 per 100,000 live births) dropped substantially over time when the estimates based on 2005 versus 2000 data were compared.

Maternal health (maternal mortality rates and maternal mortality ratios), women's nutrition status (approximated by using BMI measures and height less than 145 cm) and teenage pregnancy did

[5] When no other reference is given, data in this chapter are from the attached table 1.

not show much improvement over the 5-year period. Although the percentage of women who experienced violence in the last 12 months and women who suffered from anaemia dropped by a few percent over the 5-year period.

Refer over page to Table 2.1. that compares health parameter values from the 2000 and 2005 CDHS.

Table 2.1. Comparing Health Parameter Values in 2000 and 2005 CDHS

	2000	2005
General wellbeing		
% women not exposed to mass media (at least once a week)	30.3	21.1
% women with no education	28.3	19.4
% household owning TV	32.5	55.2
% household population ill/injured in the previous 30 days	9.5	16.2
% children under 5 with a birth certificate	20.9	54.2
Mortality and fertility		
Age adjusted maternal mortality rates (per 1,000 women- year of exposure) for the period 0-6 years prior to the survey	0.55	0.50
Maternal mortality ratio (per 100,000 live births) for the period 0-6 years prior to the survey	437	472
Infant mortality rate (per 1,000 live birth)		
for the 0-4 year period prior to the survey	95	66
for the 5-9 year period prior to the survey	91	109
for the 10-14 year period prior to the survey	78.8	93
Under-five mortality (per 1,000 live birth)		
for the 0-4 year period prior to the survey	124.4	83
for the 5-9 year period prior to the survey	119.4	127
for the 10-14 year period prior to the survey	114.7	124
Total fertility rate	4.0	3.4
Women's health		
% BMI<18.5 kg/m^2 (total thin)	20.7	20.3
% height <145cm	5.5	7.7
% anaemia (moderate and severe level)	14.0	11.2
% teenage (15-19) pregnancy	5.6	5.2
% with at least one abortion in the past 5 years	1.9	3.5
% experienced violence in the past 12 months	15.2	10.3
	2000	**2005**
Child health		
% children<5 with height-for-age <-3 S.D.	20.5	12.9
% children<5 with height-for-age <-2 S.D.	44.6	37.3
% children<5 with weight-for-height <-3 S.D.	3.9	0.8
% children<5 with weight-for-height <-2 S.D.	15.0	7.3
% children<5 with weight-for-age <-3 S.D.	12.6	6.9
% children<5 with weight-for-age <-2 S.D.	45.2	35.6
% 6-59 months have anaemia	63.4	61.9
% children receiving all basic vaccine	39.9	66.6
Injury/accident		
% injured or killed in an accident in the past 12 months	0.9	1.9
% household population physically impaired	1.6	2.2
% involving road accident among those injured or killed in the past 12 months	33.2	45.9
% involving landmine/unexploded bomb among those injured or killed in the past 12 months	3.0	0.7
Health services utilization		
% women with live birth in the past 5 years who utilized antenatal services (doctor/nurse/midwife)	37.7	69.3
% women giving birth in the past 5 years preceding the survey with no postnatal checkup	45.9	30.1
% live births in the 5 years preceding the survey delivered by doctor/nurse/midwife	31.8	43.8
% household memb. ill/injured in last 30 days seeking treatment	88.6	91.5
% live births (in 5 years before survey) delivered in health facility	9.9	21.5

Table 2.2. uses the findings from the review of health status over time (Table 2.1) and compares it to outcomes/targets set by the HSP to assess levels of achievement.

Table 2.2: HSP & Outcome Target Attainment

Reduced infant mortality	Achieved
Reduced child mortality rate (u5MR)	Achieved
Reduced maternal mortality rate	Not achieved
Reduced nutritional status among children and women	Not achieved
Reduced total fertility rate	Almost achieved 2005, possibly achieved later in the implementation period
Reduced health expenditure for the poor	Achieved
Reduced adult HIV/AIDS prevalence	Achieved

Attribution and impact of the HSP on the outcomes achieved is difficult to conclusively demonstrate. However, the focus and enabling environment of HSP can be considered pivotal to the findings reported in Table 2.2. These findings demonstrate that commendable and important gains have been achieved. However, the picture is mixed, and the lack of progress in terms of maternal mortality reduction and the nutritional status of women and children is alarming. Maternal mortality is often identified as 'marker' of health system performance and development because of the infra-structure, skills, capacity and cross referral required of the system to effectively and safely manage these complex and life threatening conditions. In this case, the health system in Cambodia fares badly. Similarly, nutrition – essential for good health - is a 'marker' of general development - there remains much to be improved in this respect

2.3 Equity in Health Status

Broadly speaking, with the exception of women's health, the health status of the Cambodian population has improved over time (2000-2005), as measured by different parameters of health. Whether gains are being made in an equitable fashion is an important issue to examine - it is possible that improvements are concentrated in certain sectors and not enjoyed by the majority of the population. Two different general development strategies can be drawn upon – i.e. the "trickle down strategy" and the "general equitable development strategy" – to guide such an analysis.

The "trickle down strategy" concentrates initial change and improvement within groups with high socio-economic status, and over time this change gradually encompasses the whole population. The "general equitable development strategy" expects inequitable conditions for health status as a starting point coupled with the use of targeted and effective measures to reduce such disparities for less privileged groups, as its main thrust.

The policy content in Cambodia is clearly in keeping with the "general equitable development strategy." Although data seems to suggest, that what has actually happened over the HSP implementation period fits better with the trickle down model (Table 2.3).

Table 2:3: Summary of CDHS Data on Equity Disparities

Infant mortality rate[6]	Urban population	Rural Population	Mothers have no education	Mothers have some 2nd education
2000	72,3	95,7	102,5	60,3
2005	65,0	92,0	111,0	45,0

Under 5 mortality rate	Urban population	Rural Population	Mothers have no education	Mothers have some 2nd education
2000	92,6	126,0	135,5	75,9
2005	76,0	111,0	136,0	53,0

Total fertility rate	Urban population	Rural Population	Mothers have no education	Mothers have some 2nd education
2000	3,1	4,2	4,5	2,9
2005	2,8	3,5	4,3	2,6

% Women BMI <18,5 kg/m2	Urban population	Rural Population	Mothers have no education	Mothers have some 2nd education
2000	16,1	21,6	22,0	21,5
2005	17,3	21,0	19,1	21,1

Infant age 6- 59 months with anaemia	Urban population	Rural Population	Mothers have no education	Mothers have some 2nd education
2000	57,3	64,4	70,1	52,1
2005	59,7	62,2	68,5	52,5

Data from Table 2.3 above demonstrate substantial urban-rural differences in infant and under-five mortality rates and such differences did not become narrower over time.

In general, urban/rural differences in health status were smaller than those related to education levels. However, that may reflect the fact that urbanization is at its early stage in many of the Cambodian cities. Urbanization is expected to speed up and when major cities are developed, predictably urban-rural differences will be widened further.

Women's education level is a good indicator of socio-economic differences. The observed health status differentials by education level were indeed very large, and in quite a number of cases (such as infant and child mortality rates) the gaps continued to increase. If this continues on its current trajectory, inequity in health mediated by educational status will be very serious.

Of particular concern is the observation that rural population groups and households with no education, seem to see very little, if any, improvement in health status.

[6] This figure is for the 10 years prior to the survey. It is unfortunate for the equity analysis that the CDHS has chosen to present these key data only in a way that makes the equity data less precise. The retrospective analysis presented here tends to disguise recent developments and overemphasise developments of more historical interest. The alternative – on the other hand – tend to increase uncertainties because of variation between years Efforts were made during the Health Sector Review to re-analyse the basic CDHS data for 2000 and 2005 in this respect but our efforts failed for technical reasons.

It seems that actual progress in health status may deviate considerably from the HSP mission and targets of equitable development. Further analysis of these data is required for a more definite appraisal and statement.

Provincial variations in health status were also very large although some variations also seem to be diminishing over time. Going forward, the priority of equity versus speed of overall improvement needs to be seriously weighed up and considered by government and policy makers.

2.4 Non Communicable Disease (NCD) in Cambodia

2.4.1 Overview

Disease burden in low income countries such as Cambodia tends to be very heavy for communicable disease, therefore, leading to a lack of focus, lack of data, lack of resources and lack of policies in relation to non-communicable disease.

The document entitled "*Non Communicable Disease and its Risk Factors – A Situational Analysis of Cambodia 2006*" has begun to raise some of these issues. A number of factors point to a rapidly increasing need to address the NCD issues systematically – such as, rapid modernization including increasing wealth with high exposure to risk factors for NCD, and demographic change. In general, available data are inadequate for a comprehensive assessment of the disease burden of NCD.

2.4.2 NCD by disease and risk groups

Diabetes and hypertension

A study published in Lancet was conducted in the rural area of Siem Reap and the urban area of Kampong Cham. The prevalence of diabetics was about 5% in the rural area was about 10% in the urban area. The prevalence of hypertension (>140/90) in adults > 25 years of age was 11.7% in the rural area and was about 25% in the urban areas. It is suggested that nutritional deficiencies may be related to the observed high prevalence levels.

Cancer

A cancer registry was established in 2001. It however, encountered technical problems and stopped functioning over the last few years. Only very limited data on patients using oncology services are now available.

Cardiovascular diseases

There are no good data available.

Nutrition

The 2000 CDHS results indicated that about 44% of the children under 5 were stunted (37% in 2005). The National Micronutrient Survey was conducted in 2000 but was not analyzed. National dietary studies were not available.

Physical activity

We found no credible survey data investigating the level of physical activity in the general Cambodian population. The situational analysis quoted the National Youth Risk Behaviour Survey 2003-2004, but that study asked about participation in sport rather than physical activities.

Smoking

Prevalence of smoking (daily smoker) for men above 15 was 35% in urban areas and 45% in rural areas according to the SES 2004 Survey which interviewed 15000 households (about 4% for women >15 in both rural and urban areas).

These data were consistent with those collected in another tobacco survey which interviewed 4200 households.

About 10% of the Cambodians started smoking at the age of 10-14. The reports were not made available but the data on smoking seem credible.

Alcohol
The situational analysis report quoted that in 2000, 66% of the interviewed husbands drank alcohol to some extent and among these people, 18% frequently got drunk. The National Youth Health Survey found that 14% of Cambodians of age 11-18 drank alcohol (exact phrasing of the questions and the study design were not given). These data are not specific enough to describe the prevalence of alcohol dependence and abuse problems in Cambodia.

Illicit drugs
Anecdotal evidence and reports indicate a growing problem of use of illicit drugs.

Obesity
The 2000 CDHS reported that 9% of the women above 25 years of age had BMI>25. The similar CDHS prevalence for women aged 15-49 in 2005 was 9.6%.
Therefore, no obvious increase in prevalence was observed. Obesity data for men does not exist

Accidents
CDHS reports on numbers of members of households that have been injured or killed over the past 12 months. Total estimates arrive at 1.9 percent. The fact that traffic accidents dominate indicate the importance to better understand the effect on disease burden of Cambodia's rapid modernisation.

More people were injured or killed by an accident in the last 12 months in 2005 as compared to 2000. Of these accidents, road accidents played a growingly important role. Road traffic accidents is clearly playing making an increasing contribution to mortality and morbidity statistics and will require greater attention, in terms of galvanising an effective multi-sectoral response in the face of Cambodia's rapid pace of modernisation.

Mental health
There is very little data to base a review of the demands on the health system from mental health problems. The National Program on Mental Health has been founded, thus representing an institutional base for further work in this area. To date, small resources for treatment and care of mental health problems are available. Generally speaking, efforts so far are far below what may be considered reasonable considering what is internationally known about the disease burden from mental health problems. Furthermore, a country emerging from a post conflict situation – such as Cambodia, is likely to have consequences in terms of mental illness. Post traumatic stress disorders and other sequellae (e.g. association with domestic violence, alcohol consumption etc) should not be discounted as minimal.

2.4.3 The National Strategic Plan for NCD

A final version of the plan was prepared in 2006. It has 4 goals – to strengthen the management and implementation structure of NCD, to build up a surveillance system, to reduce the size of the 'at-risk' population, and to strengthen the health delivery system to provide equity and quality services. Outcomes and time schedules were also included in the plan.

The tasks yet to be undertaken are enormous compared to what has been done. The general strategic direction however, seems appropriate. Technical support needs to be secured to achieve these 4 goals.
The main challenges for the improved understanding, policy development and implementation of NCD can be described as follows:

- The death registry in Cambodia is underdeveloped. There is no regulation that 'cause of death' must be recorded and the quality of data, as mentioned, is unreliable. It is therefore not feasible to examine disease burden by investigating cause of death. Health statistics in Cambodia concentrate on communicable diseases and maternal child issues, whereas NCD reporting has been under-emphasized.

- A National Council for Nutrition was mentioned in the report and the Cambodian Nutrition Investment Plan was also mentioned in the situational analysis report. The National Nutrition Program is placed within the National Centre of Maternal and Child Health. It is not clear how the Department of Preventive Medicine was linked to the NCMCH and the National Centre for Health Promotion. This is an example of an overlapping infrastructure for health promotion and raises concern over lack of co-ordination.
- The National Institute for Public Health (NIPH) does not seem to be responsible for conducting important research on NCD and risk behaviours on a regular basis. It is not clear which department is responsible for collecting surveillance research data and the coordination structure may not exist.
- The minimum package of activities (MPA) covers mainly messages on maternal and child health but contained less content that relates to NCD. Hypertension, diabetes and cancer prevention are included into the MPA.
- It is not clear whether there are any national policies/strategies on physical activity, hypertension treatment, diabetes and prevention/control of cardiovascular diseases.
- There seems to be no screening programs for detecting diabetes in the high-risk populations. There are a few diabetic clinics run by the government and some NGO. There also seems to be little available care for treatment and complications.
- The responsibility of the Department of Preventive Medicine may benefit from an update. The division of labour between this and other departments was unclear and current NCD strategies look limited and fragmented.

2.5 Utilisation of health services

2.5.1 Overview

The health sector strategic plan mission statement ambitiously states the following goals for access to health care:

> "all the people of Cambodia, of whatever age, place of residence or ability to pay, should have equal access to good quality basic and essential specialised health services, staffed by competent health professionals and at a cost people can afford…"

In particular, utilisation of health services is the focus for this part the chapter. Utilisation of health services plays a major role in the targets of HSP, the first three of which, are directly related to this aspect of health services delivery.[7]

The following information sources have been used for the analysis that follows:

- The Cambodia Demographic and Health Survey 1998, 2000 and 2005. (CDHS)
- National Health Statistics for the Kingdom of Cambodia (2002-2006J
- Annual Health Sector Review Documents 2003-2007

2.5.2 The overall picture of health service utilisation

Utilisation of health services has generally been low in Cambodia. In the region, Cambodia and Laos share similar levels of use of services where as levels for Thailand and Vietnam are higher[8] and illustrate a reasonably realistic goal for Cambodia:

[7] See attachment 3 for a detailed analysis of the strategies, the target, indicators and results 2003-2007.
[8] Data from WHO core health indicators database 2007. Data for intercountry comparisons suffer from weaknesses of data quality and up-to-dateness. Still – they give an understanding of "where we are" and "where we could go" beyond what can be achieved by other means.

Table 2.4: Health Service Utilisation - Regional Comparisons

	Antenatal care coverage – at least one visit	Births attended by skilled health personal	Births by Caesarean section
Cambodia	44 % (2000)	44 % (2006)	1 % (2000)
Laos	44 % (2001)	19 % (2001)	--
Thailand	--	99 % (2000)	--
Vietnam	70 % (2002)	85 % (2002)	10 % (2002)

The CDHS present data on numbers of household members who have experienced illness or injury in the 30 days before the interview and *who sought treatment*. From a baseline of 86 % in 1998, and 89 % 2000, the 2005 data represent a continued trend upwards with 91.5 percent having sought health services for disease or injury in the previous month (before the survey).

It is important to note, that public sector services cover a relatively small segment of the health service demand from the population – 22 percent of the total. The private sector dominates – 48 % - while the non-medical sector – shops and markets selling drugs – achieve 21 %.

Private pharmacies dominate the private sector. *Private clinics* and *private hospitals* market share match the totals for the public sector health centres and hospitals. Data alone from the public sector health information system (HIS) cannot adequately capture the general health access and utilisation patterns in Cambodia. On the other hand, the HIS data are important for the purpose of the HSP which predominantly addresses the services of public health providers.

A comparison of CDHS data for 2000 and 2005, undertaken by this review, indicated a shift in health search behaviour away from non-medical facilities. However, a change in the health provider classification system between 2000 and 2005, may have explained this finding - at least in part. Therefore, such analysis had to be unfortunately abandoned because it was not possible to compare 'like with like.'

2.5.3 Utilisation of outpatient services

Historic data for outpatient service utilisation in Cambodia include three valuable parameters[9]. Trends for the period from 1998 to 2006 are shown in Table 2.5.

Table 2.5 Trends in Utilisation of Outpatient Services

	1998	1999	2000	2001	2002	2003	2004	2005	2006
Outpatient contacts/capita/year	0,31	0,29	0,31	0,37	0,36	0,39	0,40	0,50	0,60
Antenatal coverage	30,2	36,1	40,9	43,0	41,0	46,1	45,2	53,2	0,60
EPI coverage: measles (% of target group		63	69	69	65	69	65	79	(see footnote num [10])

Data on health service utilisation in the public sector, demonstrate an increase over time in relation to the launch and implementation of the HSP. Antenatal coverage shows a clear improvement during this period whilst EPI - measles coverage are slightly less clear. There is a spike of improvement late in the period – 2005. How this relates to GAVI related activity was not examined.

The public sector is targeted by 21.6% of the population when seeking health care. In the public sector, hospitals play a relatively important role – almost eight percent seek health care in national,

[9] From national health statistics 2005
[10] Data from 2006 are preliminary and as yet incomplete.

provincial and district hospitals. Health centres, health posts, outreach services contribute to slightly less than 14 % of the total active demand.

The private sector shows a different pattern. The private "market share" reported in 2005 accounts for approximately half of the total demand. Private hospitals are few in number whilst clinics and pharmacies have a comparable "market share" to public health centres (i.e. sixteen percent). The "market leaders" are home based or office based nurses/midwifes/doctors who account for 30 percent of the active demand measured in DHS terms.

In sum, these data illustrate Cambodia's pattern of health seeking behaviour. However, it is important to recognise that many qualified health staff also provide private health services. The distinction between 'public' and 'private' in many resects is therefore partly an 'academic' point. Private outpatient services would not be available unless the public sector had provided the basic infrastructure, training and staff resource.

2.5.4 Equity aspects of outpatient services

There are few evident gender related disparities in outpatient services utilisation, as long as data are analysed in aggregate on a national level (data from CDHS). Wealth related disparities are – as can be expected – more prominent. Poor provinces in Cambodia still show lower outpatient attendance than the more wealthy provinces, as measured in the CDHS. The lowest figures for seeking health (when in need) demonstrate that 25 % abstained. In provinces with populations exhibiting higher health seeking behaviour, five percent or less reported abstaining.

An analysis of public sector facilities only, demonstrates a different situation. Provincial variation in the numbers of outpatient consultations is very large – from figures of very few handfuls of outpatients - particularly in the years before 2000 - to figures exceeding 1/pop/year. This variation – including also variation over time – and raises questions about the quality of the data, in addition to concerns about equity in access to care. It is recognised that 'noise' in provincial health service utilisation figures may be caused by such factor as, proximity to country borders (e.g. resulting in migrant health seeking behaviour over and back across a border).

Having said that, disparity between provinces (using standard deviation) decreases hardly at all over time which underlines continued equity related concerns.

Table 2.6 shows average levels of outpatient contacts per capita in provinces of different levels of poverty.[11]

Table 2.6: Per Capita Outpatient Consultations by Province

	Eight poorest provinces	Eight medium provinces	Eight provinces with lowest poverty rates
2002	0,52	0,39	0,34
2005	0,56	0,54	0,39
2006	0,68	0,50	0,43

It is clear that outpatient contacts in public health services increases over time, both in the very poorest provinces, and the slightly wealthier provinces. Relatively high utilisation figures are found in the poorest areas of Cambodia. The picture is made considerably less clear by the fact that national hospitals – predominantly situated in the capital – are difficult to include in this analysis.

[11] For the classification of provinces according to poverty levels data from the DHS 2005 have been used. Provinces have been agglomerated in groups of eight according to the share of the population belonging to the lowest wealth quintile. (DHS 2005 table 2.11) Averages are calculated with each province affecting data with the same weight.

It is assumed that many outpatient visits at national hospital level (i.e. about 15 % of the grand total for public sector Cambodian outpatient visits in 2005) are "local". The figures for the more wealthy provinces are thereby underestimating the real level of outpatient visits. For the discussion on regional equity it assumed that 1 million of the total 1,6 million take place with "local" patients in Phnom Penh. This would raise the figures for the Phnom Penh province from one of the lowest in Cambodia to a unequalled top position of 1,1 visits per capita for the year 2006.

Even so, the increase in figures for outpatient visits in the poorest provinces is encouraging and seems to support the existence of an equity edge to the HSP implementation. However, the fact that outpatient visits in national hospitals has doubled from 2002 to 2005 is a major cause for concern from a regional equity point of view. When national hospital figures are included in data for the few major cities in which they operate, more wealthy provinces are bound to have a more prominent figure and may also increase their patient numbers much faster than the data presently available seem to indicate.

Three other measures – presented in table 2.7 - of utilisation of health services convey a different message.

Table 2.7 : Antenatal care coverage, DPT 3 (immunisations) coverage and birth spacing coverage by provinces

Utilisation type (percent of target group)	Year	Eight poorest provinces	Eight medium provinces	Eight provinces with lowest poverty rates[12]
Antenatal (1st) care coverage (% of target group)	2002	42,0	44,15	31,6
	2005	69,9	85,1	58,8
Antenatal 2nd	2006	52	57	48
DPT3 (immunisation) coverage	2002	59,0	59,6	62,5
	2005	84,1	83,5	75,9
	2006	80,4	68,8	71,1
Birth spacing (contraceptives) coverage	2002	13,9	12,2	14,2
	2005	22,0	20,5	22,2
	2006	24,1	20,0	22,3

Table 2.7 demonstrates that increased utilisation is strong between 2002 (the year before the launch of the HSP) and 2005. Improvements between 2005 and 2006 are less clear. In terms of antenatal utilisation, the antenatal data are calculated in a different way in 2006 which makes temporal change unfortunately impossible to analyse.

These three indicators of explicit public health/prevention show no clear relationship to poverty levels in the provinces. It is reasonable to assume that this is explained by the fact, that the private sector – in which pharmacies play a strong role – have a lower "market share" within preventive medicine than in curative medicine. In addition, national hospitals play a smaller role.

Antenatal care utilisation is well addressed in the CDHS. However, the picture presented is not fully comparable with facility based data from the official public sector statistics. The comparison of antenatal coverage for women by wealth quintiles predictably shows better utilisation by increasing wealth. Mothers' education also shows strong positive co-variation. As formerly hypothesised, the

[12] Data from National hospitals not included

private “market share” or interest is much lower in this branch of medicine, although data do not allow for a more exact estimate of this.

Variation between provinces – as in all utilisation figures – is shown to be very high. The highest coverage is demonstrated by the group of eight middle wealth provinces. Contrary to data for public sector utilisation of antenatal care, the lowest figures are recorded for the eight poorest provinces.

The CDHS confirms facility based data shows a strong increase in immunisation between 2000 and 2005. More positively in this case – wealth status seems to play a smaller role – though not totally insignificant – for immunisation coverage. It is possible to interpret this as an effect of the public effort to achieve universal coverage.

2.5.5 Utilisation of inpatient services

The historic dataset presented in the National Health Statistic has a slightly limited information value for the follow up of hospital utilisation. To improve availability of data a further analysis of underlying data for the years 2002 and 2006 has been undertaken and is presented in table 2.8.

Table 2.8: In-Patient Utilisation Data

	2002	2005	2006
Hospital beds/1000 pop	0,56	0,57	0,53
Hospital discharges/ 100 pop	1,85	2,4	2,5
National hospital beds totals	1433	2111	2655
National hospital discharges	71.566	115.376	150.307
National hospital discharges as % of total	28,6	35,1	44,1

The overall picture is mixed. The number of hospital beds has increased over the period. A rapid development of population numbers balances this increase. The figures on “beds per capita” therefore end slightly lower in the end of the studied period.

The increase in hospital beds comes almost entirely within the category of national hospitals. Hospitals in provinces and OD’s have decreased the number of beds. Since the bed occupancy rate outside the national hospitals is generally low and moving only slowly towards “normal” levels (between 80 and 95 %), a drop in numbers of “non-national hospitals beds” can be seen as a positive development indicating improved use of resources.

It is possible to assume, that the quality aspect of inpatient care would have been favoured by a decrease in hospital beds through fewer very small hospitals (below 40 beds). Very small hospitals have remained active although it is impossible by use of existing statistical data to grasp the details of their role.

The analysis of discharges from hospitals (or admissions) gives cause for concern. The dominance of national hospitals has clearly increased and with a share of all hospitals discharges of 44 percent (2006), the present situation must be described as centred on resources on tertiary level that are costly and only marginally contributing to the general health status of the population. The strong emphasis on hospital resources around the capital is similarly a matter of concern considering the mission statement of equity in the HSP and its focus on services in the country as a whole.

2.5.6 Equity aspects of in-patient services

The DHS serves with some data on equity aspects on health care utilisation in general. These are discussed above and are presumably mostly related to outpatient services.

Data on hospital services describes major variation between provinces. Standard deviation around the discharges/100 pop average decreases between 2002 and 2005. It is too early to describe this as an improvement in equity.

In the context of rapid increase (and modernisation) of national hospital services and rapid increase also of discharges from these hospitals, the data on variation between provinces could be understood as a warning sign that further attention is needed for the development of peripheral and poor provinces to ensure a more equitable hospital care situation. When the no national hospitals are included a slightly surprising result comes forward. (see Table 2.9):

Table 2.9: Hospital Discharges by Province (per 1000 population)

	Eight poorest provinces	Eight medium provinces	Eight provinces with lowest poverty rates *(data on national hospitals not included)*
2002[13]	2,4	1,78	1,27
2005	3,04	1,87	1,42
2006	1,93	1,93	1,18

Discharges are clearly fewer in the more wealthy provinces. Phnom Penh province registers among the lowest discharge/pop figures in Cambodia – which is evidently an absurd underestimation. If only half of the national hospital patients are "local" in Phnom Penh, the capital will by a wide margin surpass all other provinces.

The increase of admissions in the eight poorest provinces is seemingly clear and rather impressive. However, the data quality issues referred to above make the observation less secure. Even so there is nothing to contradict observations of an improvement in hospital utilisation in the poorest provinces – thus supporting that HSP has played a real and positive role.

The uncertainties are however large, mainly because of how national hospital data should be understood and because of the lack of data on private hospitals.

If the observation of an improved situation for the poorest provinces relative to the country as a whole stands, two separate sets of explanations can be applied.

a. public resources for health services are used more by low income earners and the really poor. Thus the health care for the 3rd -1st wealth quintiles is handled more by private means and escapes utilisation statistics from public facilities. Improvements in access and dismantling of economic obstacles to public health facilities further strengthens this tendency.
b. The role of the National hospitals is predominantly local and the inclusion of their data particularly in the Phnom Penh figures will change the general picture in favour of high utilisation rates in the relatively wealthy provinces. Such higher utilisation rates may come on top of the undisclosed figures of private in-patient care

2.6 Conclusions

Utilisation is a major area of interest in the system of yearly reviews of the HSP. The conclusions that can be drawn from this system is analysed in detail in Chapter 2. The general conclusion from this analysis is that progress in relation to the mission statement quoted earlier has been made – although with some reservations.

[13] Data on three provinces hospitals include two extreme values that may raise questions of data quality. Caution is thus recommended for the conclusions based on these data.

Summary of Observations

- Health status in general as well as health service utilisation has clearly improved over the period. The high priority areas of women's health and nutrition for women and children are exceptions with important consequences.
- Equity is a major aspect of both health outcomes and service utilisation. Although figures are still uncertain, data seem to indicate that progress in children's health is concentrated to urban areas and to households with some – or good – education on the side of the mothers. Data on regional disparities in utilisation indicate some overall progress, but also a possible strong overweight for health service consumption in the capital. Private health services do probably strengthen this inequitable consumption pattern.
- The private sector still dominates the "health market", but comparisons between public sector and private sector for institutionalised forms of health care (hospitals, clinics/health centres, outreaches) demonstrate that differences are lower than normally assumed. The lack of data on the private sector makes it difficult to analyse whether the Cambodian population is reasonably served with quality health care.
- Non Communicable Disease, is only fragmentally covered by data, services and policies, although a start has been made to correct the situation.

Recommendations for further studies:

- To help effective monitoring of the mission statement and the strategic targets, a study of reforms of the health information system– including also elements of the private sector – is recommended. One core element could be data that show how the CPA and MPA functions are being met in actual services. Inclusion of national hospital data in the general data for each province would be an important element. Data on preventive activities could be broader. Further steps towards analysis of quality issues may be taken.
- Two key areas for analysis and studies are maternal and child health epidemiology – including also issues of service utilisation.
- The CDHS contains important data that is insufficiently known and hard to study for technical reasons. A re-analysis of CDHS to improve understanding of the present situation is strongly recommended.
- Non communicable disease will have a very strong impact on health care demand in Cambodia and already initiated work on the implications and possibilities to contain its development is recommended for further studies – including also reviews on the organisational "landscape" for analysis, policy development and implementation.

Policy Recommendations for HSP 2:

- The equity aspects of population health and service utilisation – strongly focused in the HSP mission statement – need policy tools for implementation that go beyond matters of staffing, financing and localisation of public health service facilities. Policies may be formulated in quantative terms reflecting different aspects of the equity concept – wealth, gender and regional balance

- The rapid development of the tertiary in-patient services – impacting on scarce staff resources for the whole country – as well as the role of the smallest hospital units may need a policy statement for the future that also considers the role of emergency transport services.

  The Ministry of Health's role as health sector steward needs to include policies for private sector integration to better serve the aggregated health care demands.

- The NCD policies already presented in 2006, will need to find a more prominent place in the comprehensive HSP2 covering the period up to 2015.

Chapter 3: Overall Sector Progress: Policy Development & Implementation: The Case of Maternal & Child Health

3.1. Introduction

Maternal, newborn and child mortality reduction are Royal Government of Cambodia (RGoC) priorities and the main focal areas of the HSP 2003-2007. This section focuses on maternal and child health as they are given a high level of priority within the HSP and may illustrate, through progress towards improving maternal and child health indicators, how successful the implementation of the strategies have been.

This chapter focuses in the main on maternal health, as while progress is being made in many of the infant and under-5 indicators, the maternal death ratio is not responding to the present strategies as hoped. Factors involved in limiting progress are examined and recommendations are made. Reducing maternal mortality in Cambodia is a human and women's rights and a socio-economic issue. Avoiding maternal death will have significant benefits on household income, the quality of household expenditures, the chance of survival of young children and their future educational achievements[14].

While this review focuses specifically on health services, it is important to mention the wider socio-cultural context and its effects on maternal mortality. Evidence from the CDHS demonstrates inequalities in health indicators between rural and urban communities and between educated and uneducated women. The nutritional status of women is showing that while women in urban areas have increased their Body mass Index (BMI) from 16.1 in 2000 to 17.3 in 2005, women with no education have actually seen a decrease in BMI from 22 in 2000 to 19.1 in 2005 (CDHS 2005).

Gender is an important issue in the survival of both the woman and her children. Health services need to develop a gender sensitive approach and encourage male involvement as a means of increasing gender equity. In addition, health services need to be able to identify and address Gender-based Violence, in line with the Domestic Violence Law of 2005. Evidence shows that girl's and women's education benefits family health outcomes, social stability, the environment and economic growth[15]. Wider efforts to increase access to education are needed.

3.2. Maternal Mortality Progress

Despite the prioritisation of maternal health, the maternal mortality ratio (MMR) has changed little in the last 10 years, with the MMR estimated at 437 per 100,000 live births in the 2000 Cambodia Demographic and Health Survey (CDHS) and 472 per 100,000 live births in the 2005 CDHS – which is comparable. This corresponds to a life time risk of dying from a pregnancy related cause as 1 in 50. Maternal related deaths account for 17.1% of women aged between 15-49 years.

3.3. Child Survival Progress

From 2003 -2007 the Joint Annual Performance Reviews clearly demonstrate that Child Survival is one of the main priorities for the MOH and progress is being made in increasing service provision for children under-5. The Cambodia Millennium Development Goal-4 aims to reduce under-5 mortality to 65 per 1,000 live births by 2015[16]. The CDHS 2005 demonstrated an under-5 mortality of 83 per 1,000 live births, an Infant mortality rate of 66 per 1,000 live births and a neonatal mortality rate of 28 per 1,000 live births. These figures are encouraging, however, the CDHS 2005

[14] World Bank Summary gender profile for Cambodia 2005 http://genderstats.worldbank.org
[15] World Bank, Summary gender profile for Cambodia. 2005 http://genderstats.worldbank.org and World Bank, Gender and Development 2006 www.worldbank.org
[16] Cambodia Child Survival Strategy 2006

also demonstrates these improvements are inequitable with infant mortality actually increasing in children of mothers with no education from 102.5 per 1,000 live births in 2000 to 111.0 per 1,000 live births in 2005 and under-5 mortality remained unchanged at 135.5 per 1,000 live births in 2000 and 136.0 per 1,000 live births in 2005.

3.4. Health Services for under-5s

The JAPR in 2007 reported that 456 health centres were implementing Integrated Management of Childhood Illnesses (IMCI), an increase from 322 in 2005. New case consultations for per child under-5 rose further to 1.0 per year, and hospital discharges for children under 5 rose to 64 per 1,000 population in 2006, up from 57.6 in the previous year. Although below target, Vitamin A coverage for children 6-59 months improved, with 77% receiving capsules in Round 1 and 78% in Round 2. DPT3 coverage for children under 1 year was down to 81% from 85%. The percentage of children aged 12– 59 months who received Mebendazole rose to 56.7%, well above the target of 40% and the previous year achievement of 35%.

The Cambodia Child Survival Strategy (CCSS) was completed by the MOH in April 2006 and officially endorsed by the MOH in December 2006. An important component of the CCSS was the development of the Cambodia Child Survival Scorecard, which identified 12 specific high-impact child survival interventions that need to be scaled-up throughout Cambodia so that all under-5's have access to them. The Scorecard interventions listed in the CCSS with the appropriate indicators, updated targets, and coverage estimates are shown in Table 3.1.

Table 3.1 Scorecard Interventions with Indicators and Targets

Intervention	Coverage					Target		
	CDHS 2000	2002	2003	2004	CDHS 2005	2007[1]	2010	Universal Coverage
Early initiation of Breastfeeding	11%	-	2%[2]	25%[3]	35%	35%	60%	99%
Exclusive Breastfeeding	11%	-	2%[2]	-	60%	25%	80%	90%
Complementary Feeding	71%	-	88%[2]	-	82%	95%	95%	99%
Vitamin A	29%	46%	59%	75%	35%	80%	85%	99%
Measles vaccine	55%	52%	65%	65%	77%	80%	92%	99%
Tetanus toxoid	30%	45%	43%	51%	54%	70%	80%	99%
Insecticide Treated Nets	9% (3-38%)[4]		-	20%[5]	4.2% (11-37%)[6]	80%	80%	99%
Vector control *(Aedes aegypti)*[7]	181 Sites	-	-	-	-	<10 Sites	<10 Sites	<10 Sites
Oral Rehydration Therapy (ORT)	74%	-	45%[2]	-	58%	80%	85%	99%
Antibiotic for pneumonia	35%	-	75%[2]	-	48%[8]	50%	75%	99%
Malaria Treatment	62% (2%)[9]		-	31%[5]	0.2% (0.3-3.3%)[10]	85%	95%	99%
Skilled Birth Attendance	32%	20%	22%	32%	44%	60%	70%	99%

[1] NOTE: These targets were set for the 2003-2007 Health Sector Strategic Plan

[2] UNICEF, Seth Koma Follow-up Survey 2003; for ORT it includes only ORS and RHF
[3] Cambodia Socio-Economic Survey (CSES) Health and access to medical care in Cambodia 2004
[4] 9.2% is the national average; in the provinces with high malaria transmission (Koh Kong, Kratie, Mondulkiri, Preah Vihear, Ratanakiri and Stung Traeng) insecticide-treated net coverage ranged from 3 to 38%.
[5] Report of the Cambodia National Malaria Baseline Survey 2004
[6]4.2% is the national average; in the provinces with high malaria transmission – Preah Vihear/Stoung Treng, Mondulkiri/Ratanakiri, Oddar Mean Chey, Kratie, Koh Kong – the use varied from 11-37%
[7] Given the increasing contribution of dengue fever to under-five mortality in Cambodia the Child Survival Steering Committee has decided to include vector control in the Scorecard; vector control for *Aedes aegypti* is the most important public health intervention to prevent dengue fever. The indicator used is the Breteau Index defined as: number of positive breeding sites per 100 houses (%) surveyed. Effective vector control is achieved when there are less than 10 breeding sites per 100 houses surveyed (<10%).
[8] 48% represent a proportion of children under 5 with signs of ARI (cough and fast breathing) taken to a health facility or provider
[9] 62% of children in three provinces (Preah Vihear, Pursat) with malaria transmission received any antimalarial drug, but only 2% received the recommended artemisinin-based combination therapy
[10] 0.2% is the national average; in the provinces with high malaria transmission – Preah Vihear/Stoung Treng, Mondulkiri/Ratanakiri, Oddar Mean Chey, Kratie, Koh Kong – the proportion of children who received anti-malarial treatment varied from 0.3-3.3%

3.5. Maternal and Newborn Health Services

Internationally much research has been undertaken into ways of reducing maternal deaths and there is increasing agreement as to what works in reducing mortality[17]. It is widely acknowledged that improvements in maternal and newborn health are reliant on women having access to a functioning health system during pregnancy, in the intra-partum and postnatal period. Women need access to a continuum of care including family planning; safe abortion services (where legal), focussed ANC, delivery by a skilled attendant, referral to emergency obstetric care and postnatal care. Where HIV/AIDS rates are high care should be integrated to ensure access to Prevention of Mother to Child Transmission (PMTCT) and care and treatment programmes for the woman and family members. Thus, maternal mortality is an important proxy indicator of the overall effectiveness and efficiency of health system and a woman's ability to access services.

3.6. Young People

In considering maternal health, it is important to address the needs of young people (10-24 years)[18]. The concept of young people requiring reproductive health services distinct from those of adults is relatively new in Cambodia; however, with young people making up approximately 35% of the current population their reproductive health has a significant affect on the health of the population as a whole. It is estimated that 6% of births in Cambodia are to women of less than 20 years of age. Maternal death is more likely amongst adolescents and an infant born to an adolescent mother is more likely to be premature and low birth weight and is 24% more likely to die in the first month of life than an infant born to a mother aged 25-34 years[19]. Agencies such as UNFPA and a number of NGOs have been working in the area of Adolescent Reproductive Health under the EU funded RHIYA[20] programme and other initiatives, and have been assisting the MOH to improve services for young people. However, while the policy environment for youth in Cambodia is enabling, capacity to provide youth friendly services in public health facilities is still weak and confusion over policies such as the Abortion policy has reduced access to safe abortion services for adolescents (see abortion services below).

3.7. Accessing services

Access to services in Cambodia is influenced by a number of factors, not least the level of poverty within the country. It is estimated that 35% of the population is living below the poverty line and 15% of the population living in extreme poverty. There are major disparities between urban and rural levels of poverty, with over 90% of the poorest living in rural areas. Limited access to basic health services due to financial barriers and lack of transport for referral contributes significantly to the maternal mortality ratios in Cambodia. Additional barriers such as gender inequalities including low levels of schooling amongst women and male dominated decision-making within the home

[17] Campbell O M R, Graham W J, Maternal Survival 2 Strategies for reducing maternal mortality: getting on with what works Lancet 2006; 368: 1284–99
[18] WHO defines adolescence as 10-19 years , youth as 20-24 years and young people as 10-24 years.
[19] National Strategy for Reproductive and Sexual Health in Cambodia 2006-2010
[20] Reproductive Health Initiative for Youth in Asia

further influence a woman's ability to access services and severely limit the ability of the country to reach Millennium Development Goal (MDG) 4 & 5. It is important to note that other MDGs have a significant bearing on the success in achieving MDGs 4 and 5, including MDGs 1,2,3 and 6 and so a multi-disciplinary, partnership approach to reaching MDG 5 is required.

3.8. Government Policy

Globally, important elements in reducing maternal and chid deaths include an enabling policy environment and Government commitment.
The Government of Cambodia has adopted an evidence based approach to policy and strategy development in this area and is following international best practice in terms of 'what works'. In addition to the HSP, the primary policies that influence strategic planning and implementation of SRH services include, but are not limited to:

- National Policies and Strategies on Safe Motherhood 1997, including the four pillars of Safe Motherhood (family planning, ANC, clean labour and delivery and essential obstetric care), the draft Safe Motherhood 5 year plan 1997-2001 and the National SM 5 year action 2001-2005.

- National Strategy for Reproductive and Sexual Health in Cambodia 2006-2010, which provides a comprehensive framework from which to advocate SRH priorities, to engage in annual planning and to mobilise the resources necessary for effective action.

- National Policy on Birth Spacing 1995 and the National Population Policy 2003 – based on the ICPD Programme of Action and subsequent revisions. These policies recognise the central role of reproductive health services empowerment of women and the link between poverty and rapid population growth.

- Law and Prakas on Abortion 1997, 2001. The abortion law is one of the most liberal in Asia. The MoH based the National Comprehensive Abortion Care Clinical Protocol of 2001 on this law[21].

- The Domestic Violence Law 2005 – which provides legal protection for women who are victims of gender based violence.

- Cambodia Child Survival Strategy (2006)

Related policies include:

- National Strategic Plan for HIV/AIDS 2006-2010 – the main linkages to SRH are primary prevention, PMTCT, VCCT and STI prevention and control.

In addition, the MoH has developed a number of protocols that provide for the RH needs of adolescents and youth.

3.9. Millennium Development Goal Targets

The target for reduction in the MMR under the HSP called for an 8% reduction from baseline levels (437 per 100,000 live births in 2000 to 402 per 100,000 live births in 2007), this target has not been achieved. Furthermore, the CMDG target for 2005 is 343 per 100,000 live births, which is considerably lower than the HSP target. Since the CMDGs have now been selected as the overarching goals of the country under the NSDP, modifying the targets for HSP 2 to coincide with those of the NSDP will be important.
Due to the lack of sensitivity of the MMR, the MoH has set a comprehensive range of MDG targets to monitor progress towards MDG 4 & 5.

[21] National Strategy for Reproductive and Sexual Health in Cambodia (2006-2010) MOH, page 31

While more detailed data is captured in the epidemiological and utilisation chapters of this report, the table below sets out the targets and progress - CDHS 2005. The data demonstrates that MDG 5 is off-target but that MDG 4 is fairing much better. Inequalities in relation to rural/urban, educational levels and wealth quintiles are striking.

Table 3.2: Cambodia MDG 4 & 5:

Targets	MDG 2015 Target	MDG 2005 Target	2005 (CDHS) level
4.1	Reducing the under-five mortality rate from 124 in 1998 to 65 per 1,000 live births by 2015	83	83 per 1,000 (under-5 of mothers with no education 136 per 1,000)
4.2	Reducing infant mortality rate from 95 in 1998 to 50 per 1,000 live births by 2015	66	66 per 1,000 (infants of mothers with no education 111 per 1,000)
4.3	Increasing the proportion of children under 1 year immunized against measles from 41.4% in 2000 to 90% by 2015		77%
4.4	Increasing the proportion of children aged 6-59 months receiving Vitamin A capsules from 28% in 2000 to 90% by 2015		35%
4.5	Increasing the proportion of children under 1 year immunized against DPT3 from 43% in 2000 to 90% by 2015		75.5% (target 99%)
4.6	Increasing the proportion of infants exclusively breastfed up to 6 months of age from 11.4% in 2000 to 49% in 2015		60%
4.7	Increasing the proportion of mothers who start breast-feeding newborn child within 1 hour of birth from 11% in 2000 to 62%		35%
MDG 5			
5.1	MMR from 437 in 1997 to 140 per 100,000 live births in 2015	343 per 100,000	472 per 100,000
5.2	Total fertility rate from 4 in 1998 to 3 in 2015	3.8	TFR 3.4 Urban 2.8 Rural 3.5
5.3	Increasing the proportion of births attended by skilled health personnel from 32% in 2000 to 80% in 2015	60%	44% for the country 70% in Urban areas 39% in rural areas
5.4	Increasing the proposal of married women using modern birth spacing methods from 18.5% in 2000 to 60% by 2015	30%	27% using modern contraceptives Rural 26.5 Urban 30.6 Women with no schooling 22.2, with Secondary schooling 31.9 Wealth quintiles: Lowest 22.1,

			Highest 32.2
5.5	Increasing the percentage of women with 2 or more ANC consultations from a skilled health personnel from 30.5% in 2000 to 90% in 2015	60%	CDHS 2-3 visits during ANC 60.2%
5.6	Reducing the proportion of pregnant women with Iron Deficiency Anaemia from 66% in 2000 to 33% in 2015		CDHS 2005 - 57.1% Any anaemia <11gm/dl
5.7	Decreasing the proposal of women aged 15-49 with BMI<18.5kg/Sq meter from 21% in 2000 to 8% in 2015		CDHS 2005 - 20% <18.5kg/Sq meter
5.8	Decreasing the proportion of women aged 15-40 with Iron Deficiency Anaemia from 58% in 200 to 19% in 2015		CDHS 2005 - 46.6% any anaemia <12 gm/dl
5.9	Increasing the proportion of pregnant women who delivered by Caesarean Section from 0.8% in 2000 to 4% in 2015		Overall 1.8% Women with no schooling 1% Secondary schooling or above 4.5% Wealth quintiles – lowest 0.8 and highest 6.2% Urban 5.9 Rural 1.1

3.10. Supply of and demand for services

The main bottlenecks which are causing delays in reaching the MDG targets appear to be 'how to' implement and scale up 'what works' in terms of improving the health services especially in the rural areas, and ensuring women, children and young people have equitable access to these services. The following section will briefly review issues effecting the provision and uptake of essential services.

3.10.1. Family Planning Services

Despite the encouraging progress towards reducing TFR, the percentage of women having at least 1 abortion in the last 5 yrs increased from 1.9% in 2000 to 3.5% in 2005 (CDHS 2005). It would appear that the drop in TFR is, in part, due to the increased demand for abortions, although much more data is needed to estimate with any confidence the magnitude of the effect.
A comprehensive family planning survey conducted in 2005[22] findings showed that side effects of contraceptive methods were the main reason women report discontinuing a method of contraception. In addition, women reported that high cost was a major disincentive to using the Intra-uterine device (IUD). Method awareness and geographical access to a source of contraceptive supply were not reported as reasons for discontinuing a contraceptive method. These findings would suggest that the quality of counselling and the cost of methods available to women may be factors in high method discontinuation rates.

The same study makes important recommendations in order to increase the quality of services. These include the need to:

- Increase demand for the pill and IUD by informing women about the real side effects and disproving rumours
- Train health workers in informed choice

[22] Family Planning Survey: Contraception among married women of reproductive age in Cambodia – Final Report – Ministry of Health KfW Development Bank and Domrei Research and consulting Cambodia 2005

- Offer a greater choice of contraceptive methods in health centres
- Increase the demand for the IUD by demonstrating its superior time protection/cost ratio
- Increase the affordability of the IUD and Sterilisation
- Promote each method by informing about its benefit and explain its effect on health.

Clearly, there is a need to continue efforts towards improving the quality, acceptability and accessibility of birth spacing services. The role of post-abortion contraceptive services is also an important factor in preventing women from seeking repeated abortions. In addition, support for male involvement in family planning services would increase joint decision making between couples.

3.10.2. Abortion Services

In 1997 the Cambodian Penal Code was revised to allow for safer and more accessible abortion services. The code allows for abortion up to 12 weeks of pregnancy and limited access in the 2nd trimester of pregnancy[23]. However a recent study found that unsafe abortion remains one of the most common causes of maternal death (20-29%)[24]. WHO estimates the abortion mortality ratio in Cambodia is 130/100.000[25]. The findings of the study - Ready or not?, A national Needs Assessment of Abortion Services in Cambodia 2005 prompted the MoH to develop a specific programme funded by DFID to address the serious gaps in the provision of safe abortion services, some selected findings included:

- Only 47% of hospitals, 10% of high level health centres and 5% of low level health centres reported availability of abortion services
- 67% of facilities referred women trying to terminate an unwanted pregnancy
- Lack of training and supplies were the two most common reasons for not providing safe abortion services
- Among facilities that provide safe abortion services, nearly half (42% of hospitals and 44% of health centres) refuse services to adolescents (under 18 years) - although it is not clear from the translated policy whether parental consent is required in the case of a minor requesting an abortion.
- Fewer than ½ of the health centres provide Post Abortion Care services - 1 in 5 facilities reported the lack of a provider as a primary reason for referral
- 1/3 of hospitals did not provide birth-spacing services to PAC patients
- In hospitals 30% of PAC patients and 20% of elective abortion patients were referred to another facility for birth-spacing services

The provision of accessible, affordable and safe abortion services is obviously a priority. The new programme has begun its work to address these issues. It will be important to ensure the programme lessons are taken up by the MoH and that the programme itself is implemented in a way that can be scaled up by the MoH. Of particular importance will be the programmes focus on improving post-abortion uptake of birth spacing methods.

3.10.3. Antenatal Care

Focused ANC has potential health benefits for both mother and newborn. In addition, studies in Cambodia have found there is a strong correlation between attendance at ANC and delivery with a skilled attendant[26]. The provision of ANC is on target with 60.2% of women attending ANC at least twice during pregnancy (CDHS 2005).
However, there are large disparities between educational levels and geographical areas. Women with a secondary education or higher are more likely to receive antenatal care from any trained

[23] After 12 weeks of pregnancy abortion are allowed in cases of foetal anomaly, threat to the women's life or if the child will be born with a serious or incurable disease. In the case of rape a women may have an abortion at any time if she is older than 18 and with parental consent if she is a minor
[24] National Strategy for Reproductive and Sexual Health in Cambodia 2006-2010 Ministry of Health Feb 2006
[25] Who, Unsafe abortion: Global and regional estimates of the incidence of unsafe abortion and associated mortality in 2000 Fourth edition ed. 2004 Geneva
[26] Obstacles to deliveries by trained health providers to Cambodian rural women. 2006 MoH/UNFPA

personnel (90%) as apposed to women with primary education (71%) and women with no education (50%).

Forty-six percent of uneducated women received no antenatal care, whereas the proportion of women who receive no care decreases to 27% and 9% for women with primary and secondary education or higher, respectively. In addition, urban women reported having received more of the elements of ANC than women in rural areas (CDHS 2005). Discrepancies have also been found between operational districts (ODs) within the same province. In a study of 3 ODs in the same province, ANC coverage ranged between 30-90%. The reasons for not attending ANC have been reviewed and include such factors as women do not feel sick during pregnancy so why attend ANC, the health centre (HC) was too far, women did not know the HC, or did not have enough money to attend and the waiting times were too long[27]. From the studies and CDHS a number of factors seem relevant for further development: including increasing educational levels amongst girls/women generally in Cambodia as a priority. In addition, there needs to be a focus on increasing the quality of ANC to ensure rural women benefit from a full range of ANC services, and that awareness-raising around the benefits of ANC among rural women are linked with improvements in the quality of services. Finally the user fees for ANC services should be reviewed – e.g. providing exemptions for poor women.

3.10.4. RH/Maternal Health and HIV/AIDS

HIV/AIDS is an important public health problem in Cambodia and there is growing evidence globally of the link between HIV/AIDS and maternal death. Significant resources have been put into HIV/AIDS prevention with good effect; evidence of the progress towards reducing the prevalence of HIV/AIDS in Cambodia is available. However, limited efforts to link maternal health and HIV/AIDS related services were observed in practice during the review, despite it being clearly articulated as an approach by policy makers, development partners and service providers.

The review team found little evidence of a continuum of care during pregnancy and childbirth and the postnatal period which integrated maternal health, RH and HIV/AIDS services. For instance PMTCT programmes appear to focus primarily on the prevention of mother to child transmission only, rather than the full PMTCT approach including specific prevention approaches, family planning and RH/HIV/AIDS services for women during and following pregnancy. In addition, there appeared to be a lot of concern amongst some stakeholders that high funding levels channelled towards HIV/AIDS service provision alone have weakened the focus on and provision of essential basic health services. While there was a lot of discussion around the levels of HIV/AIDS funding, it was difficult to identify the exact levels of funding in this area to verify these perceptions, see the health financing chapter for further details. However, HIV/AIDS services are supporting improvements in paediatric care.

3.10.5. Increasing access to a skilled attendant

While progress has been made on increasing levels of skilled attendance at delivery it is not sufficiently quick to reach the MDG targets 4 & 5. The RGoC has been working towards reducing the shortfall in the numbers of midwives in Cambodia, in particular in the rural areas. However, there are still too few midwives placed in Health Centres and there are concerns about the skill levels of midwives graduating from pre-service courses, in particular the primary midwives. In addition, there is little focus on other skilled attendants such as secondary nurses. These issues are addressed within the human resources chapter in greater detail.

[27] Antenatal health seeking behaviour utilisation of public health services and perceptions of their service by women with siblings younger than 5 years in Maung Russary Operational District MOVIMONDO 2000

The MOH/UNFPA study in 2006 identified a number of additional obstacles to deliveries by skilled birth attendants, these included:

- 52% of women attended by a midwife/nurse and 68% attended by a private practitioner gave birth at home rather than in a health facility.
- Younger women give birth more often with SBA and in health facilities
- Income determined choice of provider and place of delivery - Those with higher incomes were more likely to give birth with a SBA and in a health facility. (costs at the time of the study TBA - $6.4, Midwife $27.68, Private Practitioner $39.40)

Clearly the study respondents made rational decisions about the place of delivery, tables below identify the stated advantages and disadvantages of delivering with a Traditional Birth Attendant (TBA) or skilled provider or in a facility

Table 3.3 Perceived advantages of using either a Traditional Birth Attendant or SBA

Advantage TBA	**Disadvantage TBA**	**Advantage SBA**	**Disadvantage SBA**
Needed if no health facility	Lack of hygiene	Safety and Reliability	Discrimination against the poor
Assumed expertise	Own practice	Professional training	Costs, transport, medication
Able to recognise danger and refer	Traditional practices	Good hygiene	Inconvenience – HF crowded, no beds
Helps during pregnancy	Lack of diagnosis	ANC and PNC	Rudeness
Inexpensive	No ANC	Consultation and home visits	Limited services – not providing 24 hour service
Non- discriminatory		Diagnostic skills	
Convenience			

Table 3.4 Perceptions of the advantages and disadvantages of using either public or private facilities

Public Health Facilities		**Private Practitioners**	
Advantage	Disadvantage	Advantage	Disadvantage
Cheaper	No private room	Private Room – clean air con etc	Expensive
Safer and Responsibility	Limited services - not 24hr	ANC – hot injection and calcium	Lack of safety and Responsibility – still refer to hospital
ANC/PNC	Customer services - long waits	Customer service	No birth spacing
Birth spacing	Rudeness and don't care attitude - do not take care of patients who do not pay extra	Package service	Legality - do not provide birth certificate
			Fees need to be paid at one time

The study also identified that traditional practices are still widely used – at least ¾ women use traditional practices, including hot injections, avoiding certain foods, and roasting and dietary practices and 50% observe ceremonial and ritual practices. For instance, 'need to ripen the blood and avoid coldness'. A study by RACHA in 1999 also found there were often considerable delays in seeking treatment, as women would first turn to traditional medicine and will only seek professional health care last report.

Clearly a number of cost and quality considerations influence the decision around place of delivery. Barriers to using the services of a skilled provider and delivering within a health facility need to be addressed:

- The quality of services – a number of quality issues were identified including dirty facilities, lack of equipment, lack of trained staff and drugs – negative experience of the health system such as rudeness and long waiting times
- The costs are prohibitive and unpredictable – user fees appear to be a major disincentive to use public health services
- Availability of the services is poor – often only 2 hours a day - SBAs refuse to be on call
- Distance and transport costs

During the review, it appeared that many initiatives to address quality of care issues and financial barriers to accessing services have been piloted but these need to be scaled up as a matter of urgency.

- HC do not have beds so often used for ANC and PNC only - planning to increase the numbers of HC with beds is important – particular in more rural areas
- Staffing – just 1 or even 2 midwives per health centre is not sufficient to provide a 24/7 service and the standard staffing levels need to be addressed
- While there is a referral strategy – health facility level protocols are rare
- Increasing demand for services is an important gap, not only in term of education and awareness but in helping communities address issues of transport and financial barriers

3.10.6. Skilled Attendance

The term Skilled Attendance is introduced within the Human Resource Development section of this report. The term refers to the need for a skilled attendant to operate within an enabling environment which includes good health facility infra-structure (including running water, electricity) and the availability of essential obstetric drugs and equipment. In addition, the health worker requires supervision and support for referral to higher levels of care. During the review key informants often stated that key elements of the health system are not functioning effectively, while a lot of progress has been made in improving the infrastructure of HCs, there is still need to address the elements of skilled attendance mentioned above.

3.10.7. Neonatal Health

There is now an increased focus on neonatal mortality. The first step was a situation analysis which reviewed family practices in order to develop clinical guidelines and a BCC approach. This will need entry points into existing programmes and systems and a review of the Safe Motherhood protocol to include neonatal care. How to operationalise improvements in neonatal care are not clear as yet as many deliveries are conducted by Traditional Birth Attendants, and presently development partners and technical agencies do not train TBAs. Further consultation will be required on this topic. The well known work by Dr R A Bang and others in India on neonatal home based care[28] maybe a starting point for further discussions.

3.10.8. Breast feeding

Initiatives to support breastfeeding continued, with 7 hospitals now implementing the baby friendly hospital initiative and 1999 villages implementing baby friendly communities. A notable success has been the behaviour change communication approach conducted by the BBC through a TV soap opera. This focussed on early initiation of and exclusive breast feeding; the CDHS figures are very encouraging with early initiation of breast feeding increasing from 11% in 2000 to 35% in 2005. Exclusive Breast feeding increased from 11% in 2000 to 60% in 2005. However, questions have been raised as to the validity of such an increase and so UNICEF is hosting a consultancy to

[28] http://www.healthynewborns.org/section/newandnoteworthy/search

revalidate the Breast Feeding data from 2005 CDHS. UNICEF was awaiting the raw data to be released at the time of the review.

3.10.9. Nutrition

Data from the 2005 CDHS shows that there have been some improvements in the nutritional status of children from the CDHS in 2000. The percentage of children stunted fell by 8 percentage points from 45 percent in 2000 to 37 percent in 2005. Similarly, the percentage of children wasted declined by 8 percentage points from 15 percent in 2000 to 7 percent in 2005 and underweight declined by 9 percentage points from 45 percent in 2000 to 36 percent in 2005.

Until now, the nutrition activities are based on an annual operational plan, the first began in 2004. However, a comprehensive national nutrition strategy is expected around July 2007. While often nutrition activities have been stand alone, there is a focus on better integration now. The MPA module 10 on nutrition was planned to make nutrition activities more horizontal and less vertical and the nutrition package including Vitamin A, Iron, Iodine, infant and young child feeding, growth monitoring and promotion. However, there are still many challenges remaining, including concern that Vit A target coverage will not be reached.

3.10.10. Immunisation

Progress is being made in increasing immunisation rates; however, these are mostly as outreach activities and are not integrated with other services. Fixed site immunisation would provide a more flexible service and have benefits in economic and logistic terms in being able to delivery more preventive and curative services for children and their mothers. Well-baby developmental visits in conjunction with immunisation sessions could be introduced. This in addition to the provision of early postnatal visits would have an important health benefits for both the mother and her children, providing the opportunity for family planning services and nutritional support as well as immunisations and routine health checks. This is especially important as the percentage of women receiving 1 capsule of Vitamin A within 8 weeks of delivery fell to 50% from 52% in 2005.

3.11. The role of other health workers

A clearly stated policy of the MoH is to increase the % of deliveries by a skilled birth attendant (SBA). This will require that TBAs are gradually replaced by skilled attendants, e.g. nurse/midwives, especially in remote areas. However, there is no clear policy to guide the transition from unskilled to skilled attendance. One approach maybe to develop mechanisms in order to integrate TBA into the health centre structure as with the health volunteers.

The WHO standards for maternal and neonatal care on birth and emergency preparedness in antenatal care state that discussions with traditional healers and TBAs, other lay health workers and community leaders need to take place in order to promote the development of birth and emergency plans to support women and their babies to access the care they need[29]. The reviewers were not able to access information on the perceptions of TBA's themselves on the implications of the MoH SBA policy on their potential role and livelihood. But given they still widely involved in delivering care during pregnancy and childbirth there appears to be a need for a consultation process as suggested by WHO above and an agreed transition policy.

3.11.1. Health Volunteers

Cambodia has many different cadres of volunteers working within the community covering a large number of different programme areas. The review team is aware of at least 14 different volunteer workers[30]. While links with the community have been established through a number of community

[29] Birth and emergency preparedness in antenatal care (IMPAC) standards for maternal and neonatal care WHO 2007

[30] VHSG – Village Health Support Group: HCMC – Health Centre Management Committee; VHV – Village Health Volunteer; VHW – Village Health Worker; TBA - Traditional Birth Attendant; VMW – Village Malaria Worker; CBD – Community Based Distributors; VCG – Village Care Giver; DW – DOT watcher; RCV – Red Cross Volunteer; WHE – Women's Health Educator; Cha Tom 'Wat Grannies'; VHC/CSS
MRD/VHV; Women's Affairs Volunteers

volunteers, many volunteers are working under the different programmes, their roles and functions are not clearly defined and their potential to support a number of health activities within their communities, as yet, have not been fully exploited. While there are mechanisms in place to establish committees to support the functioning of the health centres and as a link with the community, the review was not able to get a clear view on how operational these structures are at this moment in time. Health volunteers can potentially have a significant influence on maternal health by linking the women with the formal health services and contributing in reducing the recognised delays in accessing emergency obstetric care (3 delays model), as recommended by the WHO Birth and emergency preparedness in antenatal care standards (2007). Vitamin A coverage is not meeting targets in many areas – in a number of countries rates have been increased by using health volunteers, although it is understood that health volunteers in Cambodia are not mandated with such tasks. It is difficult to see from the current staffing levels how Vitamin A coverage targets will be met without support from health volunteers.

3.12. Unmet need for Emergency Obstetric Care

The National Reproductive Health Programme (NRHP) has been implementing Maternal Death Audits in 10 provinces in the last six years; while the data is incomplete its results provide guidance on both when maternal deaths are more likely to occur (during delivery and within 24 hours after delivery) and the causes. The MDAs indicate that 75% of maternal death occurs in the intra-partum period and the highest cause of maternal death is haemorrhage at 50%. The second highest cause is eclampsia, followed by sepsis[31]. These findings correspond with the results of a hospital based study on maternal morality conducted in 2004 using the 2002-2003 data of the National Maternal and Child Health Centres. The study found that out of 15,936 obstetric admissions there were 51 maternal deaths. The 2 most common causes of maternal death were Post Partum Haemorrhage 27.5% and eclampsia at 23.5%. Thus the provision of emergency obstetric care to address these issues is important.

The MoH has made progress towards increasing the numbers of doctors with surgical skills able to provide Comprehensive Emergency Obstetric Care in Cambodia[32]. However, there is clearly an unmet need[33] for Basic and Comprehensive Emergency Obstetric Care, in particular in the rural areas as evidenced by the low caesarean section rates of 1.8% for the country as a whole, geographical, wealth and educational discrepancies have been identified as influencing access to c/s. The recent JICA study in 2007 found an unmet need for Caesarean Section in 22 out of the 24 provinces, those with the highest unmet need included Kep, and Banteay Meanchey. Kep has a 100% unmet need as it does not have EmOC surgical capacity. However, JICA acknowledges the limitations of their study in terms of accuracy of data for analysis.

It is generally accepted that unmet need for emergency obstetric care is the result of three delays.

- delays in recognising the need for care at household and community levels;
- the delay in reaching care;
- delay in receiving care at the health facility.

The interplay of these factors are influencing unmet need in Cambodia, the exact contribution of each and how to overcome these delays in not altogether clear at this point and requires further exploration and action.

[31] Reproduced from - The development study on strengthening maternal and child health service performance in Cambodia - Final Report May 2007 JICA

[32] Signal functions for Comprehensive EmOC include the basic functions for BEoC plus surgical procedures including caesarean section and blood transfusion

[33] Unmet need identifies the discrepancy between what the health care system should provide in terms of emergency life saving obstetric care and the care the system actually provides.

3.13. Referral Systems

Referral from community to health facility is addressed in the National Strategy for Reproductive and sexual health in Cambodia. 2006-2010. The strategy provides guidance on the mechanisms required both at community and health facility levels in order to develop an effective referral network.

While demand creation and working with communities to overcome these issues is being undertaken in a number of locations in Cambodia, many of these efforts are local and it is not clear if lessons are being learnt, best practices are being identified and scaling up of demand creation initiatives is moving as fast as is should. Of particular concern is that women and adolescents have limited ability to action their own referral to health facilities, often having to rely on relatives and partners or husbands to make the decision to refer them, and to provide money and transport needed to access emergency obstetric care.

In addition to supporting referral to emergency services, communities have an important role in supporting improvements in monitoring of maternal deaths, especially as most deliveries occur within the community. In some areas a Community Based Surveillance System has been piloted, the results of which were reported in Community based surveillance - a pilot study from rural Cambodia Sophal Oum 2005. This method used VHV to report vial events occurring in their communities such as a maternal death. The CBSS data showed that 95% of vital events such as births, deaths occurred at home and the CBSS was suggested as a way of filling the gaps in the current health facility based monitoring systems.

3.13.1. Health Promotion

A national Behaviour Change Communication strategy policy has been discussed but is not yet finalised for child health, and discussion is still ongoing as to how the strategy is to be operationalised. BCC guidelines which support the policy implementation are being drafted. Maternal and newborn BCC strategies need to be included. Implementation of the strategy is likely to be affected by the present lack of clarity in the institutional arrangements between the National Council for Health Promotion and the different programmes. A communication campaign funded by the EC in collaboration with UNICEF and the National Centre for Health Promotion is ongoing, but is delayed. The first year focussed on developing the capacity at the national centre level, but intervention implementation due for year 2 has not been actioned. Demand side issues and outreach activities need to be developed, although this is an ongoing debate about whether staff should undertake outreach, with some urging that staff should be based at the clinic and not in the community.

3.14. Monitoring Progress – maternal deaths

At present progress towards improving the measurement of maternal mortality and maternal health is limited by the difficulties in obtaining reliable and accurate data. Mortality and morbidity trends are measured through the CDHS and the Census, but these are only measurements at a point in time and do not provide sensitive enough information on which to base and adjust strategies and operational plans on a regular basis. Although maternal deaths are reported on a regular basis, this is characterized by significant under reporting. A recent small scale study in Kep province found 5 maternal deaths which did not appear in the official statistics[34]. Therefore, until the vital registration system in Cambodia is strengthened, measuring progress relies on a number of proxy health service indicators such as delivery by a skilled birth attendant and caesarean rates and by implementing regular review by the maternal death audits in just 10 provinces. The present reporting systems are inadequate. There are a number of acknowledged limitations in the quality of the health information systems within the MoH, in addition, private practitioners often do not report on their activities in this area and information from the communities where most deliveries and deaths are thought to occur is difficult to obtain. There is a need to scale up the use of

[34] Kalaichandran, A The Obstetric Pathology of Poverty: Maternal Morality in Key Province Cambodia World Health & Population April 2007

maternal death audits and to introduce verbal autopsies at a community level to help close this gap. In addition, it maybe useful to explore establishing demographic and health sites in a selected number of areas. However, there is a need for a specific review of how to improve monitoring in this area.

3.15. Institutional Arrangements

The enabling policy environment provides an excellent basis on which to develop strategy and clear operational plans. Never the less, intensive efforts to scale up services will require both increased capacity to coordinate services and also the support of development partners. The multi-dimensionally nature of maternal and child health makes effective coordination even more essential. Clearly this is a role for the National RH programme and Child Survival Management Committee to coordinate MCH services. While the RH programme is contributing significantly to the field and is coordinating activities to the best of its present capacity, a recent institutional review of the Programme highlighted the urgent need to strengthen the institutional capacity substantially.
Hopefully if these recommendations are actioned this will assist in the RHP's efforts to coordinate with the CSHM, especially given the more recent focus on newborn health and the inclusion of skilled birth attendant within the 12 scorecard intervention.

3.15.1. Development partners

Of crucial importance in assisting the Government of Cambodia to effectively address maternal mortality is the role of development partners and multi-lateral technical agencies. There are structures in place to support the coordination of activities between the different agencies and to ensure complementarity in approaches, such as the technical working groups. However, the key informant interviews clearly identified a need for increased efforts to align and harmonise development partner activities and approaches.

From all accounts the arrangements related to the HIV/AIDS strategy have worked particularly well and perhaps could serve as a model to development partners working in SRH/Maternal and newborn health. In reviewing the development partner financial commitments to health, it was difficult to identify funds supporting improvements in health systems and those earmarked for maternal health. However, the opinion of key stakeholders in this field is that resources being provided for this area are inadequate and at present it is an important factor in limited progress towards achieving targets.

3.16. Conclusions

Summary of Observations

1. There is significant political will in Cambodia to reduce maternal, newborn and child mortality and efforts are underway to address socio-economic development issues, health system strengthening and increasing access to services.
2. Progress is not sufficient to achieve the ambitious targets set by the Government of Cambodia in relation to MDG 5. A number of rate limiting factors require urgent attention, such as adequate levels of skilled workers, especially at rural levels. Health systems strengthening to ensure essential drugs and supplies and referral to EmoC are required.
3. While progress on the whole is being made to address child mortality, inequalities are widening, especially among the rural and urban populations and between those with education and those with little or no education.
4. Maternal, newborn and child health services are not coordinated and appear to run as vertical programmes e.g. immunisation outreach. The success of the MCH initiative depends on strengthening health systems, in particular finance and human resources

Recommendations for Further studies:

1. Many studies and pilot activities have been conducted, operational research is required to help identify how best services can be scaled up in an integrated manner.
2. While some studies have been undertaken around access, more understanding is needed about how to create demand for services and how to engage with communities to increase support for accessing services.
3. As part of work on access, studies to address inequalities in health need to be undertaken to better address the needs of people with little or not education and those living in poverty in both urban and rural areas.

Policy Recommendations for HSP 2:

- Many of the policies are in place, what is needed is clear costed workplans for maternal, newborn and child health services which development partners can support.
- The recent JICA study identified a number of provinces with the highest need for maternal health service using an index of key indicators, although they acknowledge the limitations of their data. The provinces identified as having the greatest need were Koh Kong, Prey Veng Kampong Cham, Kep, Preah Vihear, Rattanak Kiri and Kampong Speu[1] Conducting a targeted intervention within these provinces should be considered.
- Partnerships between public and private for profit and not for profit agencies are required, not only to address health service provision but the wider socio-cultural issues such as gender inequality and support for youth in maintaining their SRH. There is a need to tackle both educational opportunities for women who are illiterate and the underlying gender disparities more widely.
- Awareness raising and demand creation activities are required; this would require clearer institutional responsibilities between the NCHP and the programmes and should be based on the studies identified above.

Chapter 4: Overall Sector Progress: Progress & Achievements of HSP (2003-2007)

4.1 Introduction:

This chapter addresses a key activity identified in the Terms of Reference for the HSP review, namely, to examine "progress towards the achievement of specified outcomes, with a special emphasis on the 8 core strategies."

A brief account of HSP characteristics and the sector monitoring approach are described. Followed by, an appraisal of progress in all 20 strategy areas, with particular reference to the eight core strategies. Factors accounting for and influencing progress made are also identified.

Box 4a lists the main data sources used for this purpose.

Box 4a

- The Royal Kingdom of Cambodia Ministry of Health. Health Sector Strategic Plan 2003-2007
- The Kingdom of Cambodia, Ministry of Health: Health Sector Strategic Plan 2003-2007. Framework for Monitoring and Evaluation. Volume 3; 2002.
- Ministry of Health Department of Planning and Health Information. Joint Annual Health Sector Review Documents 2003-2007.

4.2 Characteristics of HSP (2003-2007)

Some of the hall mark features of Cambodia's first national strategic health plan have already been described earlier in Chapter 1. Other key features of the strategy are described below (Box 4b):

Box 4b

▪ Number of strategies in HSP (2003-2007):	20
▪ Number of key areas of work[1]:	6
▪ Nature of key areas of work:	Health Service Delivery Behavioural Change Quality Improvement Human Resource Devt Health Financing Institutional Development
▪ Number of original indicators[2]:	63
▪ Number of final indicators[3]:	131

[1] Strategies were classified by priority thematic areas of work
[2] As identified in: The Kingdom of Cambodia, Ministry of Health: Health Sector Strategic Plan 2003-2007. Framework for Monitoring and Evaluation. Volume 3; 2002
[3] As per Joint Annual Performance Reviews 2003 & 2007

4.3 Sector Monitoring Approach

At a sector level, four types of monitoring and evaluation oversight were envisaged for the HSP[35]:

- Routine monitoring through monthly, quarterly and annual reports on activities, plan outputs and expenditures from 2003 onwards
- Annual sector level performance reviews on outcome indicators and the implementation and expenditure of major activities.
- A mid term evaluation (originally planned for early 2005) to review strategic plan performance at the sector level.
- A final evaluation through an overall sector review and a national health survey 2006.

It transpired that the mid term evaluation was not conducted, and the Joint Annual Performance Reviews served as the principal means by which health sector performance was annually reviewed by all partners.

In terms of HSP linkages with other key MoH planning activity, the following is worthy of comment because of the challenges they pose for the MoH and HSP implementation:

- According to Stanforth and Maddock (2005)[36], there are 107 different development agencies in the health sector, with a weak mechanism for their coordination and alignment. Project plans are reportedly not comprehensively accounted for, or incorporated into the MoH Strategic and Operational Plans, or the relevant Vertical Program and Department Plans.

In terms of HSP linkages with other national development plans:

- National Development Plans are developed externally from the MoH, by the National Government, MoP, and MEF, although they rely on the MoH and other line ministries for implementation. The process that ensures these plans are incorporated into the MoH's own activity and action plans is currently undeveloped. Moreover, there is no mechanism to monitor or effectively evaluate these plans. Some of the National Development Plans reference, and account for, the MoH's own strategic development plan (the HSP), although many do not. There is currently no alignment or cross referencing across and between the National Development Plans which would avoid duplication and confusion at line ministry level.
- The National Strategic Development Plan 2006-10 incorporates the Socio-Economic Development Plan (SEDP), the National Poverty Reduction Strategy (NPRS), and the country's Millennium Development Goals (MDG). It was developed in a collaborative manner using Poverty Reduction Strategy (PRS) methods and is intended to be outcome-focussed. The health strategy in the current NPRS, based on the HSP, is viewed as being "comprehensive and coherent" but insufficiently focussed on the poor. The development of a sector-wide Three Year Rolling Plan 2005-7 provides the opportunity for the MoH to specifically target the implementation of HSP strategies in a pro-poor manner.

[35] As described in The Royal Kingdom of Cambodia Ministry of Health. Health Sector Strategic Plan 2003-2007.

[36] Stanforth C, Maddock K. Institutional Development and Incentives for Better Health Care. Streamlining Planning Processes within the Ministry of Health of Cambodia: Developing the Planning Framework. Prepared for the Ministry of Health, Kingdom of Cambodia by Oxford Policy Management. January 2005.

4.4 Where Are We Now: HSP Performance and Achievements

4.4.1 How easy is it to assess HSP performance and achievements?

The review of HSP performance and achievements needs to be considered bearing the following limitations in mind:

- **Where is the private sector?** There is scant focus on the private sector in the indicators and targets set for the HSP. For example, a simple frequency count of the phrase 'private sector' in the Health Sector Strategic Plan suggests that 15 occurrences in a 64 page document means it is not a central parameter of interest.

  In a country where around 60% of health seeking contacts is estimated to be with private practitioners and facilities (including pharmacies), it is biased to focus on the public sector to the exclusion of the private sector. Currently, the content of the sector monitoring approach serves to keep public sector activity in line with the overall strategic vision, yet the private sector is largely unfettered.

- **Equity – indicators do not allow for tracking of target groups**: Individual strategies in the HSP target specific groups of people – the poor and women – but associated indicators are generic and do not collect data on target groups. For example, 5/20 of the strategies single out the poor and women for specific targeting. Yet none of the associated indicators are designed to collect data that can be disaggregated.

- **Over 20% of indicators appear to have no proper baseline.** This includes some indicators which have baselines that are not particularly helpful[37]. Other indicators identified that baselines had to be established but follow through on this appears lacking – i.e. at least in terms of JAPR recording (see Annex 6).

- **Some indicators appear to have no targets,** so whether or not goals have been achieved is difficult to judge

4.4.2 What has been achieved?

Annex 6 maps progress over time for each of the 20 strategies and their associated sought outcomes in accordance with selected indicators and targets. This is a straightforward assessment of achievement against specified targets/indicators – it does not take into account whether targets were realistic or indicators appropriate.

Whilst desirable, 100% target attainment for all strategies is not a realistic yardstick in any context. For this reason, a summary score has been devised for the purposes of this review, in order to reflect the notion of a continuum of progress and change. It is acknowledged that this is a crude and somewhat qualitative judgement of progress. It attempts to capture and depict the extent of progress and change for each strategy, over the five year period of the HSP.
Indicators that had missing baseline and target information had to be excluded from this exercise and the score was based on available data – hence its crudeness.
The extent of missing data is assessed by examining the findings of individual strategies (see Annex 6).

The summary score adopted draws upon the concept of a traffic light system:

[37] For example, Strategy 8 which seeks to promote health life styles and health seeking behaviour…..has 'IEC materials for Health Education of CNAT' as an indicator. The baseline cited for this indicator is 'Posters, leaflet, flip chart, booklet, billboard, t-shirts, caps and video spots' which neither cites the current level of 'inputs' or 'activity level' for these items.

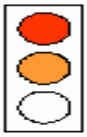
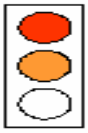
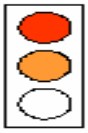
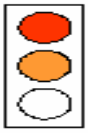
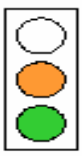
- A sole 'green light' means all indicators met their targets for a given strategy – no 'green light' strategies were identified.
- A two tone 'amber+ green' light combination means that the majority of indicators had fulfilled their targets but some targets that had not been met.' A quarter of strategies obtained this summary score.
- A two tone 'amber+ red' light combination means that some indicators had fulfilled their targets but the majority of targets had not been met.

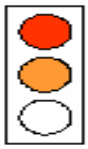
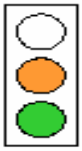
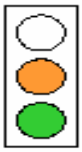
Approximately three quarters of the strategies were assessed to be at an 'amber + red' level of progress. It is important to note, a 'red light' score does not mean 'no progress' was not made – only that targets' were not reached.

In sum,

Incremental gains have been made in all strategic areas but full target attainment was not reached for the majority of indicators monitored.

This pattern is demonstrated in Table 4.1 which shows progress for the 8 core strategies across the six key areas of work:

Eight Core Strategies		Summary Score - Progress
	Health service delivery	
1	Further improve coverage and access to health services especially for the poor and other vulnerable	
2	Strengthen the delivery of quality basic health services through health centres based upon minimum package of activities.	
3.	Strengthen the delivery of quality care, especially for obstetric and paediatric care, in all hospitals through measures such as the complementary package of activities.	
	Behavioural change	
4	Change for the better the attitudes of health providers sector wide to become more responsive to consumer needs especially of the poor through sensitisation and building interpersonal skills.	
	Quality improvement	
5	Introduce and develop a culture of quality in public health, service delivery and their management through the use of Ministry of Health quality standards.	

Eight Core Strategies (cont.)		Summary Score - Progress
	Human resource development	
6	Increase the number of midwives through basic training and strengthen the capacity and skills of midwives already trained through continuing education.	
	Health financing	
7	Ensure regular and adequate flow of funds to the health sector especially for service delivery through advocacy to increase resources and strengthening financial management.	
	Institutional development	
8	Organizational and management reform of structures, systems and procedures in the Ministry of Health to respond effectively to change	

Key areas of work covering aspects of health financing, quality improvement and institutional development were closer to achieving a higher proportion of their targets than other strategies. It is important to recognise that the fulfilment or non-fulfilment of some targets is more serious than that of others, and such a 'weighting' should ideally be considered when assessing progress.

The health financing area demonstrated most gains in making progress against targets set. However, this is not grounds for complacency, as a number of important finance targets were not reached – and some demonstrated regression over time. For example, the proportion of government budget to provinces out of the total budget.

Similarly, the 'quality improvement' strategy was assessed to have made steady gains and achieved an 'amber + green.' However, in comparative terms its indicators were arguably not as complex and challenging as other areas.

4.4.3 Factors influencing progress

In the opinion of the review team the following factors contributed to a slower pace of progress (i.e. propensity to 'red + amber scores) than probably could have been achieved (i.e. a higher proportion of 'amber + green' or even 'green' scores):

- **Design and structure of the strategy:** The HSP is thematically cross-cutting in structure yet relies on a system of national programmes for implementation. This 'horizontal' and 'vertical' blend created challenges in terms of accountability and leadership, in addition to the cohesive use of resources across programmes and institutions involved. For example, the National Centre for Health Promotion is mandated to lead on matters of behaviour change (i.e. to work across programmes) yet individual programmes also have their own behaviour change programmes (and resources) which may or not involve the National Centre for Health Promotion.

In the words of one stakeholder:

"The beauty of the strategy is its simplicity…..the conceptual beauty did not lead to institutional operationalisation….accountability was weakened because of the way the plan was set up"

In addition to challenges of accountability, the cross cutting nature of HSP themes reinforced the treatment of strategies as individual strategies rather than an inter-linked matrix of strategies. For example:

- HSP human resource strategies that are not contextualised, or linked with, a staffing strategy for the private sector is only a partial strategy;

- HSP implementation is not based upon a costed strategy, as a whole, but is approached year-on-year in terms of budget negotiations. This means the balancing between different strategies (i.e. their need for staff and funding of activities) is not guaranteed from a 'master plan' perspective but rather relies on a balancing of individual 'voices' and demands in the budget;

- Generally speaking, donors have supported the HSP, yet project orientated funding tends not to be balanced within the framework of priorities set by the HSP – e.g. funding for Maternal & Child Health activities;

- Lack of linkages between strategies resulted in indicator duplication and probably unnecessary work

- **Risk management could have been more pro-active:** An impressive risk assessment was undertaken as part of the formulation of HSP (page 30 of the strategy). A number of 'pit falls' were clearly identified – demonstrating foresight of the challenges ahead. A number of these anticipated risks transpired – for example:

  - Salaries of the health workers did not rise sufficiently
  - Resistance to change within the Ministry of Health and overall government especially concerning human and financial resource management
  - Not enough attention to health promotion and changing health and health seeking behaviour (e.g. illustrated by the lack of priority accorded to the private sector in strategy delivery)

  Whilst some of these issues are beyond the sole influence of MoH, it is unclear to the reviewers what / if any risk mitigation activities were undertaken to off-set (or minimise) what was very accurate forecasting of challenges to HSP implementation.

- **The lack of a mid term review handicapped HSP implementation**: The purpose of the mid term review is to assess and take corrective action (if required) on the implementation of a given strategy. The lack of a mid term strategy was a missed opportunity for correcting the course of some developments (e.g. the proliferation of indicators which made monitoring burdensome and not helpful).

  It calls into question how truly 'self learning' the strategy implementation process was. The view held by one key stake holder about the role and function of the respective strategy committees was that:

  > *"…..the strategy committees were more active early on……as time progressed there were no meetings except around report preparation for the JAPR…..it was not about moving recommendations made in the JAPR forward – recommendations made in the Joint Review were not followed up by the Committee…"*

  A process that focuses on problem identification (i.e. via the JAPR process) but has weak follow up in term of problem solving and resolution is compromised and functions sub-optimally as a 'living' and learning system.

- **'Cannot see the woods for the trees' – a burdensome number of indicators:** The number of indicators (final number = 131) is colossal and far too unwieldy to be a useful monitoring mechanism. In comparison to other country monitoring mechanisms, the sheer number of indicators used in HSP monitoring is unprecedented. For example, the closest known contender is Bangladesh whose sector framework consisting of 61 indicators is considered 'heavy.' More typically, the number of sector monitoring indicators does not exceed thirty. For example, in Ethiopia they use 26 indicators; in Uganda their Health Sector Strategic Plan II consists of 25 indicators; in Nicaragua they use 22 indicators. The tendency for countries to adopt a 'heavy' number of sector monitoring indicators is common, however the HSP situation in Cambodia is more acutely burdensome than most.

  The review team notes that the original M&E strategy document had 63 indicators and these were different in content and number (over time) to those used for sector monitoring purposes in the JAPRs. The reason for the change and proliferation of indicators is not clear.

  It is worth underlining that the sector monitoring process should be a positive and capacity building experience for countries in terms of information management and 'owning' the system. It is important to safe guard against donor requests to insert indicators into the sector monitoring arrangement for their purposes.

  The dropping, changing and lack of 'follow through' on indicators – as evidenced in HSP – is symptomatic of a sector monitoring system that is irrelevant and not meaningful. It is also probably further symptomatic of broader poor alignment and harmonisation in the sector.

  Additionally, the lack of 'follow through' on indicators over time poses significant challenges for performance monitoring.

  It was also noted that the HSP mix of indicators was weighted towards 'input' and 'process' type indicators – with a smaller proportion of 'output' type indicators. As a general observation, the indicators tended to be 'micro' and 'low level' rather than strategic.

- **Setting targets:** The skill with which targets are set is clearly important in the assessment of overall progress. It was difficult for the review team to judge on what basis targets were set for indicators, and what rationale informed their revision. For example, were targets set by reviewing trends over time – or were they influenced by an element of wishful thinking? Realistic target setting is central to successful performance appraisal rather than setting the standard too ambitiously high and failing. Several points of detail were observed when examining the HSP targets for particular indicators.

  - Target revisions were sometimes difficult to understand. For example, some targets that were met were put forward at the same level for the following year. On the other hand, some targets that were not met – sometimes with significant shortfall – were put forward unrevised (i.e. at the same level) for the following year, they were not adjusted or revised down to make target attainment more reachable.
  - Sometimes targets were so broad or lacked specificity that judging whether they were met or not was ambiguous (e.g. one target = "TB patients and most of the general population received health education messages on TB")
  - Occasionally targets were set but no entry was recorded whether they were met or not
  - Targets have an accountability purpose – i.e. if not met the 'deliverer' is held to account. Knowing 'who' or 'what agency' to hold to account was generally not clear

- **Equity issues are not tracked in indicator construction:** Given the equity focus of the HSP, the lack of an equity focus in relevant indicators significantly handicaps HSP performance appraisal.

Simultaneously, it is also important to be realistic about how much a system can meaningfully and feasibility target and track over time. Equity targeting and tracking is information system intensive! As Knowles (2005[38]) pointed out, most of the core health sector indicators are measured at the population level, rather than at the service delivery level, with a heavy reliance on the Cambodia Demographic and Health Survey (CDHS) as a data source. This means sub-analyses are often not possible because of the way data are collected, whilst assessment /re-assessment intervals are of the order of 4-5 years. The need to complement what is already available with well designed, facility based, cross-sectional studies may be worth considering.

4.5 Conclusion

Summary of Observations

- Incremental gains have been made in all strategic areas but full target attainment was not reached for the majority of indicators monitored**.**
- 5 strategies (spanning the key areas of work of health financing, quality improvement and institutional development) were closer to achieving a higher proportion of their targets than other strategies.
- A sophisticated (and accurate) risk identification exercise was undertaken at the strategy formulation stage but little subsequent risk mitigation or management was evident to the review team
- The translation of HSP's commitment to being a 'sector wide' and equity focused strategy were weakened by the lack of focus on the private sector in the M&E framework, as well as equity focused indicators.
- Performance assessment was hampered in part by missing baselines and targets, as well as indicators that changed without obvious reason over time.
- The number of indicators (131 final indicators) was overly burdensome and not helpful for meaningful sector monitoring purposes

[38] Knowles J. Institutional Development and Incentives for Better Health Care: Review of Resource Allocation Formula in Health. Oxford Policy Management for The Kingdom of Cambodia, Ministry of Health. February 2005.

Policy Recommendations for HSP2

- **Design HSP2 to 'fit' with established health sector structures and processes:** The strategy needs to clearly map onto established institutional structures, with strong links to financing and planning modalities, so that the *'ownership'* and *'accountability'* of outcomes and deliverables are clear. Key is the linkage to budget planning mechanisms and integrated human resource management. A design that is conceptually and thematically 'horizontal' whilst logical is harder to operationalise in terms of clear lines of accountability and ownership.

- **Include the private sector**: This is immensely important and means sector strategies, and their monitoring and evaluation, need to span and include both public/private health care. Some policy recommendations to this effect have been made earlier in Chapter 2. In addition, it may be worth exploring, as an interim measure, a voluntary code of co-operation with known secondary and tertiary private hospitals – that would involve their involvement and inclusion in health information statistics for key indicators agreed for the next strategy. A mapping of private sector providers may be required – to this end – as a first step.

- **Reduce the number of sector monitoring indicators by selecting more strategic indicators.** A mix of 'input,' 'process,' 'output' and 'outcome' in orientation is desirable. Additionally, the assessment of baseline scenarios is central to any subsequent review of progress. Furthermore, it is key to safe guard against donor requests to extend and insert indicators into the sector monitoring framework for their purposes.

Policy Recommendations for HSP2 (continued)

- **Ensure indicators have an equity focus given a continued commitment to the goal of equality of access**. It is important to consider *what, when*, *how* data collection for the monitoring of target groups is undertaken. Practical tools that trade off information needs versus time, labour and costs are required.

- **Be ambitious but realistic with evidence based target setting** (where possible): Linking results monitoring with policy correction is essential.

- **A mid term review should be conducted**, and in a timely fashion, otherwise a critical strategy correction opportunity is missed

- **HSP2 needs aligning to MDG strategies and indicators.** The monitoring and evaluation framework of the National Development Plan (2006-10) also needs to be considered, so that HSP2 strategies and indicators are aligned where it makes synergistic sense to do so.

Chapter 5: What Were the Resources for Health (2003-2007)?

5.1 Health Financing

5.1.1 Introduction

The Health Strategic Plan (HSP) focuses on the need:

- to ensure regular and adequate funding – through advocacy and better financial management (Strategy 14)
- to focus resources on improving access for the poor (and specifically to reduce access barriers to access to hospital services) – through alternative financing mechanisms (Strategy 15)
- to improve efficiency and transparency in resource use – through better resource allocation processes, better coordination of funding sources and better monitoring (Strategy 16)

Monitoring of progress has focused on:

- the allocated budget as a share of Gross Domestic Product (GDP) and overall public expenditure
- levels of per capita public spending
- budget execution rates – focusing on performance by key chapter paying particular attention to the issue of back loading (concentration of spending at the end of the financial year) and on the procurement of drugs and medical supplies
- allocation issues – share of the budget allocated to the provinces and to health facilities

In overall terms, although the allocation of public resources to health has fallen below expectations rapid growth in public spending as a whole has still allowed significant increases in the level of spending. Budget execution has improved gradually over time (although not without setbacks) with both higher and more timely releases but there is scope for further progress. Allocations to the provinces are pro–need but are running well below levels targeted and the tracking studies have shown a high degree of inefficiency in the use of the small amounts that actually do get there. There is a marked lack of transparency in funding flows and accountability for resource use at the service delivery level.

The strategy focuses heavily on public expenditure. This is understandable in the sense that Government has direct control over such spending. However, this tends to downplay the roles of donors and private spending which, as the chart below shows continue to dominate financing flows.

Table 5.1 Health Financing Flows: Strategic Plan Period

	2003	2004	2005	2006	2007
Budget (recurrent)	3.8	2.8	4.0	4.4	5.7
Donor Financed	6.3	6.9	8.3	7.9	
Out-of Pocket	27.0		24.9		
Total (per capita)	**37.1**		**37.1**		
Total (US$ millions)	**493**		**512**		
Percent of GDP	**10.8**		**8.3**		
Source: adapted from Lane 2007[39]					

[39] Budget data: Source: Ministry of Health. 2006 Estimate. 2007 Budget. All recurrent spending only
Donor funding: 2000, consultant estimate. 2003, estimate by Michaud (2005).[39] 2002 and 2004 estimates based on OECD disbursement data and 2003 total estimate. 2005 estimate based on CDC report of health projects, plus Global Fund and GAVI alliance data; 2006 based on CDC report
Out of Pocket Spending: 2000 and 2005 from Cambodia Demographic and Health Surveys. 2003 (Bloom et al).[39]

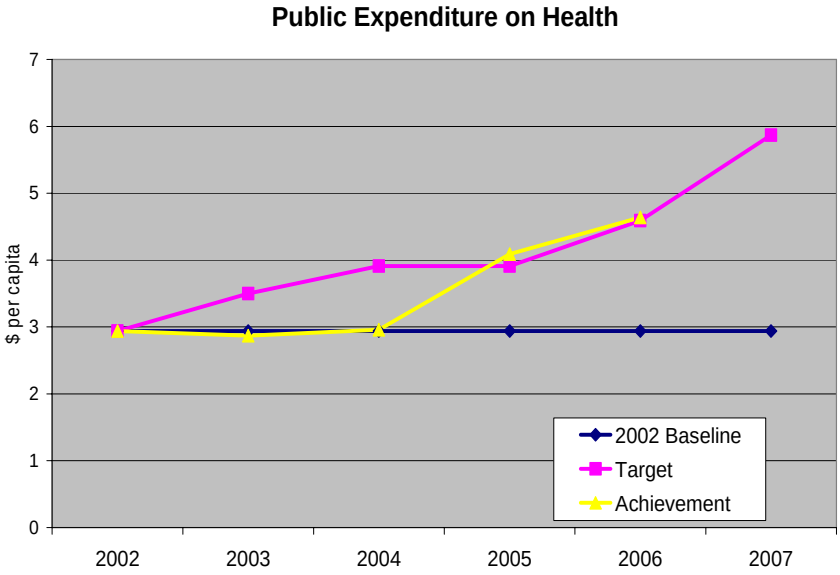
As the table 3.1 shows the problem is not an *overall* lack of resources – total per capita spending on health exceeds the $35 considered necessary by the Commission for Macroeconomics and Health to deliver a package of essential health care. The problem is more one of allocation and effective use of both public and private funding spending and the fact that Government has little direct influence over the latter. This emphasises the importance of ensuring that any additional public funding for health is channelled into priority areas and that attention is paid to efforts to ensure better results from private spending on health

The following sections track progress against the key health financing strategies. The analysis suggests that although some key areas are relatively neglected a number of important initiatives not reflected in the strategy – often related to broader public finance reforms – also need to be considered. Progress against targets from contracting, health equity funds and health insurance are considered separately under the section on institutional development given their broader health systems implications and prominent role they have played. Issues of donor spending are covered here in so far as they relate to overall financing flows – issues of alignment and aid effectiveness are covered under strategy 20.

5.1.2 Strategy 14: Monitoring the regularity and adequacy of funds to the health sector

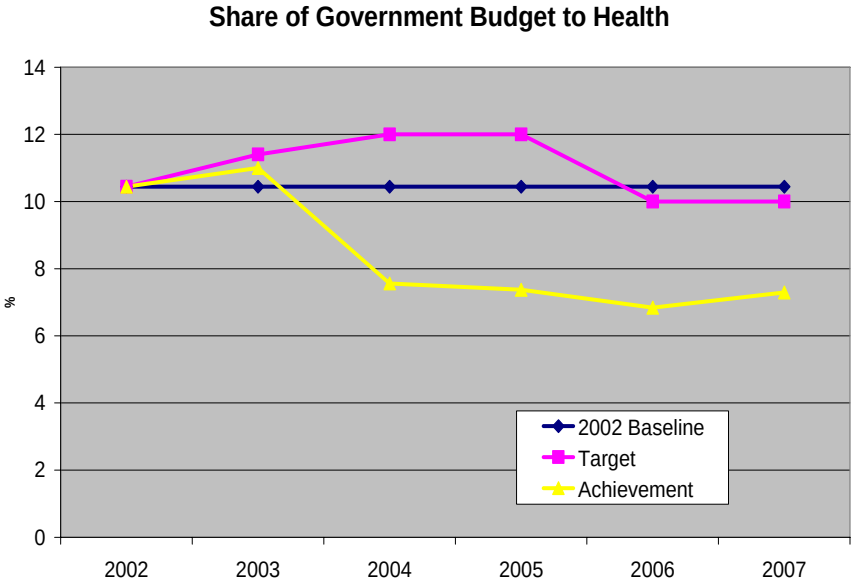
Government Financing and Expenditure

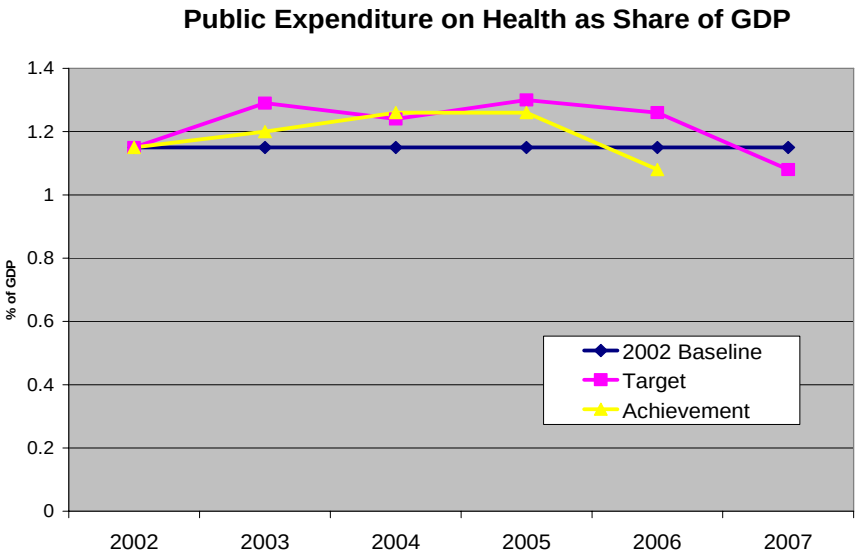
Public spending on health has increased rapidly in absolute terms over the Plan period – (2007 saw a 29% increase in the health budget) The Joint Annual Performance Review (JAPR) reports large increases in the allocation of public funds in per capita terms (especially from 2005 onwards – see chart). As the chart shows per capita spending increased from $2.94 in 2002 to $4.64 in 2006 and a target of $5.87 in 2007.Targets have been met in the latter part of the Strategic Plan



At the same time the share of the recurrent Government budget allocated to health has fallen well short of the minimum 10% targeted and is still well below the levels in 2002.

Public spending on health as a share of GDP increased modestly during the early years of the plan period but subsequently fell and was actually lower in 2006 than 2002





Together this suggests that public spending on health rose as a result of sustained economic growth (which has exceeded 8% per annum over the Plan period) and a strong fiscal position which support greater public spending as a whole rather than because of any reallocation of resources towards health.

Financial Management of Government Expenditure

The 10 year Public Financial Management Reform Programme (PFMRP) adopted in 2004 is beginning to address a number of the widely recognised system constraints – many of which are not reflected in the Strategic Plan. Budget execution procedures have been streamlined, which should allow for the more rapid and timely disbursement of resources (although the effects have yet to be fully felt in the health sector).A new chart of accounts has been established which should make expenditure tracking, including the tracking of poverty related spending, easier. Lastly, programme based budgeting (PBB) aims to link inputs more explicitly to outputs. These measures are backed up by a series of complementary measures – such as steps to improve the projection of expected revenues – which should also impact on expenditure management at the sector level.

Currently health spending is guided by the budget and the annual operational plan (AoP). The former covers Government and donor funding including user fees which pass through the treasury system and has traditionally been presented on an input basis. The budget does not spell out releases from the national programmes or the Ministry of Health to the provinces or from provinces down to health facilities.

The AoP process has been developed gradually in an incremental manner. The introduction of priority areas and their tracking through the AoP process have been a key innovation. The scope of the AoP has gradually broadened to incorporate an increasing share of total sector funding and also to take a longer term perspective through the development of 3 year AoPs. Guidelines have been developed and modified over time. Whilst the approach is still evolving and the links between the AoP and budgeting processes need further development the process offers significant potential to support efforts to prioritise the use of limited resources and align support more closely to national objectives.

The AoP links the annual budget and an increasing amount of donor financing to sector outputs and objectives[40]. At present the AoP cannot be used to link inputs to outputs as budget execution data is not linked to the objectives, data from donors is not received in a consistent and timely manner and the very large number of objectives would make the task extremely demanding. As reported in the Public Expenditure Tracking Survey (PETS) this means a degree of duplication by which budget managers are required to prepare two budgets using different guidelines.

Cambodia's public financial management system is still in the process of transition between a traditional input based approach which tends to be effective in terms of controlling agency spending to a more performance based approach which focuses more on outputs and links between spending and programme goals.

The Ministry of Health is acting as a pilot for the Programme Based Budgeting (PBB) approach in 2007 although the approach has only been partly implemented with only 3 programmes[41] adopting the approach with the other two (largest spending) programme areas reverting to input based budgeting. The current budget year has seen the end of Priority Action Plan (PAP) funding which was seen as a one off emergency means of channelling resources to service delivery units in a flexible manner and in doing so bypassing the over centralised Government execution processes. There is some evidence that PAP and Accelerated Disbursement District (ADD) mechanisms have improved performance with the evidence "consistent for the health sector where the impact tends to be greater at the provincial level". An internal audit department has now been established but is not yet functioning

The introduction of PBB has resulted in initial teething problems having been introduced alongside new accounting codes with little guidance. There are more fundamental questions as to how feasible it is to implement PBB in a sector such as health where identifying units of production and expected outputs is far more complex than is the case say in education. Nonetheless, the approach offers the prospects of linking inputs to outputs and outcomes and to inform strategic resource allocation decisions. In short, progress is being made and many of the key building blocks for effective expenditure management are being put in place.

Progress in terms of **budget execution** has been mixed but the situation is generally improving. Central spending tends to get priority over provincial expenditure and spending is still often concentrated in the second half of the financial year.
The degree of back loading tends to be higher in the health and education sectors than elsewhere (Public Expenditure Review 2004) (which suggests the case for an indicator which compares performance to other sectors might be suitable for the next Plan). This issue will need further attention as it directly affects service provision with the PETS study reporting a "moderately positive correlation" between the timing of disbursements and some services outcomes.

[40] the 2007 AoP sets out some 93 objectives
[41] MCH, Communicable Diseases and Non Communicable Diseases. This support relates to central activities only and accounts for just over $0.5m of Government spending – coverage is therefore extremely modest at present as. wages and administration costs are excluded

Devolution of budget management responsibility to lower levels (as education has done) might be one way forward – however it would have to be carried out alongside measures to improve financial management capacity and record keeping at these levels

Table 5.2 Implementation of the Health Budget in 2006
Execution as % of revised budget

%	Q1	Q2	Q3	Q4	Year
Central budget	27.8	10.8	27.1	29.6	95.4
Provincial budget	6.8	14.5	32.3	33.1	86.7
Total budget	21.1	12.0	28.8	30.7	92.6

Key causes have included severe cash shortages (especially in 2004) but more recently the key issues have been the slow post audit and procurement systems plus the effects of making the transition between different systems. According to PETS the expenditure commitment process at the provincial level continues to be extremely protected with document verification required by 6-8 officers within the Provincial Department of Economy and Finance and 5 further reviews by the Governors Officers.

A detailed analysis of overall progress on budget execution is shown in annex 7

5.1.3 Strategy 15 - Allocate financial resources to improve the accessibility of health services for the poor through alternative health financing

In terms of allocation of resources the strategy monitoring framework currently only focuses on the issue of allocation to the provinces. It identifies the share of resources going to front line providers as a key issue but this cannot be tracked using routine data systems. Little emphasis is placed on the low share of resources going to salaries and the issues of balance and the potential mismatch between investments and the main outstanding needs. The strategy also says little about equity in the allocation between provinces. Such factors might be considered in developing the monitoring framework for HSP 2. The PETS study could usefully be repeated to shed light on progress in channelling resources effectively to the periphery.

Allocation of Public Expenditure
As shown in the tables below the funding pattern is characterised by:
Extremely low share of spending to salaries: – according to the 2007 AoP 13.5% of Government spending was allocated to salaries with a further 2.1% for incentives (13.4% and 2.8% when user fees are added). Once donor contributions are added the share to salaries falls to 8.8% whilst the share to incentives increases to some 4.7%.

Table 5.3 Allocation of Government Budget by Destination and Use: 2007 Annual Operational Plan (million riels)

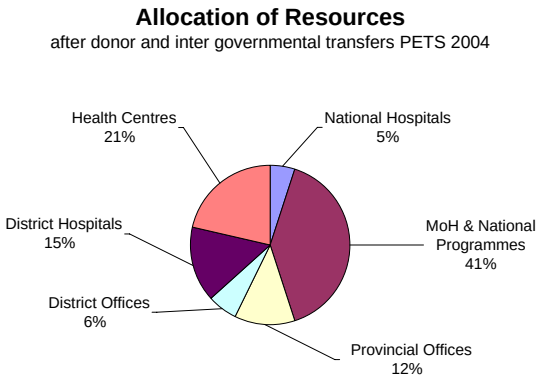
	Salary	Incentives	Operating Costs	Capital Costs
MoH	5.4	-	133.9	81.6
National Hospitals	5.4	0.8	28.9	-
Central Institutions	3.8	1.8	52.0	2.0
Provincial Health Departments	33.0	4.9	81.9	5.1
Total	47.6	7.5	296.7	88.6
% of recurrent exp.	13.5	2.1	84.3	

Table 5.4 Allocation of Resources from All Sources by Use and Source: 2007 Annual Operational Plan (million riels)

	Salaries	Incentives	Operating Costs	Capital Costs	Total	% of Total
Government	**47,567**	**7,503**	**296,629**	**88,633**	440,332	**64.6**
User Fees	**2,303**		**1,758**	**838**	4,899	**0.7**
World Bank	**147**		**35,091**	**15,250**	50,488	**7.4**
Asian Dev Bank		**1,289**	**27,098**	**13,159**	41,546	**6.1**
UNFPA		**76**	**5,863**	**185**	6,124	**0.9**
DFID		**1,306**	**10,038**	**3,112**	14,456	**2.1**
Bilateral		**1,735**	**8,921**	**1,785**	12,440	**1.8**
Multilateral	**4,339**		**28,610**	**4,423**	37,372	**5.5**
NGO		**4,066**	**22,016**	**2,869**	28,951	**4.2**
Other		**3,007**	**33,180**	**9,038**	45,226	**6.6**
Total	47,567	25,770	469,205	139,291	681,834	100.0
% of recurrent exp.	8.8	4.7	86.5			

Low share of expenditure reaching the provinces: Targets to allocate at least 60% of budgetary *increases* to the provinces (in 2005 and 2006) have not been met (actual figures were 45% and 26% respectively). According to the 2007 AoP Provincial Health Department (PHD) expenditures were expected to account for some 34% of total funding – although this does not allow for some $27m for pharmaceutical procurement and $5.1 for capital investment which are used at lower levels

Low share of resources reaching front line providers: A key problem is the fact that such a low share of the budget actually reaches the service delivery level. As budgets do not exist below the provincial level this cannot be verified through the use of routine data. However, the PETS study indicates that as Operational Districts are unaware of their budget entitlements the majority of funds are utilised at provincial levels. The funding available is also extremely inflexible. Much of it comes in kind and whilst PAP allowed some flexibility to vire between line items this mechanism has now been abolished.



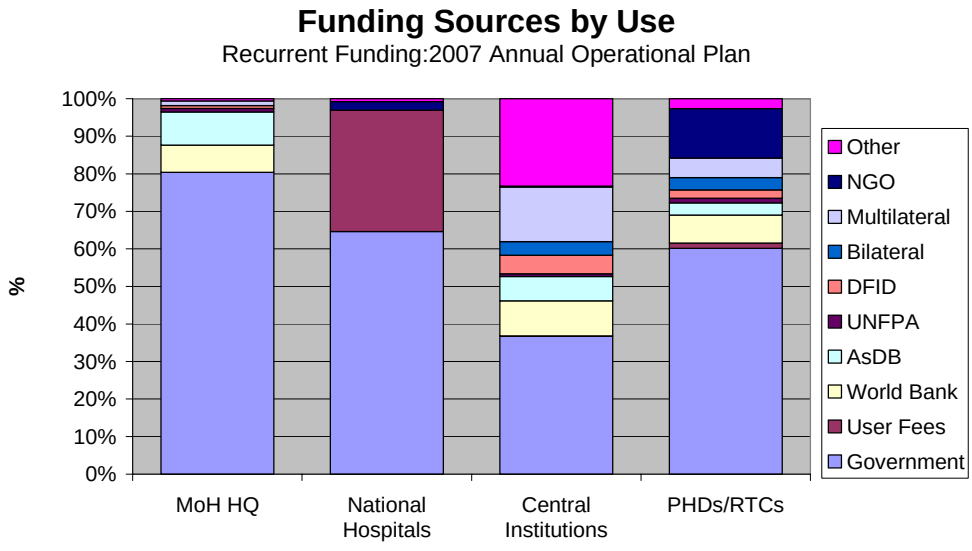
The coping strategies employed – including use of private moneylenders as outlined in PETS - add further inefficiency and leakage.

Low share of resources being allocated to priority interventions: despite the fact that MCH is recognised as a national priority a disproportionate amount of resources still flow to other areas such as HIV/AIDS despite the relatively low prevalence rates. (Lane). This is not an issue of over funding of HIV/AIDS – indeed costing assessments have revealed ongoing funding gaps in this area. Rather, it is the result of serious underfunding in other areas. This has been exacerbated by the fact that a large share of donor support is earmarked to disease specific issues – particularly communicable diseases and is also a reflection of the low levels of public spending on health in the country as a whole.

Due to the classifications used on the Council for the Development of Cambodia (CDC) website it is not possible to systematically estimate the imbalances caused. Nonetheless, analysis of the latest CDC data suggests that a significant share of new funding is still going into HIV/AIDS. This issue is discussed in more detail in section 6.

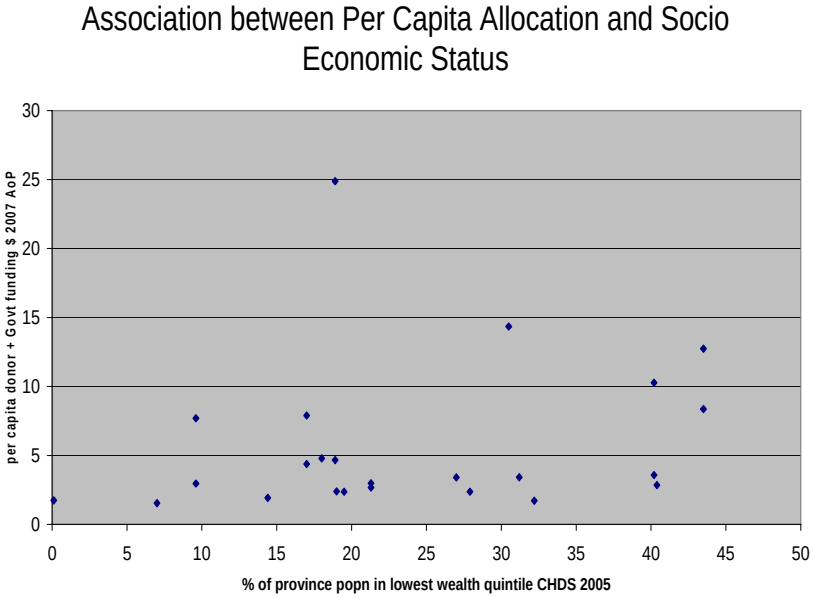
Addressing this issue will not necessarily mean reallocating existing resources away from favoured areas such as HIV/AIDS – rather it is likely to require a combination of efforts to develop robust costing estimates for all possible sector interventions and to channel any additional resources into neglected areas. Whilst we could commend the efforts to develop a costed HIV/AIDS strategy we would point out the risks involved in the development of needs-based disease-specific costing exercise which draw from international agreements without taking into account the funding context in a particular setting or the needs of other programmes. Only a sector wide costing exercise which given current finding levels in Cambodia would undoubtedly result in funding gaps in many areas – followed by an iterative process to determine priorities within these priorities would realistically address issues of balance between competing objectives

Diversity of funding sources: The Government budget is the primary funding source for expenditure at central levels. National hospitals rely heavily on user fees whilst the funding patterns for central programmes and provincial health departments are far more mixed. Donor funding is concentrated in specific national programmes (central institutions)



Equity of Public Expenditure

The PER suggests that inequality in resource distribution is most evident for the national level facilities which tend to be urban based and primarily used by the better off. District hospitals on the other hand "appear to provide the greatest benefit to the poorest group". Data from the 2007 AoP (see chart) suggest that the little funding that actually reaches the provinces is actually allocated in a relatively pro poor manner. Knowles 2005 came to similar conclusions.



This partly reflects the fact that allocations are driven largely by the level of infrastructure – in turn influenced by the Health Coverage Plan - which is primarily driven by the population (although a small share of resources is allocated according to reported service outputs).

However, as noted above this says little about how resources are actually used once they reach these levels and, as the chart shows, the association is not strong with some major outliers.

These findings suggest that allocating resources to the provincial level allied with complementary measures to ensure the resources are put to good use has the *potential* to achieve a strong pro poor impact. Follow up PETS studies using the initial study as a benchmark could usefully be carried out during the consolidation of the HSP mid way through HSP 2 to track progress although efforts might be made to incorporate some elements covered in the study into routine budget management and reporting mechanisms.

Household Health Expenditure

Private spending, primarily made up of out of pocket spending which has been long recognised as an inefficient and inequitable way of funding health care, (World Health Organisation 2000) is still far and away the major funding source in Cambodia. This is likely to remain the case for some time to come. However, there is some evidence that reliance on this funding source is declining in importance albeit very slowly. Per capita private expenditure is reported to have declined from $27 per head to under $25 between 2003 and 2005.

Although large regional variations remain average costs in both public and private sectors have declined significantly. Average cost per contact is now lower in the public sector than in the private sector with costs having halved between 2000 and 2005 compared to a reduction of just over 30% in the private sector[42].

[42] p36 Cambodia Demographic and Health Survey 2005 – note % quoted for reduction in private sector costs is wrong) The reduction in household costs for *public sector services* is particularly strong – from an average of $31.8 to $15.52. Considering a simultaneous increase in the number of contacts with the public sector facilities, this drop in household costs must be understood as very positive and quite dramatic. The decrease in the private sector – slightly more than 30 % - from $27.1 to $18.6 is smaller than in the public sector but nonetheless significant. Unfortunately no distinction is made between in patient and outpatient costs.

This suggests that people are now spending rather less out of pocket than they did but are also getting a higher volume of services than before (though the quality of these services remains in question). The evidence also suggests that the population is also finding it rather easier to cope with the costs associated with ill health as there has been a decline in the need to resort to borrowing and sales of assets[43]. Presumably this has resulted from a combination of strong income growth as well as the lower unit costs**.** Despite this, health and health related costs remain a major cause of poverty. A study by Oxfam (Biddulph 2004) shows that poor health is the root cause of around 60% of cases of landlessness. Cambodia Socio Economic Survey (CSES) data also show that the loss of income associated with the costs of health care is sufficient to increase the estimated poverty headcount index from 34.7% to 37.0%. CSES also found that illness and injury were the fourth most important reason for taking out a loan - accounting for 13% of all loans.

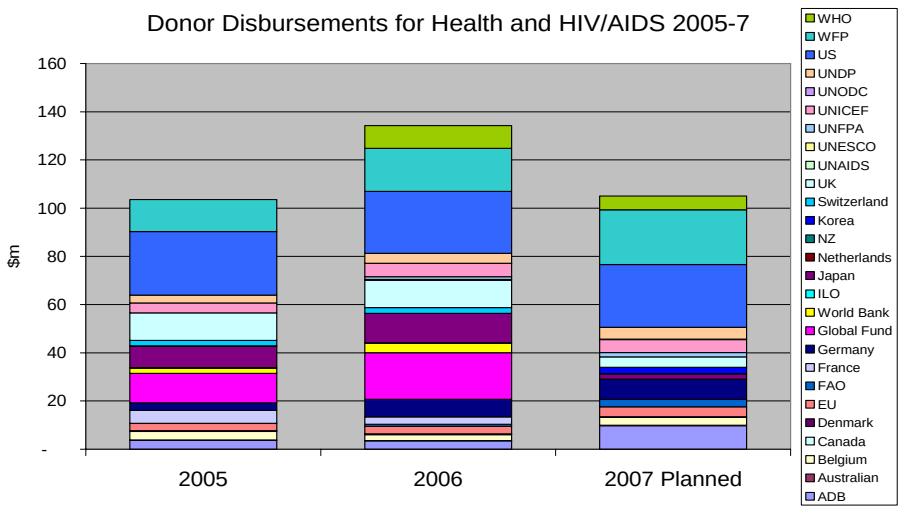
Nonetheless financial problems still are considerable. Women who report problems in accessing health care – and most women who have considered using health services seem to have experienced such problems – note the problem of getting money for treatment as the most important cause. Concerns over availability of drugs in health centres and hospitals as well as concerns over non-availability of staff are also important deterrents – though on a considerably lower level than financial problems.

The poor are less likely to use services when they are ill than the better off and when they do they are likely to access services generally thought to be of poorer quality. The better off still spend more on health in both absolute terms and as a share of income. The CSES found that 8.3% of the top 20% income households spent more than 50% of their non food consumption on health compared to only 2.5% of the lowest 20% income group. This suggests a strong case for encouraging the development of risk pooling mechanisms to provide some protection for the better off groups even if the case for subsidising such approaches is low.

The lower spending by the poor is likely to reflect in part the fact that they often live with poor health (or die from illness) rather than seek care or seek treatment late at higher cost and with probably worse outcomes

Donor Funding

Donor support plays a significant role in the financing of health care in Cambodia – accounting for around two thirds of overall public spending. The chart outlines actual disbursements for 2005 and 2006 and planned disbursements for 2007 as reported to the Council for the Development of Cambodia[44].



[43] Only 2.7% of households reported selling assets in 2005 compared to 6.2% in 2000

[44] The data relate to all funding for health and HIV/AIDS not just that administered by the Ministry of Health. The data captures a large share of support but are not fully comprehensive e.g. no data for WHO in 2005 no planned expenditures by GFATM in 2007

According to the Aid Effectiveness Report 22 donors were implementing a total of 109 projects with disbursements increasing by a half from $67.7m in 2002 to $110m in 2006 and donors providing a further $35m for health and $2.5m for HIV/AIDS most of it core funded .

Issues of aid effectiveness are dealt with in more detail in section 6 under strategy 20.

5.1.4 Strategy 16 - Ensure transparent, efficient and effective health expenditures through strengthening resource allocation, coordination of different sources of funds and monitoring.

The strategy refers to measures to strengthen resource allocation processes and to improve financial reporting.

A number of steps have been taken to improve **transparency** at the macro level. These have included strengthened efforts to track donor expenditure through the establishment of a database maintained by the Council for the Development of Cambodia (CDC) and through the Annual Operational Plans which are gradually capturing a greater share of donor spending. In the 2007 AoP a total of $53.5m of donor funding is reflected whilst data on spending by the Global Fund to fight HIV/AIDS, TB and Malaria is appended to the Plan but only partially incorporated.

There is reasonable transparency in terms of resource allocation approaches at the central level although the AoP does not spell out how much funding is provided through the Central Medical Stores (CMS). (CMS does maintain records which show how resources are distributed between central and provincial levels but this data is not routinely reported). Given the large share of drug costs it is recommended that in future such figures are reported to give a clearer picture of the allocation both to provinces and between individual provinces.

In addition, some resources provided to central institutions – especially through the national programmes - are subsequently channelled to support provincial level activities either through cash transfers or in kind flows. Again this data is not reported. The amounts involved are large (in the case of National Malaria programmes 17% of its 2005 AoP involved direct support at the provincial level).

Another key thrust of Government policy is to expand the planning horizon through the development of **medium term expenditure frameworks (MTEF)**. However, the approach has not taken off mainly there is too little credibility about future spending plans especially as they relate to donor spending. Forecasting of Government revenue has also been weak. The MTEF adopted for the Strategic Plan period used an indicative costing model and identified significant funding gaps in the order of $80-100m per annum primarily reflecting a lack of information of development partners funding intentions. Allocation of the Government budget has also fallen below anticipated levels with the framework anticipating Government spending 1.45% of GDP on health by 2007. MTEFs also require predictable funding and as the PER suggests “it would be very difficult indeed to convince line Ministries to take three year forward estimates seriously when they are concerned about whether they will receive funding for the next 3 months”. The MTEF process needs to be reinvigorated. This requires on the one hand a more systematic effort to cost future priorities for all programmes not just selected ones and a willingness on the part of donors to signal future funding intentions even if they are not necessarily able to make formal long term commitments.

The tables below taken from the health MTEF[45] show the proposed breakdown of Government funding but also the lack of data on proposed donor spending.

Table 5.5 Health sector spending by source for 2002 (actual) and expenditure plan for 2003-2007 (Millions US$)

Source of Funding	2002 (actual)	Expenditure Plan for 2003-2007				
		2003	2004	2005	2006	2007
Government [a]	40.38	50.50	57.16	74.70	89.32	107.09
User fee [a]	NA	2.29	2.27	2.70	2.70	2.70
Total external aid [b]	20.44	28.93	43.77	44.83	23.38	10.48
Total health spending	58.29	82.12	103.37	121.93	115.08	119.85
Health spending per capita	4.10	5.63	6.92	7.96	7.33	7.45
% Government	64.94%	61.49%	55.30%	61.26%	77.62%	89.35%
% External	35.06%	35.22%	42.35%	36.77%	20.32%	8.75%

Table 5.6 Projection of available fund from Government for the Health Sector: FY 2003-2007

Key Area of Work	Actual Exp. 2002	Budget 2003	MTEF 2004	MTEF 2005	MTEF 2006	MTEF 2007
Health Service Delivery	137	161,528	188,446	246,287	299,291	359,539
Behaviour Change	1,792	3,976	4,315	5,555	6,121	7,335
Quality Improvement	248	374	944	1,237	1,403	1,615
Human Resource Development	4,907	6,434	9,202	12,021	14,185	16,962
Health Financing*	0	0	960	1,200	1,296	1,344
Institutional Development	17,233	29,688	24,792	32,500	35,000	41,549
Total (Million Riels)	161,532	202,000	228,659	298,800	357,296	428,344
Total (Million USD)	40.38	50.50	57.16	74.70	89.32	107.09

Three year rolling operational plans are also being developed but currently lack reliable data on service costs and, as above, a clear picture of donor intentions. Capital expenditure is typically seen as a "free good" with little link between it and any future recurrent cost implications. Links between the health content of the Public Investment Plan (PIP) and sector objectives is weak, there is currently little data on capital expenditure outturns with the PIP used mainly as a means of mobilising donor support which is then executed off budget.

5.1.5 Future Prospects for Government Funding for Health

By international standards Cambodia is in a rather enviable position in terms of future resource prospects. It is likely to be able to afford quite significant increases in spending over the coming years reflecting the likelihood of continued strong growth which should allow increases in domestically funded public spending and which offer the potential to reduce dependence on donors. Oil revenues also have the potential to transform fiscal space – with suggestions that the share of revenue to GDP may double or triple – although this is still subject to considerable uncertainty. It also offers the possibility of redirecting funding towards priority programmes (on the grounds that it is easier to allocate new money that reallocate existing resources away from current uses).

As a result per capita public health expenditure is likely to increase rapidly in the coming years – Lane estimates a real increase of just under 50% by 2015 amounting to around $10 per head. This should allow major strengthening of the system depending on where investments are made. Lane estimates that the incremental costs for strengthening primary care (through contracting), reducing

[45] http://www.mef.gov.kh/hnaron/mtef-2004/mtef4.htm
Source: Health MTEF

access barriers (through expansion of HEFs) and introducing the merit based pay initiative (MBPI) would cost around $1.8 per head.

This could be met through increases in the Government budget in the medium term but would require some donor financing in the short term (to 2011). Fabricant 2006 estimates the cost of scaling up contracting to the 31 operational districts with below average utilisation (accounting for 55% of the population) would cost an additional $23.5m annually – doing so without contracting would cost some $17.9m whilst the cost of extending the health equity funds to the same districts plus national hospitals would cost some $1.8m and extended community based health insurance for inpatient and outpatient services around $5.4m. These compare to a current recurrent Government budget of just over $80m. At this stage the costing of some of the potential interventions are indicative although more detailed work has been carried out in some areas (such as child survival package costing). As noted earlier. A more systematic costing exercise would help form the basis for dialogue between investment partners on how to choose between competing priorities. At the same time it is clear that private financing is likely to remain the dominant funding source in the sector – especially so given projected increases in income.

5.1.6 Conclusions

Summary of Observations:

- the problem is not too few resources but the use to which these resources are put. Although heavy reliance on out of pocket spending and donor funding raise serious questions about efficiency, equity and sustainability the strategy places little emphasis on such issues
- private expenditure remains the major funding source for health care and this will continue to be the case even beyond HSP 2. There is some evidence that health care is becoming more affordable - and less likely to cause impoverishment - through a combination of higher incomes and a fall in the unit cost of accessing health care especially in the public sector. Despite this cost remains a financial barrier and there are still serious concerns about the quality of services received
- public funding for health has increased rapidly – but might have increased by more given greater political commitment to allocate a larger share of the Government budget to health. Future prospects for public funding appear good
- the allocation picture is mixed – allocation by provinces seems relatively pro poor. The problem is that the share of resources allocated to the provinces is too low and most of what is received is retained centrally with little flowing through to service providers.
- the strategy does not appear to have driven the allocation of funds which remain poorly aligned to key stated national priorities. Donor funding remains extremely fragmented in spite of some positive steps towards sector wide management. Whilst some areas such as HIV/AIDS receive significant donor funding on the back of costed strategies other programme areas remain seriously under funded.
- ongoing public finance reforms have contributed a picture of improving budget execution and improving transparency - although there is still much to do. Many of the key building blocks are being put in place although there have been some transition costs

Recommendations for Further Studies:

- improving data on expenditure especially on private out of pocket and donor spending
- the need for better data on the cost implications of future policy options with a view to developing a well costed operational plan embedded within a medium term expenditure framework
- the Public Expenditure Tracking Survey should be repeated at regular intervals to assess progress in channelling resources to the periphery and in the effective use of resources. One might be undertaken during the proposed consolidation period and a second in the run up to any HSP2 mid term review

Policy Recommendations for HSP 2:

- the need to further develop longer term planning through development of a rolling expenditure framework based on the 3 year AoP
- continued strengthening of the AoP process by incorporating more donors/including the PIP and aligning with the budget process – and specifically the developing the approach to support the PBB process
- to consider the adoption of devolved budget control and management
- the need to develop a comprehensive financing strategy – pulling together all of the themes and lessons from various pilot approaches and develop a clear vision for the future

5.2 Resources for the health sector - Human Resource Development

5.2.1. Introduction

Human Resource Development is one of the 6 key areas of work and the 8 core strategies within the HSP and has focussed its specific objectives on reducing the maternal and infant mortality rates in Cambodia in particular by focussing on the number, quality and distribution of midwives within the system. The HSP identified a number of important elements which needed to come together in order to achieve reductions in mortality and morbidity, these included, the right staff, in the right place, in the right number, at the right time and with the right skills and attitudes. In order to achieve these elements, the HRD strategy has 3 specific objectives:

- Strategic objective 11 - Increase the number of midwives through quality basic training and strengthen the capacity and skills of midwives already trained through quality continuing education
- Strategic objective 12 - Strengthen human resource planning to reduce mal-distribution of the numbers and type of workforce through identification of posts and the reallocation of staff
- Strategic objective 13 - Enhance the management and technical skills and competence of all Ministry of Health Workforce through quality, comprehensive training, education, retention and support measures

The three main HRD strategies above provide key direction to the development of the annual operation plan and indicators to monitor the progress and achievement.

Cambodia's workforce is characterised by a number of constraining factors, most pressing is a very low density of doctors, midwives and nurses of 1 per 1,000 population, which is compounded by an inequitable distribution of health personnel between Phnom Penh and the rest of Cambodia. In addition, the public and the private health sector human resources overlap and are difficult to map and monitor; managerial and technical skills require further development and motivation of public health workers is hampered by poor salary levels and limited attention to motivational factors such as performance related management.

The HSP focussed specifically on reducing maternal and child mortality in Cambodia, and developed the human resource strategy aimed at increasing the numbers of skilled attendants, principally midwives. This approach raises a number of questions which this chapter will attempt to address:

1. Was it the right decision to focus almost exclusively on midwives rather than on workforce planning more broadly?
2. Have the strategic objectives been achieved?
3. What issues should be addressed in HSP 2?

5.2.2 Focussing in increasing the number of midwives rather than on workforce planning more broadly

Improving human resource development remains one of the most pressing requirements if the functioning and quality of health services, both public and private, are to fully contribute in reaching the health MDGs.

Over the course of the review the key informants identified human resources as one of the biggest bottlenecks to progress in achieving the HSP outcomes. The lack of skilled birth attendants is considered to be a contributing factor to the high maternal mortality ratio in Cambodia of 472 per 100,000 live births.

Focussing on increasing skilled attendance as delivery

It is widely recognised that many women die or experience complications in pregnancy and childbirth because of incompetent care during pregnancy and childbirth[46]. The RGoC set the target of 80% of deliveries by 2015 should be attended by a skilled attendant[47]. This focus on skilled attendants is in line with WHO[48] recommendations as one of the key evidence based approaches globally to reduce maternal mortality rates[49]. At present Cambodia is far from achieving this target. WHO has identified Cambodia as one of the countries with an acute shortage of doctors, nurses and midwives with a ratio of only 1 health provider per 1,000 population which is much lower than the required density of 2.5 per 1,000 population established by the Joint Learning Initiative to ensure at least 80% of births covered by a skilled birth attendant (WHO 2006). Clearly there is need to address the severe shortage of skilled attendants at delivery if the MMR is to be lowered, however, is it appropriate to narrow the definition of a skilled attendant to focus exclusively on midwives.

5.2.3 Focussing on increasing the numbers and deployment of midwives

In Cambodia midwives are the principal professional tasked with caring for a woman during pregnancy and childbirth. However, both doctors and nurses with obstetric training are also considered to be skilled birth attendants within the WHO definition. In recent years Cambodia has included basic obstetric training in the general nursing curriculum with a view to enabling general nurses to manage normal deliveries. To the reviewers knowledge the role of the registered nurse in childbirth has not been reviewed, nor has there been a review of whether the inclusion of obstetric skills in general nurse training, has been successful in developing the required skills to undertake normal deliveries. If nurses are able to attain the skills required to assist in normal births, they may be more suited for posting to remote areas where they would be able to address the needs of the community as a whole. As it is, stationing a primary midwife at a rural health facility with basic knowledge in midwifery care only, she is unable to provide a range of services within the minimum package of care.

In addition, if nursing staff are able to conduct normal deliveries, the opportunity to reach the MDG 5 target of 80% deliveries by a skilled attendant will be increased, as there is a ratio of 1 nurse to 1,750 population, as apposed to 1 midwife to 4,700 population.

5.2.4 Remuneration and incentives for health staff

At present many increased incentives have been focussed on midwives, there is the risk that other cadres of staff may suffer, such as nursing staff, other paramedic staff and doctors who also have to provide essential primary and secondary health services.

Thus a more holistic approach to remuneration and incentives to avoid large distortions between cadres is required which acknowledges the role of other cadres in achieving MDGs 4,5 and 6.

5.2.5. Creating perverse incentives

A word of caution needs to be raised about the possibility of 'perverse incentives'. The introduction of the extra payment for deliveries by midwives may well support an increase in births conducted by a midwife, but could also discourage midwives focussing on other areas of care. While studies have indicated that the majority of maternal deaths occur around the time of delivery, the continuum of care for the mother and baby throughout pregnancy and childbirth is important to their wellbeing. Improving the coverage of family planning, safe abortion services and dealing with youth and gender issues have proved significant in their contribution to the maternal morbidity and mortality. For instance studies have shown that women who attend ANC are more likely to use the

[46] National Strategy for Reproductive and Sexual Health in Cambodia 2006-2010

[47] Millennium Development Goal 5 - target of increasing the numbers of skills attendants in Cambodia - Target 5.3 is: Increasing the proposal of birth attended by skilled health personnel from 32% to 80% by 2015 (CMDG report 2005)

[48] WHO 2004a Making pregnancy safer: the critical role of the skilled attendant. A joint statement by WHO, ICM & FIGO. WHO

[49] Skilled attendant – A joint WHO/ICM/FIGO statement, endorsed by UNFPA and the World Bank defines a skilled attendant as 'an accredited health professional – such as a midwife, doctor or nurse – who has been educated and trained to proficiency in the skills needed to manage normal (uncomplicated) pregnancies, childbirth and the immediate postnatal period, and in the identification, management and referral of complications in women and newborns' (WHO 2004a)

services of a skilled practitioner. MDG targets in Cambodia focus on the need to reduce the levels of anaemia among pregnant women, Iron and folate supplementation during pregnancy are important interventions in reducing anaemia. In addition, post natal care is important for ensuring the wellbeing of both mother and baby and that woman have access to birth spacing methods.

5.2.6. Addressing health workforce planning more broadly

While the focus on the skilled attendant should be maintained, it is important to address the needs of the health sector workforce more broadly, including other paramedic cadres of staff and doctors, especially as the RGoC has targets to achieve in all health related MDGs and the level of non-communicable diseases in Cambodia is set to increase. While strategic objective 13 does address the skills of the workforce as a whole, it does not include a comprehensive approach to health workforce planning. However, it is anticipated that the focus will inevitably remain on nurse/midwives as they represent 60% of the total MoH health workforce. It is important to consider workforce planning for both cadres, especially as creating incentives to undertake post basic midwifery training means that registered nurses are being taken away from the nursing pool, this in turn creates a need to recruit and train more registered nurses. HSP2 should address issues of the health workforce more broadly, as detailed within the 2nd national Health Workforce Development Plan 2006-2015.

5.3. Progress towards achieving the goals and objectives related to HRD

In this section the review summaries the progress made against the 3 specific objectives. The Joint Annual Performance Reviews 2003 – 2007 were used as the main reference for this section.

In reviewing the Human Development Strategy the team conducted a number of key informant interviews from government, development partners and the NGO sector, and reviewed a number of documents, including:

- Comprehensive Midwifery Review September 2006 – this review was conducted as part of the larger HSP review.
- Institutional Development Plan (IDP) 2007-10.
- Joint Annual Performance Reviews.
- Health Workforce Development Plan 2006-2015 Version 1 – Human Resources Development Department Feb 2006.
- Evaluation of Training courses at the National Maternal and Child Health Centre - Feb 2007.

Clearly the HSP has been a catalyst for action in bringing about a number of changes which were essential as ‘building blocks’ for progress. Overall progress has been limited despite the fact that many initiatives have been developed and implemented.

5.3.1. Progress towards achieving strategy objective 11

i) Secondary Midwives - Post Basic Midwifery Training Programmes

Following a 6 years gap when no midwives graduated, in November 2002 the one-year post basic midwifery training was established[50]. Four institutions initially providing this training including the Technical School for Medical Care (TSMC), Battambang Regional Training Centre (RTC), Kampong Cham and Kampot RTCs. An initial intake of 80 students was enrolled, 68 students graduated as midwives in 2003. In 2004 as further 51 students graduated. In 2005 only 17 midwives graduated, 8 from Kampot RTC and 9 from Battambang RTC. There were no applicants for the courses at the TSMC and Kampong Cham RTC.

The dramatic decrease in trainees for the post basic course was thought to be as a result of Registered Nurse graduates being attracted into the private sector, NGOs, and the MoH as they

[50] This course is open to nurses who have undertaken a 3 year course

were hesitant to apply for training in case they were posted to remote HC without any increased economic incentives. The MoH took action to address this shortfall by creating a large number of new midwifery posts, which appears to have been an impetus for increasing the intakes in 2006 and 2007. In 2007 85 graduates and 88 new students were recruited, it is anticipated that 80 students will graduate per year for 2007 -2008

ii) Primary Midwives – Pre service
A decision was made to develop the cadre of primary midwife[51], specifically focussing on the North East region of the country where staff shortages are most acute due to the remote location. By January 2004, the curriculum had been developed and 34 new entrants selected from the local communities. Gradually the numbers of students and the number of RTCs offering the course have increased. The 2007 JAPR reported that 192 primary midwives had graduated. The fiscal year 2006-2007 training intake included 146 primary midwifery students. Provincial Health Directorates are actively selecting applicants living in the community nearby the HC's so this strategy is likely to have a positive effect on the number of remote HC's which have a midwife in post. However, experience has shown that students with lower educational backgrounds, such as class 7,10,11 are unable to reach the learning and competency standards required. The requirement for a high school diploma is on suggestion for the recruitment of future intakes. In addition, a number of problems with ensuring adequate clinical training practice and lack of a competency based training approach has adversely influenced the skill level of new recruits

iii) Revitalization of the 3 year pre-service training for Midwives
Given relatively slow progress towards reducing the shortfall in the number of midwives in Cambodia, the MoH has been actively discussing the introduction of a 3 year pre-services programme for direct entry into the midwifery profession. However, the decision was made to await the results of the Midwifery review before continuing further with plans. This is discussed in detail later in this chapter.

iv) Continuing education – improving midwifery skills
Over recent years the skills of midwives at the Health Centre and Referral Hospital levels have been strengthened through a continuing education programme. In 2003 the continuing midwifery education package was refined.

It was agreed that the existing NMCHC course, 4 month MCH course and LSS course would replace the MPA 11 and 12 and a decision was taken on the focus of these courses to reduce the risk of overlap.

A number of different government and non-government (RACHA) organisations provide and support the midwifery skills training. Training is conducted at the NMCHC, TSMC and RTCs in collaboration with PHDs. From the JAPR reports it appears that progress has been quite consistent over the preceding years: Since 2003 between 123 -193 midwives per year have had their skills upgraded; this is set to continue during 2007-2008. For the most part the continuing education programme is donor funded; on occasion there have been delays in implementing some of the training activities due to the delays in disbursement of the HSSP budget. The Comprehensive Midwifery Review found that in-service training courses which lasted more than one month such as the NMCHC course and the LSS course had a positive correlation with skills levels.

5.4. Challenges

5.4.1 Attracting and Retaining Midwives

Despite efforts by the MoH to increase the number of midwifery posts and to increase training of midwives, there is still a shortfall in recruitment into the profession. Some restructuring of the civil service pay and conditions have been initiated, including development of a clearer pay scale

[51] 1 year training in midwifery

related to qualification and job functions. The Council for Administrative Reform has overseen the development of the priority mission groups' concept, which is designed to give special allowances to groups of civil servants charged with certain objectives. In the health sector for example the PMG has been established to encourage midwives to work in rural areas[52]. However, there is clearly more to be done to encourage recruitment into the profession. There are a number of factors which need to be considered which may be used to facilitate planning in this area:

- The Comprehensive Midwifery Review (CMR) in September 2006 identified that the community has a positive view of and supports midwifery as a profession, which is in line with findings from the Obstacles to Delivery by Trained Health Providers to Cambodian Women (2006). However, the public is unaware of the acute shortage of midwives – the review suggested a media campaign to publicise the need for midwives.
- There is still a need to review pay levels, Ensor et al (2005) found that the motivation to stay working in the public sector is strong as it enables staff to develop a professional identify, provides training opportunities, pensions and career progression. This leads to an increase in credibility among the public and increases private practice opportunities. This study also suggests that increasing pay levels is likely to increase time spent in public service but that further work is required to understand the levels and conditions under which this should be implemented.
- The recommendation of the CMR to set up a taskforce to look into the issues around midwifery recruitment, training and retention would be an ideal vehicle to undertake a holistic review of the issue, in particular exploring some of the options provided by the CMR in relation to flexible and innovative recruitment approaches. If a taskforce is to be set up it should have access to funds to undertake studies and operational research in this area. This would avoid having to rely on a set of random actions which may appear logical and appealing at the time but which distort the situation because of factors not taken into consideration when it is implemented.

5.4.2 Public and Private sector

The HSP did not address the linkages between the public and private sectors in relation to the midwifery or nursing workforce. There is only anecdotal evidence relating to the number of midwives working in the private sector, although they are likely to increase given the popularity of private delivery. However, private midwives may become a more important feature of the public services, especially if the Public Administrative Reform process decreases the number of national civil servant posts available. This needs to be explored as if quotas of civil servants are reduced there may be need to experiment with different working arrangements such as contracting staff, perhaps even reviewing the public-private arrangements to commission public services from the private sector. In some countries midwives have the option of working either in the public or private sector. In-depth analysis is required of the issues of the relative contributions of midwives in both sectors at present, and the potential for midwives to be employed as private contractors but providing services to the public sector. Another issue is that key informants mentioned that public sector midwives often deliver at home privately. While that is increasing access to skilled attendance, new WHO recommendations advocate delivery within a health facility[53] – by a health worker with midwifery skills.

5.4.3 Medium and Long term HR planning

Developing human resources within the health system is a long term process, which is influenced by a number of factors such as community perceptions, the general education system and the professional education institutions capacity to train new recruits and to provide continuing education for those already practicing. These were not addressed within the HSP. Clearly there needs to be continuing efforts to project the medium and longer term health resource requirements and to begin planning in consultation with other sectors such as education and youth, in order to

[52] Ensor, T. etc al Public sector motivation of health workers in Cambodia – how much might it cost? (2005)
[53] Integrated Management of Pregnancy and Childbirth WHO recommended interventions of Improving maternal and newborn health WHO/MPS/07.05 (2007) p4 Table 2 Place, providers, interventions and commodities

ensure the shortfalls in human resources does not increase as there is increased competition for suitably qualified recruits.

5.4.4. Quality of training

Although there is a sense of urgency to increase the number of skilled attendants rapidly, it is a waste of resources to invest in poor quality training. Training needs to be competency based, to prioritise both clinical and interpersonal skills development, and must include extensive 'hands on' exposure to clinical environments, and needs to be provided by skilled and experienced trainers. Health provider education systems must receive adequate attention if skilled attendance is to be achieved[54].

5.4.5. Significant shortfalls in midwifery competencies

The CMR results show there is a significant skills shortfall in the current workforce, especially, but not exclusively for life saving skills (LSS) for obstetric and neonatal emergencies.

Of particular note is the clinical competency of primary midwives, and the review made several recommendations including modification of the curriculum to focus on clinical experience and skills and the possibility of a probationary period for newly qualified primary midwives. In addition, the report suggested exploring training opportunities for primary midwives to become secondary midwives. The ability to set professional standards and to clarify the role and responsibility of midwives vis-à-vis other health professionals would be facilitated by having one cadre of midwife.

5.4.6. Difficulties in applying new skills in practice

The CMR review found a positive correlation between skills levels and attending the various - 1 month, LSS or in-service training programmes. However, the review noted that some of the continuing education courses appeared ad-hoc in that they lacked central coordination. In addition, change in practice as a result of the trainings was hampered by inadequate follow up and monitoring activities. As a result, managers often did not provide an enabling environment in which midwives could implement new skills in practice on their return to their clinical duties. The CMR recommended the introduction of a Quality Assurance and Improvements System for Training, but also there is a need to improve managers' appreciation of their role in facilitating improvements in practice.

5.4.7 Costed plan

A number of JAPR reports stated that delays in accessing both HSSP and government budgets have constrained the recruitment of midwives and the upgrading of midwifery skills and knowledge to the existing staff. There are continuing efforts to improve disbursement of funds. If capacity and quality of training is to be increased significantly in order to meet medium and long term human resource requirements within the sector, work is required on future projections and a clearly indicated plan of activities which is costed. This should be based on the direction and guidance on the SBA by the task force which is to be established.

5.5. Issues which need to be addressed in order to improve the quality of education and training

The CMR provided a number of options for improving the quality of midwifery education and training which need to be taken forward, including improved training opportunities for teaching staff, development of a common curriculum and establishing a centre of excellence in education. Areas of focus include:

- The capacity of midwifery teachers – many of whom lack clinical and instructional skills

[54] MacDonagh. S, Achieving skilled attendance for all; a synthesis of current knowledge and recommended actions for scaling up – 2005 DFID Resource Centre

- The quality of training provided at semi-autonomous training institutions in the absence of accreditation and regulatory mechanisms means there is no way of ensuring that health sector workforce needs are met and health professionals are trained against uniform standards.
- Obtaining appropriate clinical placements for students remains an ongoing concern.- but needs to be urgently addressed
- Shortage of teaching aids and training materials within the RTCs
- Course/curriculum revision activities and coordination activities of the training institutions, such as regular meeting between the TSMC and RTCs, meetings between the RTC staff

5.5.1 Importance of Skilled Attendance

While discussing the importance of delivery by a skilled attendant, it must be acknowledged that a skilled attendant operates within a health system and is reliant on the system to be able to function adequately.

'Skilled attendance' has been described as a partnership of skilled attendants AND an enabling environment of equipment, supplies, drugs and transport for referral to Emergency Obstetric Care (EmOC). Health system organisation and development issues must be addressed in order to provide an enabling environment for the provision of skilled attendance. Clear policy guidance on the place and type of attendant providing delivery care, the transition strategy from unskilled to skilled care and the provision of emergency obstetric services is required.

5.5.2 Transition to skilled attendance

A number of factors needs to guide these policy issues including the available evidence, the resource implications, the socio/cultural norms and beliefs surrounding childbirth, and the physical access challenges of the particular context. Much work has been carried out on these issues in Cambodia, including barriers to the use of skilled attendants. Of particular concern is that fact that TBAs are still conducting many deliveries.

Discussion of how the transition from unskilled to skilled attendance is managed in terms of the future role of these workers within their communities and their referral to health services is required. The recent focus on care of the newborn adds another dimension with the need to address how care immediately after delivery is best provided for the newborn as well as the mother.

5.5.3 Rights and community participation

The political, policy and socio-cultural environment can also enable or prevent 'skilled attendance' [55] Skilled attendance can only be achieved when there is attention to the political, social and legal actions that address women's human rights and addresses the issues which reduce women's access to services. In addition, gender equity concerns must be central to policy development and implementation strategies if provision of skilled attendance is to impact on the health outcomes of poor people. The role of communities in supporting the efforts of health workers to reduce maternal mortality has not been fully established, this is discussed further in the maternal health section as well as other factors such as essential equipment and medicines, a responsive emergency referral system that links levels of care are addressed in the maternal health section.

[55] Graham W. et al [2001] Can skilled attendance at delivery reduce maternal mortality in developing countries? In: De Brouwere V. & Van Lerberghe W. [2001] Safe Motherhood Strategies: A review of the evidence. Studies in Health Services Organisation & Policy, 17. ITG Press, Antwerp.

5.6 Progress towards achieving strategy 12

A severe shortage of midwives within the public health sector has been identified. A number of issues are considered to contribute to this situation:

- Some midwives have moved from clinical practice to other positions, often in administration and management
- Midwives have moved to the private sector, both for profit and non-profit
- A number of midwives are on temporary leave of absence from the service
- Recruitment into the profession is weak and a 6 year gap in training has dramatically affected the numbers of new recruits
- Midwives do not want to be posted in more remote locations away from the provisional centres or Phnom Penh

In order to address these issues the MoH has:

- Conducted a functional analysis as a first step towards developing staffing standards for HC, RH and National Hospital levels. The staffing standard is based on patient caseload, and the formula, information and the CPA Guidelines have been incorporated into the HR database
- Improved coordination between human resource development and personnel departments of the MoH, both departments have access to the database of health personnel and work together to coordinate recruitment and training
- With information from the database, areas of greatest staffing needs can be identified and new graduates are posted to provinces and operational districts with greatest shortfall in the number of midwives
- The MoH created a 100 new posts for midwives[56] – mainly outside Phnom Penh
- Incentives for midwives have been established, which include:
    - Entry point into the civil service salary scales for midwives is 3 points above nursing staff
    - Midwives can enter into civil service at 30 and not 28 years as for other professions
    - A new initiative has been developed in which R 60,000 for delivery at HC and R 40,000 for delivery in Hospital is paid to a midwife
- The focus is now on recruiting and training locally at regional training centres to ensure more remote posts are filled
- The distribution of staff within the province and to the operational districts and to the facilities is all decided at a provincial level
- When a post in Phnom Penh becomes vacant it is reviewed to see if it continues to be needed and then it is reallocated to a provincial level

5.7 Challenges

As a result of the initiatives undertaken by the MoH under strategies 11 and 12 - in 2006 51 midwives were recruited to 100 vacant posts, including 34 primary midwives and 17secondary midwives. It is expected that at least 70% of HCs will have midwifery graduates allocated to them in 2007 and 2008. However, there continues to be a shortage of 1,287[57] midwives overall with up to a 1/3 of the midwifery workforce set to retire in the next 5 years and the attrition rate is about 10% per year. At present 23% of Health Centres do not have a midwife and 14 of the 24 provinces have a higher population ratio per midwife than the standard set of 1 midwife per 4,700

[56] JAPR 2006

[57] Calculated based on the CPA (guidelines for comprehensive package of activities 2006-2010) and health centres (MoH Human resources Database, 2007) – as cited in The Development Study on Strengthening maternal and Child Health Service Performance in Cambodia Final Report may 2007 JICA

population. A recent report suggested that unless recruitment is increased further and training capacity is increased that between 2007 and 2010 the shortfall of midwives may rise to 1,327[58].

5.7.1 Workforce planning issues

While the initiatives which have been taken by the MoH personnel development should be applauded, progress can only be sustained over the long term if there is an enabling policy environment to give planners a clear direction. Like many countries, Cambodia has no published official statement of health workforce policy. While the Health Sector Strategic Plan identified 3 specific objectives, there is continuing need to take a more detailed and long term view over the country as a whole. While the Health workforce Development plan 2006-2015 and National Policies and Strategies for Human Resources for Health 2006-2010 give guidance there are many issues which are identified in these documents which need to be addressed:

5.7.2 Public sector pay and conditions

Due to low public sector pay, many public employees work part-time in the private sector. This is perhaps a reason why health worker pay is not addressed, as it is assumed that health workers will supplement their salaries within the private sector. However, this reduces access to services by the poorest women who can not afford private care. Keeping public sector workers in the public sector on a full time basis should be an important focus.

One successful approach has been through the 'contracting' approach where health workers were paid an appropriate wage and worked only in the public sector.

This was considered successful, but anecdotal evidence suggests this 'drained' other non-contracting operational districts around. However, what is clearly showed is that if you provide the right level of pay and enabling working conditions workers will stay at their public sector posts.

5.7.3 Vertical programmes

Key informants often mentioned that the success of the HIV/AIDS strategy in terms of reducing the prevalence in the country has been in part due to that fact that this vertical programme has been able to attract health workers with attractive incentives. This has reduced the pool of health workers available to the health system as a whole. This issue is an important development partner harmonisation issue. In some countries HIV/AIDS funds have been successfully used to improve human resource availability for the health sector as a whole, while still addressing this specific disease. Efforts to strengthen the health sector as a whole by using vertical funds needs further exploration. *Raise vertically – spend horizontally* is a new phase often heard but it is worth considering in HSP 2.

5.7.4 Distribution of health personnel

While progress has been made under Strategy 12 to increase the numbers of staff, little progress has been made on re-deploying staff to address the current inequitable distribution of health personnel. This is a difficult task and may not be possible at an individual level. However, there may be scope to review the overall health sector structure and future roles of the public and private sectors.

5.8 Progress towards achieving strategy 13

This strategy addressed the HR needs of cadres other than midwives, but still continued to focus some of its efforts on increasing provision of health workers at provincial and district levels:

The achievements have included:

1. The basic surgery-training programme has contributed to a better distribution of surgeons by upgrading general medical doctors to qualified surgeons at provincial level.
2. There has been a priority for in-service training of health centre staff, MPA modules have been mostly finalized according to health needs, the Continuing education system has been strengthened, improved trainee selection procedures have been developed.

[58] The development Study on Strengthening Maternal and Child Health Service Performance in Cambodia – Final Report May 2007 – JICA

3. Priority is given for training of operational district and provincial level staff
4. MoH/JICA project on HRD of co-medicals established a committee for establishing standards/criteria for training for health to be used by the ACC, in collaboration with relevant partners, including Council of Ministers, MoEY&S – the need for this committee is due to the introduction of private training institutions and the need for guidelines on training standards to guide quality in these and public educational institutions
5. RTC staff have been trained in use of the database and there have been regular meetings between MoH and education partners
6. Operational district supervision to health centres has been improved, and monitoring of in-service training has been improved
7. Health services management training has continued with follow-up in selected provinces, CPA guidelines have been developed, and basic surgery training is on-going
8. The range of health workers which have benefited from the trainings include doctors (basic surgery), health service managers, X ray technical staff, nursing staff, including Operating Theatre Nurses and Nurse Anaesthetists (ISAR)

5.9 Challenges

The Health Sector Strategic Plan stated that by 2007, the aim was to ensure *that "There is excellent capacity and relevant skills among all our workforce".* While there has been progress towards this objective, for instance the success of the continuing education courses for midwives and surgeons, there are gaps and limitations which need to be addressed before this is completely achieved. Mechanisms to coordinate, regulate and accredit continuing training and education are essential, especially given the recent involvement of the private sector in the provision of training.

5.9.1 Accreditation and monitoring

At present there is limited monitoring in terms of standards of and education and training. An accreditation system for training institutions and training courses is required in order to improve the standards of training and ensure that graduates are – fit for purpose.

i) Professional registration

A registration system for all health professionals linked to individual licensing based on compulsory continuing education training is lacking. The Medical Council and if established, the Nursing/Midwifery council could have an important role in maintaining such a registration system and ensuring professional standards are maintained in order to protect the public. In addition, there is an obvious role for Professional Associations, such as the Cambodian Midwifery Association in supporting training quality and in identifying training needs as changes in care require new skill sets.

ii)Competency based training

Replace theoretical based continuing training programmes with competency based programmes which ensure new skills are acquired and that managers facilitate the trainee to practice new skills on return to their working environment

5.10 Workforce planning, human resource development and management

5.10.1 Institutional Arrangements

The overall coordination of the HRD strategy should be further strengthened. This will require for the institutional arrangements presently operating to be reviewed in the light of a future HSP 2.
At present the primary HRD functions, that of planning for and managing the workforce and training and educating health providers are undertaken by different departments within the MoH.

- Department of Planning and Health Information (DPHI)
- Department of Personnel (DP)
- Department of Human Resource Development (DHRD)

The DHRD is responsible for health personnel education and training activities within the government sector, and is responsible for the organising and conducting national examinations. At present the DP is involved in workforce planning with the DPHI and in personnel issues, such as terms and conditions.

A number of interdepartmental working groups were set up in 2004, including the Health Sector Steering Committee, the Technical Working Group for Harmonization and Alignment in the health sector, the Technical Committee for the Implementation of the Health Strategic Plan 2003-2007, the Working Group on Health Service Delivery and the Working Group on Human Resource Development.
The role and functions of each of these working groups needs to be reviewed and responsibility for the working group assigned to a particular department within the MoH to ensure accountability for outputs.

5.10.2 Indicators

Having indicators for each of the specific strategies is very helpful in enabling prioritisation of interventions and in reviewing progress. However, the indicators for Strategic objectives 11, 12, and 13 have some constraints to achieving these aims.

- Many of the indicators are output level indicators, outcome indicators would be more appropriate for such a strategic approach
- Indicators are often not disaggregated, so it is difficult to see where there are gaps
- The indicators fail to make a link between the continuing professional education and quality of service provision

Monitoring capacity
A strengthened training database would enable planning for training needs at central and provision level – an enhanced role for the CE coordinator in ensuring provincial training is coordinated and databases are up to date.

5.11 Conclusions

Summary of Observations:

- Focussing efforts on the numbers of midwives as a policy approach only partially addressed the issue of increasing skilled attendance at delivery and was too narrow a focus. The policy failed to recognise that a skilled attendant can also be a nurse with obstetric skills or a doctor.
- The focus on placing primary midwives in rural areas failed to address the broader health needs of the population, in particular children.
- Creating incentives for one cadre only, disparities between health workers are created; they also have the potential to create 'perverse incentives' which encourage focus on only certain aspects of care, e.g. providing incentives for deliveries.
- Efforts to rapidly increase the numbers of midwives have been at the expense of quality. The CMR clearly highlighted that many new graduates do not have the necessary skills to be safe and competent practitioners.
- Although efforts have been made to try to increase the numbers of staff out side major urban areas, mal-distribution of staff continues to be a problem, with reallocation from urban to rural or from managerial to technical posts occurring only rarely.

Reccommendations for Further Studies:

- A review of the obstetric skills of secondary nurses and the possibility of them being included in a boarder definition of SBA
- Explore the concept of having a 'multi-skilled' worker posted to rural locations to provide integrated services
- Conduct a private and public sector mapping/review in order to conduct a workforce planning exercise
- Conduct a review of public health workers absenteeism and how to create the right terms and conditions to attract workers into the public health sector.

Policy Recommendations for HSP 2:

HSP2 should address issues of the health workforce more broadly, as detailed within the 2nd national Health Workforce Development Plan 2006-2015.

- The review supports the recommendations of the Comprehensive Midwifery Review in that a high-level multi-disciplinary taskforce should be convened as soon as possible. However, this taskforce should address the issue of skilled attendance more broadly than just midwifery.
- Institutional arrangements need to be clarified and issues of responsibility and accountability defined within the MOH. A more functional arrangement has been suggested in the health workforce development plan 2006-2015:
- Establish and implement an accreditation system for training institutions and ensure there is constituency in training curricula and training approaches. Standards of training and education need to be established and reviewed regularly. Increase the remit of the Medical Council and establish a nursing/midwifery council to protect the Cambodian public.
- Re-focus pre-service and post basic education – pre-service training should equip the trainee with the required skills and competencies to avoid the need for lengthy in services training programmes aimed at imparting basic skills.
- Involve professional associations in creating and maintaining standards for continuing professional education. Implement the recommendations of the recent review of the institutional capacity of the Cambodian Midwifery Association – to provide continuing professional education and development,

Chapter 6: A Time of Experimentation in Systems Development 2003-2007: An Analysis of Cambodia's Experience

6.1 Introduction

This chapter focuses on efforts aimed at responding to a number of perceived systems weaknesses:

- the failure to channel resources to the periphery and resulting effects on equity and access
- the lack of incentives to promote good performance – notably the effects of low salaries on health worker productivity
- weak management of key resources – especially human resources and drugs
- lack of clarity on the role of the state and institutional arrangements which result in duplication and fragmentation of efforts

The first section looks specifically at the range of innovative financing approaches Cambodia has adopted and the next section focuses on progress of the institutional development strategies.

6.2 Innovatory Financing Mechanisms

6.2.1 Overview

The Health Strategic Plan (HSP) focuses on the need:

- to focus resources on improving access for the poor (and specifically to reduce access barriers to access to hospital services) – through alternative financing mechanisms (Strategy 15)

Monitoring of progress has focused on:

- expansion in the number of Health Equity Funds (HEFs), numbers of patients covered and number of patients receiving assistance
- exemption practices of facilities without HEFs and level of user fee collections
- number of community based health initiatives (CBHI) established and numbers covered
- expansion of contracting approach

Health equity funds, contracting and social insurance have attempted to address the weaknesses outlined above by bypassing Government systems. They have expanded albeit in a rather ad hoc manner during the Plan period - at a pace dictated largely by the availability of funds rather than by any grand design - and rather more slowly than anticipated. Their coverage has increased but still remains relatively low.

They have focused on the demand side (HEFs and CBHI) as well as the supply side (contracting) and have been implemented alone or in combination with other approaches. They currently cover a relatively small share of the population although they are largely focused at poorer groups – directly in the case of HEF and indirectly for contracting which tends to be focused in poorer provinces. At the same time most operational districts (ODs) – largely but not exclusively the better off ones – still rely on the traditional Government delivery mechanisms.
The poor within these areas rely on exemptions - currently estimated to account for around 15% of contacts despite around 80% of the population living on less than $2 per day.
This is generally considered to be ineffective with the evidence suggesting exemptions do little to protect the poor but are still a serious drain on facility resources.

Attention is now being paid to the long term effects and the future sustainability of such schemes. Provincial facilities in Cambodia have traditionally been characterised by low levels of utilisation and the presence of excess capacity. Many of the approaches outlined below have increased utilisation – often primarily by the poor - but it is still far from certain that these increases will be sustained (were they down to initial enthusiasm or over servicing?). Many of the gains have been made at modest i.e. marginal cost using existing under utilised capacity. Ensuring future gains may be far more difficult and far more expensive to achieve. Realistic costing of the next steps will, therefore, be extremely important.

Before considering the individual approaches in detail it is also worth pointing out that they have, in many respects, been a response to the failure of the current system to deliver predictable funding to the periphery (as set out in various documents such as Public Expenditure Review and Public Expenditure Tracking Study). Were this situation to change the need for such approaches would be less compelling. User fees, for example, are a means of ensuring that facilities can pay their staff additional incentives and make provision for some basic level of non salary recurrent funding. If it did prove possible to increase resource flows to the periphery e.g. through disbursing resource direct to the facility level (as education does) and Merit Based Pay Initiative (MBPI) for administrative and management staff and other enhanced pay initiatives based on performance for service providers were extended to those at the periphery, and shown to be effective in boosting productivity, the need for user fees and thus by extension health equity funds would decline (though equity funds could, in principle, still usefully be focused on meeting the non health related costs preventing access by poorer groups). The focus on these pilot mechanisms should, therefore, not be at the expense of broader attempts to address the underlying public financial management problems. The next Strategic Plan will, therefore, need to consider the question of balance between longer term efforts to strengthen the Government system and short term efforts which, in part, bypass the system but deliver results. It also needs to develop a comprehensive approach which takes account of the interactions between the different approaches.

6.2.2 Contracting

Contracting attempts to improve performance by increasing payments to providers, basing those payments on the delivery of specified outputs and strengthening management supervision. The contracting experiment began in 1998.
A number of approaches were piloted – a contracting out model in which the contractor took over responsibility for all functions, and a contracting in model in which the contractor took over management functions. As part of the initial approach a number of control districts were identified and comparable amounts of funding provided through Government systems. The 2001 evaluation (Keller and Schwartz, 2001) clearly demonstrated that the contracted out model offered the best value for money although the contracting in model still achieved significant benefits. Boosting support through Government systems, on the other hand, had little effect.

More recent reviews have shown that contracting can increase utilisation, improve service quality, reduce costs to users and benefit the poor especially when used alongside health equity funds (Annear 2006). The approach has been focused in poorer operational districts (ODs) with 46% of inhabitants in contracting districts living below the poverty line compared to the national average of 36%. Key shortcomings in the approach have included:

- a failure of the part of Government to deliver funding in a timely manner (meaning that the contractors have often provided bridge financing) and
- a failure to ensure adequate staff (in one province 25% of staff had to be recruited from outside – with possible implications for staffing in non contracting districts) ,
- the slow development of exit strategies,
- limited involvement by Provincial Health Departments (PHDs) in the process,
- limited expansion of HEFs to support contracting,
- a misalignment between contract targets and national objectives,
- overemphasis on quantitative targets at the expense of more relevant qualitative ones and
- high administration costs.

In general, however, the approach has demonstrated that it can achieve results albeit at a rather high cost.

Box E: Impact of Contracting

"multiple stand-alone plans and initiatives sponsored by different government departments and implementing agencies is that often there is little coordination
between such plans and programmes"
"The most significant segment of vulnerable groups is the poor, and contracting combined with HEFs has certainly improved coverage and utilization by them".
"There is no doubt that the MOH has obtained good "value for money" under these contracts. Mechanisms have been implemented through Contractors that could not otherwise have achieved the dramatic improvements in indicators for health care. Nevertheless, attention to reduction in administrative costs in the long run would provide additional financial resources that could be applied to health care delivery at a time when resources are scarce"
sources –Annear et al 2006/Contracting Review 2007

Since 2001, and throughout the Strategic Plan period, the focus has been on expanding the approach to a wider range of operational districts. This aim is also reflected in the National Strategic Development Plan (NSDP). In practice a hybrid model has been adopted in which the contractor takes on the existing Government staff but is able to hire additional staff to make good any staffing shortfalls. The recent Contracting Review made a total of 29 often highly specific recommendations on the performance and future of the approach.

It is clear that some decisions need to be made immediately. Contracts are due to end at the end of 2007 – the Contracting Review recommends an extension of a year. However, there appears to be little consensus between the donor community and Government and also within these groups on how to proceed. The Council for Administrative Reform (CAR) is understood to be against contracting on grounds of sustainability, the Ministry of Economy and Finance in favour in view of the benefits it brings but with concerns for what to do in non contracted districts. It is also clear that a failure to act quickly will have serious implications. The field visits carried out as part of this review indicated that staff currently working in contracting districts are in the process of applying for new jobs. It is also likely that should contracting collapse any attempts to resuscitate the approach in the future would simply lack credibility.

A formal evaluation of the performance of the contractors and the contracting process is due to be carried out to assess formally whether the contractors have achieved their contract targets. The Contracting Review suggested terms of reference for such an exercise. Such an evaluation might also help answer some outstanding questions such as whether the positive effects of contracting are additional or whether they are at the expense of others. For instance it is not clear what the impact of contracting is on performance in neighbouring districts especially when there is a strong incentive to attract staff away from non contracted districts.

It is also unclear what impact contracting has on private sector activities within the contracted districts or whether it promotes curative care at the expense of public health and preventive services. These issues could possibly be included in the Terms of Reference for the forthcoming evaluation. However, having said this, the review team feel that outside of additional external reviews, more could be done locally using routine data to monitor progress in terms of outputs. Enough is already known about the approach already to make decisions about the future given that any decisions will not be made just on technical merit and cost effectiveness but will also be based on political considerations. The existing model seems unlikely to be retained so the evaluation may give little guidance about the future. In view of this and the imminent end of the current contracts it is vital that decisions need to be made urgently and waiting for any further information which might be obtained from the results from the evaluation should not be used to delay the decision making process or it will simply runs the risk of reaching the classic conclusion that "the operation was a success but the patient died".

Donors and Government need to recognise a few home truths. Donors have a residual obligation to make their best efforts to ensure the contracting experimental phase is brought to a satisfactory end with a clear plan for its future direction. This applies particularly to the donors who have supported the approach directly but also to the international community at large (Cambodia has been at the cutting edge of health financing reform and its experiences have been used to inform international debates on health system performance and equity. As such it could be argued that supporting the approach to a natural conclusion could be supported on the public goods argument). Initial thinking for the successor to the Health Sector Support Project, however, appears to make no mention of continued support to contracting raising serious concerns about future funding arrangements. Donors also need to accept that the best technical solution (in this case contracting out) will not always be politically acceptable. Contracting was introduced in a post conflict situation and there are always tensions as to how and when Governments should take on greater responsibility for the delivery of services and provision of stewardship as the broader security and governance situation improves.

Government, on the other hand, needs to accept that donors will not be willing to simply channel their money through the public sector in ways which have already been shown to be ineffective and where significant concerns still remain.

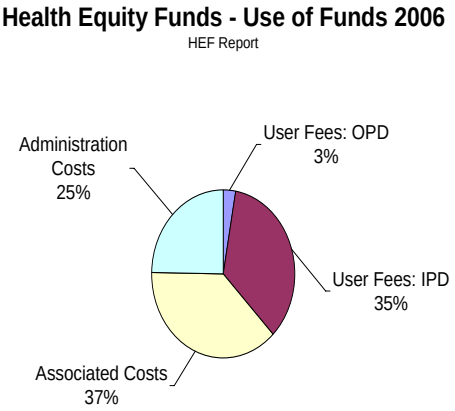
The Contracting Review proposed a phased handover of the contracting role to Operational District with NGOs retaining a residual role in monitoring rather than management. This seems a sensible approach though agreement on the model does not answer questions of how rapidly this transition might take place or what the costs might be. Other successor options include the possibility for donors to support performance-based provincial block grants for service delivery, discussed in section 6.3. The key will be for the government to indicate its preferred role for NGO contracting (eg specific difficult locations or conditions or where NGO contracting has been in place only for a short time) compared to 'internal contracting'. We recommend that an urgent summit take place to address this issue (using a high profile and independent facilitator)

6.2.3 Health Equity Funds

The introduction of formal user fees in Cambodia was unusual in that it led to a *reduction* in out of pocket expenditure on health (in many countries it simply adds to the financial burden) and often resulted in a significant *increase* in utilisation (Barber and Bonnet 2004 refer to a 50% increase in Takeo Provincial hospital).
However, it was also clear that user fees still presented a major barrier to access for the poor (Wilkinson 2001) in part because facilities had little financial incentive to exempt users. As a result equity funds were introduced to compensate providers for the loss of user fee revenue and also to help address financial barriers faced by the poor over and above just the costs of user fees.

According to the 2007 Joint Annual Performance Review HEFs are now operational in 29 districts (6 contracting ODs and 23 non Contracting ODs up from 5 at the start of the plan but below the target of 41). They mainly cover referral hospitals although 5 schemes also covered health centres and one additional scheme only covered health centres. Just over 432,000 poor patients have been pre identified and just over 89,000 have benefited. A national framework was developed in 2005 and has since been revised and adopted by the Ministry.

As the chart shows the majority of funds are not used for covering user fees but for covering non health costs and for administration costs.



Evidence (Annear et al 2006) suggests that HEFs have:

- helped reduce financial barriers to access, has
- increased admissions especially by the poor, has
- been cost effective and
- few entry barriers
- can be scaled up at relatively low cost (monthly subsidies range from $3k-6k per month at referral hospitals and $200-300 at health centres),
- been well targeted with little leakage to the non poor and
- reduced the likelihood of impoverishment caused by ill health
- increased resource flows at the facility level.

HEFs have also been shown to encourage the poor to access public rather than private facilities.

One outstanding question remains the focus of HEFs at the referral hospital level. This was justified on the grounds that the costs – in terms of both health costs and associated costs such as travel – would be much less prohibitive when accessing health centres and also based on the assumption that exemption schemes were more effective at health centre rather than hospital level. However, it does raise the question as to whether HEFs create a perverse incentive for patients to bypass health centres and seek immediate treatment at hospital level. The recognition of the presence of these perverse incentives has meant that the location of existing HEFs have been restricted by the selection criteria of the existence of a well-functioning referral system and functioning health centres as found, for example, in contracted districts.

The alternative to HEFs is to rely on largely ineffective exemption mechanisms. These are clearly ineffective with wide variations in coverage (Espinosa and Bitran 2000). The 2007 Joint Annual Performance Review (JAPR) reports that only 16% of poor patients were exempted from fees at referral hospitals, 18% at health centres and only 11% at national hospitals.

The case for expanding equity funds appears beyond doubt although there are some questions about its design and focus which might justify some further experimentation. As such the challenge is to scale up the approach more widely. A cost and prioritised scale up programme would assist this process. Any support should be coordinated and aligned as far as possible with Government systems and managed by the nominated Government Equity Fund Implementer. As suggested later there may well be competition to fund HEFs – it may make sense for current joint funders to finance interventions other than HEFs.

6.2.4 Health Insurance

Given the high reliance on out of pocket spending there is a strong case for developing mechanisms to pool risks. All income groups could potentially benefit although the poor are, of course, more vulnerable to the financial consequences of ill health.

Development of such an approach poses major challenges in the Cambodia setting given the size of the informal sector (~90% of the population), the high levels of poverty especially in rural areas, lack of management capacity in developing risk protection mechanisms and an inability to regulate the private sector effectively. Such approaches also tend to have very high initial set costs and therefore tend to be very expensive when they only cover a small segment of the population as would probably continue to be the case in Cambodia.

Community based health insurance is poorly developed in Cambodia. Although it began in 1999 it has grown slowly and coverage remains limited. Currently 8 schemes, run by GRET/SKY, CAAFW, RACHA or MALTESER/CHHRA, are in operation – this is expected to increase to 20 in 2007 according to the JAPR. International experience suggests that this approach primarily meets the needs of the rather better off and that the premiums of the poor would need to be covered for them to enjoy access. It also suggests that such schemes often face serious sustainability problems – often with moral hazard (resulting in over consumption) and adverse selection

(resulting in the healthier opting out) as underlying factors. The recently produced *Guidelines on Community Based Health Insurance Schemes identify these issues* – but progress will need to be closely monitored over time to assess their viability. The approach needs to be broadened to cover more districts – again in a costed, prioritised manner - and the potential to allow the poor access through the use of HEFs explored.

Social health insurance (SHI) tends to meet the needs of those in the formal sector. In principle, it can be an effective way of raising resources and although the sector is diverse it tends to be relatively well organised and easy to cover. However, the approach also runs the risk that it may simply act to channel subsidies towards better off groups and further widen inequality in access to health care at least in the short term. Few poor countries have been able to move rapidly towards universal insurance coverage as those countries which most need to provide subsidised premiums to incorporate the poor tend to be the very ones which lack the means to do so. It is recognised that social insurance is a long term goal which needs to be achieved on a step by step basis. There is also a need to strengthen measures to regulate the private sector to ensure that benefits go primarily to members and not providers. The Ministry of Social Affairs, Veterans and Youth Rehabilitation (MoSVY) which, alongside the MoH, has responsibility for taking forward the SHI Master Plan is keen to conduct a pilot mandatory health insurance scheme. Implementation and evaluation of this approach would be a key feature of the next strategic plan.

The SHI Master plan and the legislative roadmap provide a framework for expanding social health protection. It is likely that a gradual expansion of risk pooling based on a mixed model of CBHI and SHI involving both compulsory and voluntary enrolment and financed by a combination of household premiums and tax funding will be the way forward. Consideration is also being given to linking equity funds to health insurance and its possible use in covering the premiums and associated costs faced by the poor who would otherwise be unable to enrol. Together these factors further emphasise the need to develop a comprehensive health financing strategy. Recognition that it will not be possible to move towards a unified model with a single social insurance agency certainly within the timeframe of the next strategic plan also further highlight the need to monitor the impact of a more fragmented approach on equity in access to services.

6.3 Introduction: Institutional Development

6.3.1 Overview

The Strategic Plan focuses on the need:

- to ensure the MoH can respond effectively to change through:
- organisational and management reform of management structures, systems and procedures
- enhancing management and leadership culture
- effective decentralisation and deconcentration
- institutionalising sector wide management
- to improve accessibility, quality and affordability – through the promotion of effective public private partnerships and enforcement of regulations

Key expected outcomes include improved stewardship of the sector and improved accountability

Monitoring of progress has focused on

- better staff management – establishment of a human resources data base
- the introduction of performance based salary supplements
- progress towards agreeing and implementing a vision for future institutional arrangements
- development of planning, budgeting and monitoring frameworks

- registration of medical practitioners
- the establishment of effective donor coordination mechanisms
- strategies to prevent Non Communicable Diseases (NCDs) and improve the evidence base
- strengthening management capacity
- ensuring effective decentralisation and deconcentration
- institutionalising sector wide management

This area seems rather a catch all with a degree of duplication (in relation to sector wide management (SWiM) and donor coordination). It is not clear why non communicable diseases (NCDs) is included here rather than under service delivery and issues of staff management and development are better dealt with under human resources.

6.3.2 Strategy 17 - Organization and management reform of structure, systems and procedures of the Ministry of Health (MoH) to respond effectively to change.

Other than expansion of the contracting approach (dealt with earlier) which has largely bypassed Government systems - relatively little implementation has taken place in terms of developing Government systems themselves. Rather the focus has been on consensus building and the design of measures aimed at addressing systems weaknesses. This is partly a reflection of the late start made to Health Sector Support Project (HSSP) activities. In addition, progress in the sector also needs to be set in the context of broader public sector reforms.

Merit Based Pay Initiative

The development of the Merit Based Pay Initiative (MBPI) proposal is seen as a key step to enhance public sector productivity. This has involved long and delicate negotiations with a range of key stakeholders notably the donors, the Ministry of Economy and Finance (MEF) and the Council for Administrative Reform (CAR).

It is planned to introduce the approach for 160 staff in the Ministry of Health and then expand the approach to central institutions and a number of pilot provincial health departments in the near future. CAR is currently assessing the resource implications of future approaches for scaling up the approach. The intention is that accelerated increases in civil service salaries will ultimately replace the need for donor financed supplementation. The current thinking is that this might be possible around 2015 suggesting that a sustainable and adequately remunerated workforce might be a realistic aim for the end of the next Strategic Plan. The MBPI is targeted at administrative, policy, managerial and technical staff and not for service delivery staff. It remains to be seen how this approach will compare with (or combine with) contracting as a means of improving productivity. On the one hand, it should enable health workers to enjoy the levels of remuneration required to encourage greater productivity and will be Government funded (and thus presumably more sustainable). On the other, it is less clear that the approach will incorporate the rigorous monitoring and supervision mechanisms used in contracting to ensure that better pay is translated into more outputs

As nothing is in place on the ground yet there is little to be said other than the fact that the approach initially covers only a limited section of the workforce identified through the completed functional analysis at MOH central departments, the Annual Operational Plan (AOP) and the introduction of the Performance Management System from 2006 sets the parameters for post descriptions and numbers of MBPI posts and the control and monitoring mechanism to achieve the expected productivity gains. This effectively leaves incentives for staff at the service delivery end to continue to rely on an inefficient mixture of low salaries, incentive payments (funded by Government under Priority Mission Groups, by donors and through user fee revenue) and facilitation payments to meet their financial needs.

It will also be important to closely monitor the impact in particular in terms of the extent to which the approach is rolled out on those working at the service delivery level and in terms of impact on outputs given some concerns that the approach might provide too many incentives for reform activities and too little on routine day to day activities.

The bottom line here is that there is a proposal on the table which offers some prospect of addressing one of the most intractable problems facing Government in Cambodia at the moment. It is important to get on with it and assess the extent to which it achieves the desired results.

The Institutional Development Plan

The role for Government in the health sector needs to be clearly spelt out. Government probably needs to adopt a more limited role in the sector – focused more on stewardship and surveillance. Whatever it does decide to do it should do well. At present it is not well equipped to undertake the stewardship role

Under the HSSP TA a possible future vision has been develop which sets out what the health system might look like in 2020. It also sets out a road map of the initial steps Government might take on this route. Essentially, the vision describes a possible future in which Government focuses on its policy role establishing arms length agreements with a range of institutions to ensure effective stewardship, regulatory and service delivery arrangements are in place.

Such an approach implies:

- the Ministry focusing more on purchasing (including from NGOs and the private sector) and less providing,
- a less hierarchical approach to management with greater reliance on arms length agreements and a stronger stewardship role with a greater policy and results focus,
- stronger financial oversight and building up the so called “back office” function and
- a modified approach to regulation

Box F

The Institutional Development Plan sets out a possible vision for 2020. Specifically it calls for

- a **comprehensive agreement between the MoH and its health partners on the sector’s future architecture (its functions, financing and management)** as a basis for establishing organisational development priorities
- significant **investments in management systems** at all levels and skills required to operate them
- the fostering of **government leadership**
- a more **holistic approach** by health partners to supporting the sector
- a **rebalancing of technical assistance** towards skill transfer and mentoring within agreed long range organisational and human development strategies.

In terms of key first steps it suggests:

- **increasingly paying providers according to their output and formalise what is already happening** – recognising the shift towards fee for service payment arrangements (through out of pocket payments, HEFs) and encourage the replacements of individual input based incentive with output based fee for service arrangements. Such approaches do have major dangers in terms of the risks of cost escalation and incentives to deliver curative care at the expense of other key services. It is planned, for example, to introduce payments to midwives who succeed in delivering at health centre and hospital level and which could potentially significantly increase their remuneration.
  As with all such approaches it will be important to monitor impact given concerns it could encourage staff to focus on what is being measured and ignore other important duties such as the provision of ante natal care. Dedicated funding would also be required to ensure adequate support is provided for the production of inputs e.g. training.

- **develop organisational leadership** – through the establishment of leadership networks along the lines of those adopted by hospital managers
- **improved access to services for the poor** – through expanded equity funds and exploring the case of demand side financing approaches targeted at obstetric and curative primary care
- **develop new functions** – especially the role of National Institute of Public Health (NIPH) as a knowledge centre and provider of management training
- **support the development of professional organisation** – to help set and maintain clinical standards
- **improve staff management** – by turning Annual Operational Plans (AoPs) into Service Level Agreements
- **improve service quality** – through the promotion of provider accreditation

It is not appropriate for the review to recommend any particular model or critique the vision as its main purpose is to stimulate discussion. Rather, we would emphasis the importance of that discussion taking place and the need to for the Ministry to devote sufficient time to develop its thinking on the issue over the next year or so. The next Strategic Plan could then explicitly set out the proposed role of the state in the health sector focusing specifically on the following questions:

- should it provide all services or focus on a few – which?
- should provide services to all – or just some – who?
- should it undertake all functions or focus on a few - which policy, regulation, financing, service delivery
- should it try and compete with the private sector or work with it

The Government Policy of Public Service Delivery, Public Financial Management Reform Programme, and Deconcentration and Decentralisation (D&D) polices will also shape the plan. Policies in these areas are evolving at present. The Policy of Public Service Delivery makes the distinction between the financing and stewardship role and the delivery of services and helps clarify what form autonomy might take. In terms of D&D Government is developing an organic law to guide the process and which foresees united administration and provincial and district level and a stronger role in planning and budgeting with the potential for provincial block and provincial sector grants. Details are not yet known but it is clear that these processes will encourage change in many ways along lines set out in the Institutional Development Plan. The fact that the social sectors are not represented in the D&D discussions, though, is a concern and something that donors may wish to take up at a higher level.

Functional Reviews and Organisational Analysis

A functional analysis of central MoH Departments has highlighted:

- the fragmentation and lack of clear responsibility for budgetary matters, procurement and regulation,
- the failure to mainstream issues such as quality and information management across the organisation,
- a failure to develop effective and well coordinated oversight arrangements (with multiple, parallel supervision visits taking place,
- too much effort being expended on unnecessary and /or inappropriate functions (such as training) with too little attention focused on issues such as chronic diseases.

It also suggested that future directions highlight the importance of developing the commissioning/contracting management function. Low salaries are frequently cited as a problem leaving staff to seek opportunities for access to per diems which are often inappropriately aimed at supervision visits and technical training and supporting donor projects.

National centres and institutions have been able to attain a degree of informal autonomy from the MoH often based on their ability to attract donor funding ((National Centre for HIV.AIDS, Dermatology and STDs (NCHADS), for instance, is virtually completely donor funded). Supported

by timely access to funds strong leadership and political commitment these programmes have often been able to deliver impressive results. National programmes have tended to focus more on stewardship issues and less on service delivery developing performance agreements with service providers. Some have also developed effective models of collaboration with NGOs and incorporated their activities into AoPs.

However, this tends to result in a fragmented approach (too much on programme specific training rather than broader public health /management issues) often involving the development of parallel systems (NCHADS has established its own system for access anti retroviral drugs) and large distortions in the allocation of resources. The ability to pay salary supplements to selected staff has also influenced and distorted the activities of staff at the facility level.

At primary care incentives to health workers to work in remote areas remain extremely weak. Pay reform initiatives such as MBPI focus on central staff and those at primary care level continue to rely primarily on salaries, per diems (for preventive care) and user fee revenues (for curative care) which are unlikely to create balanced incentives. Funding flows are extremely unreliable and per diems driven by national programmes tend to distort efforts and reinforce a vertical approach to delivery.

6.3.3 Strategy 18 - Effective public private partnerships to improve accessibility, quality and affordability through the participation of private sector participation and enforcement of regulation

Quality Development

Quality improvement is given a prominent position in the hierarchy of General Mission Statement and Policy Statement. It is part of the essential core strategies (strategies 9 and 10) and ranks high through its placement as a part of the main elements for health service delivery in Cambodia.
Slight inconsistencies in the strategy set up – strategy 9 addresses the public sector only, while strategy 10 includes also the private sector – cannot obscure a high strategic priority for quality systems development. An important background to the high priority given to quality development is the understanding that Cambodian health services (public and private) suffers from poor quality of care.[59]

Quality improvement as a system feature often faces a number of challenges – generally and in Cambodia:

- the *legal position of the public and the private sector* health system differs: the public sector is basically a "command-control system" under government leadership and thus reasonably "simple" to govern. The private sector needs special legislative efforts to be brought into a similar development. Such legislation is complex to bring about and takes time. The process thus risks to go out of step with the public sector.
- a main feature of most quality system is *good information systems* to feed into decentralised – often facility based – forms of self-administration under higher lever supervision. Such information systems are demanding and costly but necessary to support the development of a "culture of quality" (strategy 9).
- The use of quality systems normally demands *a fair share of resources* both in health facilities and on higher levels in the health hierarchy. Resource demands also have many other worthy purposes.

The technical solutions for the public sector quality system have been laid out in three main documents and a number of quality guidelines from the MoH:

- The national policy for Quality of Health (October 2005)
- The operational guidelines for Clients Rights and Providers' Rights-Duties (February 2007)
- Physicians' code of ethics (June 2006). No similar code of ethics exists (?) for other medical professions (dentists, psychologists, nurses, midwifes etc)
- Quality guidelines (not studied – but related to the Minimum package of activities – MPAs for health centres and the Complimentary packages of activities CPAs for hospitals)

[59] Cambodian National Policy for Quality in Health, chapter Ia,i.

There is also a separate legislation for the private sector (Kram on Management of private medical, paramedical and medical aide practise of October 2000). This law covers also other medical professionals than medical doctors. The law gives the Ministry of Health the authority to instruct, supervise and monitor all medical staff with the support of the professional committee under the code of ethics of each profession. The final say over the provisions issued this way lies with Government in the format of an Anukret.

The formulation of the basic regulatory effort is mostly recent and has been brought forward with support from donors. The implementation of the quality systems brought forward in these regulations has therefore not advanced very far. Certain provisions in the regulations provide for a general system for quality – both public and private – while others seem to be better adjusted to the public system. Resources for implementing the policies, the codes and the guidelines are meagre. Certain structures essential for quality improvement – such as the Cambodia Medical Association, the Cambodia Medical Council also suffer from lack of resources and from an unclear legal status. Other medical professions seem to lack these structures entirely. It seems fair to say, that the whole area may need systematic institutional development. Progress may have to include also structures with a role to represent clients/patients in the system.
Information systems specifically designed to support the implementation of the policy have still to come and may take considerable time to develop considering costs involved.

In conclusion:

> Important steps have been taken to develop quality systems in health care. The fact that resources for their implementation are meagre, that institutions for their implementation are weak or non-existent and that information systems still are rather immature should not overshadow the value of these initial steps.

Experiences to be considered for inclusion the HSP 2008-2015:

> A roadmap for the gradual implementation of the quality systems is essential and such a roadmap may need setting up of priorities, good analysis of the costs involved, structural development for the implementation and the legal measures needed to assure effective coverage of the health sector as a whole – including staff working part-time in public sector and part-time also privately.
>
> Development of quality information system could benefit from a gradual development in which the main focus is on development of facility based small systems addressing areas deemed to be of particular relevance for the individual health centre/hospital as a precursor to general and national systems.

6.3.4 Strategy 19 - Enhancing MoH capacity to address chronic and other non-communicable diseases and emerging public health problems

See section 2.4

6.3.5 Strategy 20 - Further developing the health sector to strengthen management effectiveness and service delivery responsiveness through enhanced management, good leadership, appropriate decentralization and de concentration and institutionalized sector wide management.

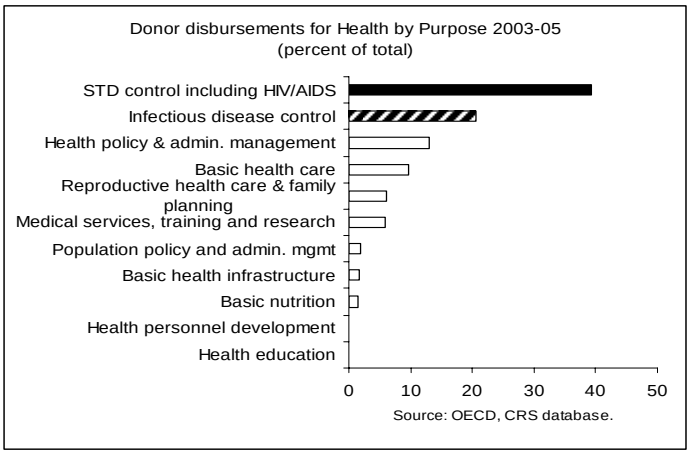
The Government of Cambodia's Strategic Framework for Development Cooperation Management emphasises the key role for line Ministries in

- directing and aligning external assistance to established or emerging priorities that are consistent with national development goals;
- providing leadership and taking ownership of the Technical Working Group (TWG) mechanism, and maintaining regular contact with development partner representatives and with members of the TWG from other ministries

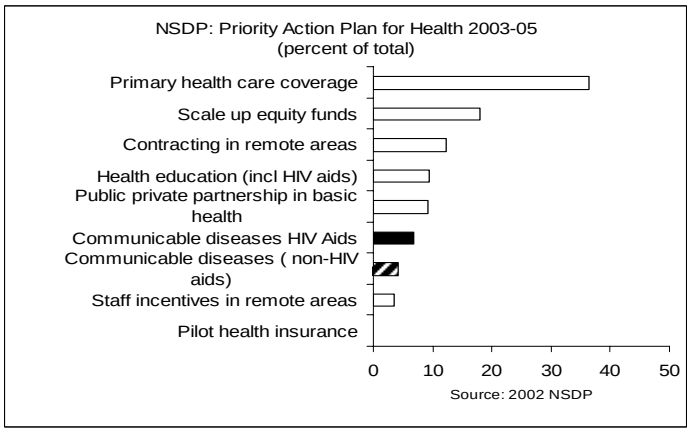
- reducing the number of stand-alone projects and moving rapidly towards program based approaches including sector wide approaches (SWAps) sector wide management (SWIM)
- reducing the number of project implementation/management units, international experts and technical assistance in consultation with development partners

A number of modalities have been used by donors to support service delivery. Donor funding has been used to provide performance based funding for referral hospitals and health centres through contracting and HEFs.
Support to the national programmes, including support to the Central Medical Stores, have typically provided in kind support to providers whilst the Public Expenditure Tracking study (PETS) reports little link between direct donor support at the provincial level and service delivery outputs.

Some progress has been made in terms of harmonisation and alignment of donor support in the health sector. Key measures taken to improve aid as well as sector effectiveness include the establishment of the Technical Working Group for Health and the Joint Annual Performance Review, which has developed as a mechanism for supporting sector wide management, as well as a whole series of sub groups and task forces. The Health Sector Support Project (HSSP) review reports increasing capacity of the working groups and the use of the process to identify future priorities[60]



The Technical Working Group - Health is considered to be “an effective forum for analysis and discussion of key sector issues” (HSSP review) with strong representation from the NGO community.



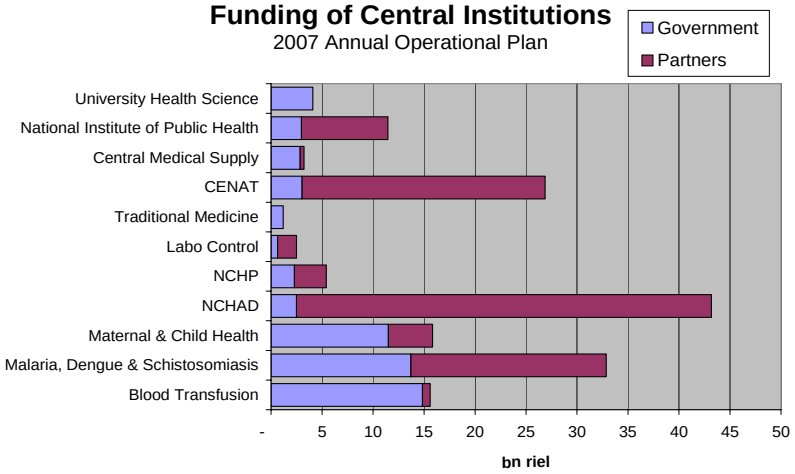
However, as the Aid Effectiveness Report points out aid in Cambodia is much more fragmented than elsewhere in the region, that the fragmentation in health is far more pronounced than in most other sectors and that it is getting worse. The SWiM review suggests that “despite constructive political and technical relationships at central level, activities remain largely uncoordinated and driven by donor priorities, policies and procedures”. In part this is a reflection of the international aid architecture for health which has developed (and fragmented) in ways which were perhaps not fully anticipated by anyone at the start of the Strategic Plan.

As a result **aid flows have not been closely aligned to the main health priorities** (see charts taken from Lane 2007). As such the strategic plan cannot be considered to have been an effective tool in prioritizing the use of resources. Direct comparisons are difficult because the classification used in the National Strategic Development Plan (NSDP) is not the same as those used in the CDC database or the HSP.

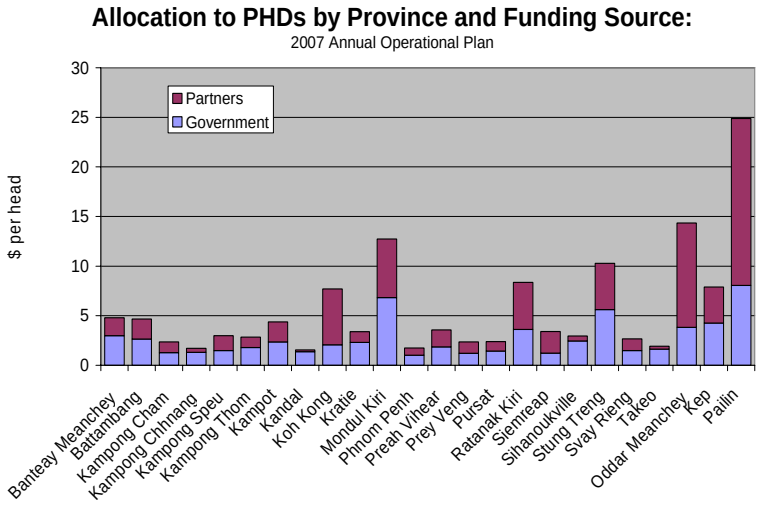
[60] in 2007 the AoP reports that at least $61m has been allocated to the identified priorities – essential obstetric care, attended deliveries, child survival interventions, full MPA status at health centres and reproductive health including birth spacing)

However, the divergences between them is clear. Whereas NSDP sets out spending on primary health care – including the expansion of the Minimum Package of Activities (MPA) and Complementary Package of Activities (CPA) around 60% of donors funding went into HIV/AIDS and other infectious diseases – a figure which is likely to have increased given recent GFATM approvals amounting to over $85m in grants since late 2005.

The chart illustrates the impact of donor spending on the balance of national programmes. It shows that donor support (even before taking into account spending outside the AoP) has a major impact on the overall allocation of public health spending. This is most noticeable for the national programmes where donor funding is concentrated in a small number of programmes (NCHADS, National Centre for Tuberculosis and Leprosy Control (CENAT) and other communicable diseases) and dramatically alters the funding profile.



As far as provincial level spending is concerned donor support appears to supplement Government spending and encourage an allocation which, in broad terms, reflects needs. Donors are considering pooled support for provincial level block grants to support service delivery. This seems sensible as long as it supports a continued pro poor approach and, as noted previously, is supported by measures to make sure resources are used efficiently e.g. by increasing supervision capacity at provincial level and/or channelling resource directly to facilities.



Better tracking of donor funding and its relation to identified needs is required and should be a key feature in the next Strategic Plan. A National Health Accounts (NHA) exercise is under consideration – this could help give a clearer picture of overall resource flows especially in areas where data is currently weak. Our only comment would be that any approach needs to be tailored to the needs of Cambodian policy makers rather than follow any international blue print and that steps should be taken to institutionalise the approach. The Annual Operational Plans have also helped provide a more comprehensive picture of financing flows in the sector capturing a large and expanding share of donor spending and also user fees. Although this is, at present, more of a mapping exercise than a strategic planning tool it still represents an important first step in establishing Government leadership in the sector. It is planned to incorporate Global Fund to fight HIV/AIDS, Tuberculosis and Malaria (GFATM) funding into the next AoP (the data is appended to the 2007 AoP but not incorporated due to late receipt).

Predictability of donor funding has tended to be poor with few donors able to programme funds in the long term and many doing so on an annual basis. A study by Michaud suggested that only 20% of donor support was on budget (latest CDC data suggest this has increased to 35%) with funds provided directly to a range of national programmes and over 100 NGOs. In terms of progress against the Paris Declaration Indicators CDC data suggest that 52.6% of technical assistance was coordinated and that 24% of aid was part of a programme.

Possible Future Directions for SWiM

In terms of developing sector wide working in the health sector it is important to recognise that there is no pre defined direction that this process should take. It is also important to be realistic as to how rapidly the process might move forward. The SWiM review recommends the development of a road map focusing on how donors and Governments interact rather than focusing on the activities to be funded. It suggests the drawing up of a Memorandum of Understanding (MoU) which goes beyond merely bland pleasantries and actually commits key stakeholders to changing their behaviour. In terms of the MoU our view is that this would do little harm but such measures are rarely effective in actually changing behaviour and are often simply ignored. Rather they simply tend to formalise agreement on new ways of working However, an MoU could still represent a useful monitoring indicator for the next Strategic Plan.

The review also helpfully makes clear that a SWAp does not necessarily mean the provision of budget support and can incorporate a range of financing instruments. It suggests *strategic incrementalism* as a way forward – seeking agreement on, and the development of common procedures in areas where this is possible – focusing especially on the innovative financing and service delivery models. Early thinking on the successor to HSSP seems to adopting this approach proposing joint financing in a number of areas with possible participation by a larger number of donors.

All participants would be welcome although particular attention might be paid to GFATM which has shown a willingness to join pooled funding arrangements elsewhere (in Mozambique). There are questions (see below) as to whether the programme should cover areas where there is general consensus (where non pooled funders are likely to support) or act as an investor of last resort (where other donors are unlikely to fund).

The approach needs to take on board the institutional realities and the fact that many donors face constraints in participating in sector wide approaches. Some are forced by their mandates to closely earmark resources to particular uses – others are not able to particulate in pooled funding arrangements. Other donors' programmes are heavily shaped by headquarters targets and priorities. The question is how these barriers can be addressed or at least their potentially negative impacts mitigated. The Global Fund has been mentioned as a key donor given its size, its interest in ensuring greater alignment and its potential to ensure the SWiM process achieves a critical mass. As a demonstrated pro poor intervention there is likely to be donor competition to provide funding for HEFs. This being the case it may make sense to seek funding from the GFATM to support HEFs (there is a precedent in that it has funded prepayment premiums in Rwanda under its Health Systems Strengthening window). It also raises questions as to whether the donors more able to provide joint financing, and hopefully ultimately pooled financing through Government systems should focus on areas which other donors are unwilling to support rather than areas such as HEFs where there is likely to be competition for donor support.

This would imply that any successor to HSSP might cover areas least likely to be funded by others rather than “cherry pick” the most attractive investments. With a tighter Strategic Plan, the AoP could form the basis for a “project slot” approach to aid management – identifying key gaps requiring donor financing.

The transition between instruments will also be important. Donor project finance, albeit often subject to delays, has had some success in channelling resources towards service delivery, a

benefit which could be lost through any premature shift towards sector budget support. There is no consensus on how rapidly any shift towards the use of budget support would be possible. It seems fairly apparent that the public financial management reforms will need to bear some fruit before many donors could contemplate the use of such an instrument. Government also holds some legitimate concerns that more harmonised support could serve to undermine ownership. Nonetheless, it might be a reasonable target to expect sector budget support to be provided within the period of the next Strategic Plan (although possibly towards the end of it).

Donor support for incentive payments through national programmes and at provincial health department (PHD) level have introduced major distortions in both the relative importance of the different programmes but also on activity at the service delivery level. Initial agreement has been reached on harmonising the level of incentive payments (sub decree 98). If effective this might be helpful but the transition of such uncoordinated donor support for preferred activities into support for the expansion of MBPI to the provinces might be a key objective for the next Plan.

In summary, sector wide management could benefit from a clearer, more operational plan which donors could buy into, a step by step development of current joint financing arrangements centred around key themes (e.g. HEFs, MBPI, increasing provincial level allocations), more proactive approaches to programming donor resources, better tracking of donor funding and its relation to national priorities and more explicit agreement on ways of working

6.4 Conclusions and Recommendations

Summary of Observations:

- most efforts to date have focussed on efforts to bypass Government systems.
- alternative financing mechanisms have expanded albeit in a rather ad hoc manner and rather more slowly than anticipated. Their coverage has increased but exemptions continue to be the primary way of protecting the poor in most ODs.
- exemptions continue to be the primary way (and a rather ineffective way) of protecting the poor in most operational districts.
- The HSP period has seen the development of consensus on some key approaches e.g. MPBI and options on other (the future vision for the sector).
- the next Strategic Plan will need to address the question of balance between longer term efforts to strengthen the Government system and short term efforts which in part bypass the system but deliver results. It also needs to develop a comprehensive approach which takes account of the interactions between the current approaches
- ensuring future gains may be far more difficult and far more expensive. Realistic costing of the next steps will, therefore, be extremely important
- important initial steps have been taken to develop quality systems but capacity remains extremely limited
- despite some important steps donor support continues to be extremely fragmented and generally poorly aligned with national priorities. Not only has this resulted in imbalances in the allocation of resources – it has also helped create a system of incentives which do little to ensure the effective delivery of essential services

Policy Recommendations for HSP 2:

- the need to consider the question of balance between longer term efforts to strengthen the Government system and short term efforts which in part bypass the system but deliver results.
- the need to develop a comprehensive strategy which takes account of the interactions between the different financing and systems reforms
- the need to plot out the future of ongoing pilot approaches
- ensuring an orderly transition from pilot to implementation phase for pilots especially for contracting and
- costed, prioritised expansion plans for the health insurance and HEFs.
- an urgent need to agree a process for deciding the future of contracting
- the development of strong monitoring mechanisms are required to assess progress
- developing sector wide management through a clearer, more operational plan which donors could buy into, a step by step development of current joint financing arrangements centred around key themes (e.g. HEFs, MBPI, increasing provincial level allocations), more proactive approaches to programming donor resources, better tracking of donor funding and its relation to national priorities and more explicit agreement on ways of working
- the need to develop a process for considering the future vision for institutional arrangements and taking forward findings from the institutional reviews
- implement and monitor progress under MBPI and development of a plan to scale it up if successful
- the development of a road map and measures to strengthen information systems are key prerequisites to sustained quality improvement

Annex 1: Terms Of Reference: Health Sector Strategic Plan 2003-07, Mid Term Review

I. Introduction

These Terms of Reference (TOR) specify the scope of work for the implementation of the overall Mid Term Review (MTR) of the Health Sector Strategic Plan, 2003-07 (HSP). Results from the MTR will inform the updating and extension of the HSP to accord with the National Strategic Development Plan, 2006-10, and contribute to the required mid-course adjustments to the Health Sector Support Project, 2003-07, the MOH's flagship project combining overall support and funding from the Asian Development Bank, Agence Francaise de Developpement, the U.K. Department for International Development, the United Nations Population Fund, and the World Bank.

II. Background and Rationale

The HSP was launched on January 1, 2003 and is expected to terminate on December 31, 2007. Original plans for conducting the MTR specified mid-2005 as the scheduled date. However, this was postponed due to the slow initial implementation of the HSP and HSSP as well as to enable the MTR to utilize the findings from the Cambodia Demographic and Health Survey, 2005 results from which are now expected to be made available only at the end of 2006.

The HSP consists of a mission statement, the values and working principles of the MOH, and a policy statement. In addition, it specifies a set of 20 strategies that form the strategic plan and that are directly derived from the policy statement. Eight of the 20 strategies are deemed core strategies, and are organized around six key areas of work: health services delivery, behavioural change, quality improvement, human resource development, health financing, and institutional development. Health service delivery is seen as the principal area of work with the other five contributing to its improvement.

Overall outcomes mentioned in the plan include reductions in the infant and child mortality rates, maternal mortality ratio, total fertility rate, and household health expenditures especially among the poor, along with improved nutritional status among women and children. Also cited are building a more effective and efficient health system.

III. Purpose and Outcomes

The purpose of the MTR is to measure progress toward achieving the goals and objectives of the HSP, derive lessons learned from its implementation over the 3 year period, and develop policy options and strategies for the updating and extension of the HSP.

The expected outcomes of the MTR are a renewed vision for the health sector, and an updated HSP that will coincide with the NSDP's duration for the period 2006-10.

IV. Scope of Work and Output

The approach envisaged for the MTR consists of a set of four individual reviews and assessments occurring from July 2006 through November 2007 that will in turn contribute to the overall MTR expected to be carried out from mid-November 2006 through February 2007. The four individual components consist of a Midwifery Review, a strategic review of Health Services Contracting, an assessment of the Sector-wide Management approach, and a review of the Health Sector Support Project. It should be noted that while these reviews will be conducted separately, they are all considered to be part of the same process.

The overall MTR will be a joint activity led by the MOH with the participation of an external consultancy team, and in close collaboration with all of the MOH's health development partners.

Certain other mid term reviews being carried out separately by health development partners such as JICA, GTZ and BTC in advance of the MTR, will also contribute toward its findings. The MOH is also currently in the process of preparing an Institutional Development Plan (IDP) 2007-10. Initial analysis and consultations for the draft IDP will also inform the MTR. An initial activity under the HSP portion of the MTR will involve a thorough re-assessment of the appropriateness of the HSP in relation to the Cambodian context, given current health financing initiatives and the dominant role of the private sector. This activity will draw on the ongoing work of the Macroeconomics and Health Technical Advisory Group, jointly being conducted by the MEF and the MOH, which will constitute inputs into the MTR.

As already noted, the HSP consists of 20 strategies organized around 6 key areas of work. Each strategy has linked outcomes and strategic actions required to be undertaken to achieve those outcomes. A key activity under the MTR will be to examine the continuing relevance of each strategy, and the strategic actions specified for that strategy, and progress toward achievement of specified outcomes, with a special emphasis on the 8 core strategies, analyzed by institutional, financial and technical constraints.

A second activity will focus on the relevance of the 6 key areas of work, particularly in light of MOH's (and Royal Government's) stated aim of moving toward program budgeting in the near future. Some of the targets specified in the plan are at variance with those specified under the Cambodia Millennium Development Goals (CMDGs) e.g., the target for reduction in the MMR under the plan calls for an 8% reduction from baseline levels (437 in 2000 to 402 in 2007), while the CMDG target for 2005 is 343 per 100,000 live births which is considerably lower. Since the CMDGs have now been selected as the overarching goals of the RGC under the NSDP, modifying the targets of the updated HSP to coincide with those of the NSDP will be crucial. It will also be necessary to ensure that the HSP is in alignment with the health priorities articulated in the NSDP (2006-10).

This exercise will thus necessarily involve a close examination of the child health, maternal health, nutrition, and disease prevention and control indicators and targets listed in the NSDP. In turn, since the NSDP itself is expected to be updated annually, findings from the MTR will contribute to this process as well.
Key issues that will be addressed through the overall MTR include, but are not limited to, the following:

(i) incentives and performance management for service delivery especially in rural areas, including contracting, equity funds, civil service salary reform, Priority Mission Groups, etc.
(ii) the extent to which HSP demand-side interventions are addressing the needs of the population, in particular the poor and the vulnerable, especially women, children, ethnic minorities, and the poorest segments.
(iii) cross-cutting government reform processes to examine how far progress in HSP achievement is reliant on wider RGC reforms in Public Financial Management and Public Administrative Reform
(iv) aid modalities with reference to sector wide management (SWiM) arrangements for development co-operation under HSP that will include the HSSP, the GFATM, and other multilateral and bilateral partners, and development of a road map to a deeper SWAp, within the context of the RGC's Action Plan for Harmonization and Alignment, 2006-10.
(v) specific issues requiring particular attention such as: (a) progress on and challenges to maternal mortality reduction including recruitment and redeployment of midwives, and a review of midwifery qualifications and training, and (b) mechanisms for client and community consultations, and the extent to which those voices are incorporated into planning, monitoring and implementation of health programs.

(vi) an institutional assessment of the health system's capacity to learn from, process, and integrate evidence into the policy process, and how to strengthen capacity to scale up effective interventions.
(vii) HSP's effectiveness in leveraging and establishing linkages with civil society, NGOs and the private commercial sector, and ensuring that they have a role in planning, resourcing, managing, and monitoring the HSP and Annual Operational Plans.
(viii) analysis of current monitoring systems
(ix) appropriateness and sufficiency of current resource allocation patterns, especially with respect to core strategies, 6 key areas of work, and priority areas under the HSP; which investments are likely to have the greatest sustained impact particularly over the long term, to what extent resource allocations fit in within the budget as well as the Medium Term Expenditure Framework process, and make recommendations in this regard, and
(x) an examination of the epidemiologic transition that Cambodia is facing with reference to the increasing burden of disease due to diabetes, hypertension, and the adverse effects of tobacco consumption, as evidenced from recent surveys.

Findings from the MTR and its sub-components will contribute to the IDP which is scheduled to be completed early in 2007. The MTR is being scheduled at a particularly appropriate time in terms of information availability. Data from the nationwide Cambodia Inter-Censal Population Survey (CIPS) 2004 (20,000 households), the Cambodia Socio-Economic Survey (SES) 2003-04 (15,000 households, although for direct comparability purposes, and to reduce the effects of seasonality, most indicators have been calculated based on only 2004 data, effectively 12,000 households), and the Cambodia Demographic and Health Survey (CDHS) 2005-06 (15,000+ households) covering a wide range of indicators are expected to be available at the time of the Joint Team's mobilization, or shortly thereafter. In addition, secondary analyses may be required to be carried out to enable key indicators to be disaggregated by household assets quintile as a proxy for income, and sex, ethnicity, and geographic location. Other sources of data for specific sub-sections of the review will be drawn from the Midwifery review, the Health Services Contracting strategic review, the SWiM assessment, the HSSP mid term review, as well as independent program reviews being conducted by health development partners, such as JICA, GTZ, BTC, etc. For the purposes of the MTR, it is agreed that baseline data will be drawn from the Cambodia Demographic and Health Survey 2000, as constituting the most reliable findings available, and since those findings will be directly comparable to those from the CDHS 2005-06.

Indicators listed in the HSP will constitute the key indicators against which progress on the HSP will be measured. However, the MTR Joint Team will be free to include such other output and process indicators as they regard important, so as to strengthen the quality and scope of the analysis.

In addition to utilizing the above data sources, it is envisaged that the MTR Joint Team will conduct a series of interviews with key stakeholders in the health sector, as well as visit a sample of provinces and operational districts.

The expected output of the overall MTR will be a consolidated report containing a main section focusing on the HSP, along with annexes on the HSSP review, the Midwifery review, the Health Services Contracting strategic review, and the SWiM assessment. The MTR report will draw on the findings of these individual reviews and assessments as required to present policy options and recommendations to the MOH. The MTR Report also will incorporate specific recommendations for the update of the HSP for the 2007-10 period to coincide with the NSDP's duration, and give direction for the completion of the Institutional Development Plan. In addition, drawing on the HSSP review, the overall MTR report will provide recommendations for improvements to the HSSP to enable it to realize its stated objectives by the project's end.

V. Schedule of Work

The overall MTR will be conducted from May, 2007 through July, 2007, with the final report due on or before July 31, 2007. The consultants, in close collaboration with their counterparts on the Joint Team will initially prepare a work plan within the first week of consultancy, and submit it to the MOH for approval. Subsequently, the consultants will prepare a draft report that will be submitted to the MOH for comments. After receipt of comments from all relevant stakeholders, the consultant will revise the draft, and submit a final report on or before July 31, 2007.

VI. Reporting Requirements

The Joint Team will formally report to the Technical Working Group Health through its Secretariat for overall guidance and strategic direction. On a day to day basis, the Team will work closely with the MTR Working Group, and such other entities as the TWG-H may specify, and will be guided by them in all aspects of the review.

VII. Key Competencies

The external consultancy team will consist of a Health Systems Specialist, a Public Health Specialist, a Health Economist/Finance Specialist, an Epidemiologist and a Social Specialist. The Health Systems Specialist will act as Team Leader for the external consultancy team, and be responsible for coordination and liaison with the MOH, and key counterparts. Each external consultancy team member will work jointly with an MOH national counterpart, and during the process of the review, it is expected that external team members will give due attention to capacity building of national counterparts with a view to ensuring transfer of necessary competencies and skills.

It is expected that all four team members will be international consultants. Estimated levels of effort mentioned against each team member below are only indicative, and organizations bidding on the contract are free to propose alternate time periods.

The external consultants should be able to demonstrate the following competencies (required and desired):

Team Leader and other team members are expected to have a continuous presence in country for a major portion of the assignment duration.

Team Leader
Required:
• Extensive knowledge of, and experience in health policy and planning in developing countries
• Experience in conducting evaluation/review studies in the health sector, particularly of health systems

Desired:
• Knowledge of and experience with the health sector in Cambodia/S.E. Asia

Public Health Specialist
Required:
• Extensive knowledge, and experience in public health programs and service delivery in developing countries
• Extensive experience in conducting evaluation/review studies in the health sector, with a focus on public health programs and service delivery

Desired:
• Knowledge of and experience with the health sector in Cambodia/S.E. Asia

Health Economist
Required:
• Extensive knowledge of, and experience in health finance in developing countries
• Extensive experience in conducting evaluation/review studies in the health sector, with a focus on equity, social protection, and health finance issues

Desired:
• Knowledge of and experience with the health sector in Cambodia/S.E. Asia

Epidemiologist
Required:
• Extensive knowledge of, and experience in disease surveillance, burden of disease analysis, and disease control in developing countries
Extensive experience in conducting evaluation/review
• Extensive knowledge of, and experience with conducting advanced statistical analysis

Desired
Knowledge of and experience with the health sector in Cambodia/S.E. Asia

Social Specialist
Required:
• Extensive knowledge of, and experience in social issues and maternal health issues in the health sector in developing countries
• Extensive experience in holding community consultations and conducting evaluation/review studies in the health sector with a focus on social issues

Desired:
• Knowledge of and experience with the health sector in Cambodia/S.E. Asia

Annex 2: Document Database Used To Inform the HSP Review

A: HSP Strategy & Other Planning /Strategy Documents

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Yanagisawa, Satoko, 'Health Seeking Behavior of Pregnant Women in Cambodia and Determinants of Births Attendant choice', School of Health Science, Faculty of Medicine, Shinshu University, 2005

Annex 3: List of Key Informants Interviewed

Representative Of	Name
Kingdom of Cambodia – **Ministry of Health**	Professor Eng Huot, Secretary of State for Health
	Dr Lo Veasnakiry, Director of Planning & Health Information
	Dr Or Vandine, Director of Department of International Co-operation
	Professor Tea Kim Chhay, Director of the Department of Drugs & Food
	Dr Sok Kanha, Department of Planning & Health Information
	Dr Vengky, Health Sector Support Project
	Dr Krang Sun Lorn, Health Sector Support Project
	Deputy Head of the Government Statistics Office & Planning Department
	Dr Va Sokea, Essential Drug Bureau
	Dr Chou Si Ngoun, Quality Assurance Department
	Dr Sann Chan Soeng, Deputy DG, Department of Epidemiology
	Dr Mean Chhi Vun, NCHADS
	Dr Ung Sam An Director of the National Institute of Public Health
	Director of the National Programme of Mental Health
	Mrs Keat Puong, Director, Human Resources Department
	Dr Tung Rathavy, Deputy Director, National Maternal & Child Health Centre and National Reproductive Health Program Manager
	Dr Bun Samnang, Department of Planning & Health Information
	Dr Prak Piseth RainSey, Department of Non-Communicable Disease
	Dr Lim Thai Pheang
	Dr Oung Sam An, NIPD
	Mrs Khout Thavary
	Professor Koeut Meach
	Mrs Si Somong
	Dr Mey Sambo
	Provincial Representatives in Kampong Cham & Takeo Provinces
Cambodian Medical Association	Prof Sau Sok Khonn Adviser to Ministry of Health/President Cambodia Medical Council
Cambodian Midwives Association	Mrs Ou Saveoun, Director
World Health Organization	Dr Michael J O'Leary, WHO Represenatative
	Dr Ben Lane, Health Planning Adviser
	Paul Weelen, Health Systems Development Adviser
	Maryam Bigdeli, Health Care Financing
	Cecil Haverkamp, Programme Management Officer
	Dr Susan Jack, Medical Officer – Child Survival

	Dr Dainah Fajardo, Medical Officer – Child & Adolescent Health
	La-ong Tokmoh, Technical Officer for Nutrition
Australian Development Cooperation-AusAID	Lia J. Burns, Senior Program Coordinator
DFID	Elisabeth Smith, Health and Population Advisor & First Secretary Development
Agence Francaise de Developpement	Luize Guimaraes Scherer Navarro, Project Manager
GTZ	Anne Erpelding, Programme Co-ordinator
	Dr Chhom Rada,
	Mary Ann Evangelista
JICA	Dr Hiromin Obara, Chief Advisor
	Sato Shoko, Project Formulation Advisor (Health Sector)
UNFPA	Alice Levisay, Deputy Representative
UNICEF	Thazin Oo, Head of Child Survival Programme
	Viorica Berdaga, Project Officer, Mother and Child Health, Child Survival Programme
USAID	Kate Crawford, Director Office of Public Health
	Chanta Chak
	Peng Vanny, Deputy Country Director – URC Cambodia
	Huong Vuthy, QI/Hospital Program Manger – URC Cambodia
	Mary Dunbar, Resident Advisor, A2Z Cambodia
	Angelique Smit, Country Co-ordinator Avian Influenza Behaviour Change Communication - AED
	Judith Moore, Resident Advisor, ACCESS Program
	Dr Steve Solter, Resident Advisor, BASICS, Cambodia
	Dr John Naponick, Team Leader, HSSP: Reduction in Maternal Mortality Project
World Bank	Toomas Palu, Senior Health Specialist
MEDICAM	Dr Sin Somuny, Executive Director
Independent Consultant	David Wilkinson

Annex 4: Attendees at Health Sector Review - 'Early Findings'Presentation on 26th June 2007[61]

Representative Of	Name
Kingdom of Cambodia – Ministry of Health	Professor Eng Huot, Secretary of State for Health
	Dr Lo Veasnakiry, Director of Planning & Health Information
	Dr Or Vandine, Director of Department of International Co-operation
	Dr Lim Thhpheang, Director NCHP
	Dr Sok Touch, Director CDC
	Dr Mean Chhi Vun, Director of NCHADS
	Dr Char Meng Chuor, DDG
	Director Administration Department
	Dr Kheng Sim, Vice Director, CNM
	Dr Sok Kanha, Department of Planning & Health Information
	Dr Vengky, Health Sector Support Project
	Dr Vijay Rao, Health Sector Support Project
	Mr Kin Sonissay, Health Sector Support Project
	Dr Ravindra, DPM
	Dr Mey Sambo
	Dr Ung Sam An, Director, NIPH
	Dr Chhour….., Director NPH
	Dr Seng Ydoth
	Dr Bun Samnang
	Dr Chea Chanthon
World Health Organization	Dr Michael J O'Leary, WHO Represenatative
	Dr Ben Lane, Health Planning Adviser
	Maryam Bigdeli, Health Care Financing
	Cecil Haverkamp, Programme Management Officer
DFID	Elisabeth Smith, Health and Population Advisor & First Secretary Development
Agence Francaise de Developpement	Luize Guimaraes Scherer Navarro, Project Manager
GTZ	Anne Erpelding, Programme Co-ordinator
	Dr Chhnom Rada,
JICA	Dr Hiromin Obara, Chief Advisor
	Masayo Terakado
	Sato Shoko, Project Formulation Advisor (Health Sector)
UNFPA	Alice Levisay, Deputy Representative
	Sok Sohan,
	Sam Sochan
UNICEF	Thazin Oo, Head of Child Survival Programme
USAID	Chakchantha, Team Leader
EC	Simone Seper, Programme Officer

[61] This list was compiled from the register of attendance at the meeting. We apologise for any inaccuracies – we are aware some names/affiliations may have spelling errors given we had difficulty deciphering the handwritten register!

World Bank	Toomas Palu, Senior Health Specialist
Kandal	Oum-Thorn, Director
MEDICAM	Dr Sin Somuny, Executive Director
	Or Vandive, Director
	Tea Kim Chhoy, Director
	P. Ramysay, PMD

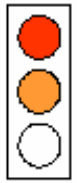
Annex 5: HSP - Number of Indicators & Change Over Time

Indicators				
Strategy	**Total number of indicators (Source: JAPR 2007)**	**Number of 'new' indicators (i.e. included in JAPR 2007 but not in JAPR 2003)***	**Number of indicators by with no baseline**	**Number of indicators that 'disappear' (i.e. appear not to be tracked over time)****
HEALTH SERVICE DELIVERY				
1	14	6 (sub-indicators)	8	3
2	19	5	2	2
3	5	0	0	1
4	12	0	1	0
5	10	3	0	0
BEHAVIOUR CHANGE COMMUNICATION				
6	4	1	3	0
7	2	0	1	0
8	10	0	3	0
QUALITY IMPROVEMENT				
9	3	0	0	0
10	8	2	6	1
HUMAN RESOURCE DEVELOPMENT				
11	8	3	0	4
12	5	0	1	1
13				
HEALTH FINANCING				
14	7	0	0	0
15	7	2	3	0
16	2	0	0	0
INSTITUTIONAL DEVELOPMENT				
17	4	1	0	0
18	2	0	2	0
19	6	0	2	0
20	3	0	1	0
Grand Total of Indicators	131	18	33	12

* Does not include indicators related to the development of guidelines, policies, criteria development etc

** Activity up to 2006 taken as 'cut point'

Annex 6: Health Sector Strategic Plan 2003-2007: Progress Overview

STRATEGIES BY KEY AREAS OF WORK*****									
KEY AREA: HEALTH SERVICE DELIVERY (5 STRATEGIES)									
	STRATEGY	**OUTCOMES**	**INDICATOR (identified 2003)***	**BASELINE ** **	**NEW INDICATOR *** (If Applicable)**	**TARGET FOR 2006**	**TARGET REACHED 2006**	**TARGET FOR 2007 OR OTHER 'END POINT'' NOTE**	**'TRAFFIC LIGHT' SUMMARY SCORE******
1	Further improve coverage and access to health services, especially for the poor and other vulnerable groups through planning the location of health facilities and strengthening outreach services Cont. over page	• Improved access to health services delivery	• The number of health centres that receive MPA drugs	• 812		• 915	• 881 (EDD)	• 895	
			• Number of functioning health centres	• N/A	• Num Functioning HCs with Basic Minimum Package of Activities (MPA)	• 115	• PM	-	
					Num Functioning HCs with Medium MPA	• 330	• PM	-	
					Num Functioning HCs with Full MPA	• 470	• 447 out of 966	-	
			• Number of Referral Hospital with major surgical operations	• 35	-	-	-	-	
			• Criteria developed for functioning CPA1/2/3 Referral Hospitals	• N/A - criteria to be Developed	-	-	-	• 32	
			• The number of functioning CPA1/2/3 Referral Hospitals	• Establish baseline	• Num of Referral Hospitals with Comprehensive Package (CP) -CPA1	• 22	Hospital dept?	• 18	
					• Num of Referral Hospitals with CPA2	• 30	• 27		
					• Num of Referral Hospitals with CPA3	• 17	• 17		
			• Average number of outreach visits per remote village per year	• Establish baseline		• 6 outreach per village per year	• PM		

* Source: JAPR 2003. Occasionally, reported baselines differ for selected indicators between JAPR 2003 and JAPR 2007. Where this occurs the baseline reported in JAPR 2003 has been used. ** Where 'new indicators' have been added (i.e. recorded in the 'new indicator' column, where relevant) the baselines for these new indicators (if identified) are recorded in this baseline column too along with the baselines provided in the JAPR 2003; *** Source: JAPR 2007 ; **** This summary score attempts to capture progress along a continuum – i.e. from limited progress (red light), to some progress (amber light) , to all targets achieved (green light). The use of two colours (e.g. red/amber or amber /green) is indicative of the gain in terms of the direction of change – i.e. amber/green = 'progressing well towards the achievement of targets'; whilst red/amber = ' progress being made but substantial progress still to be made'. ***** **W**here table columns /cells in the table are blank – the variable is either not relevant or the data is not reported in the JAPR documentation

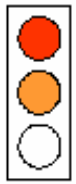
STRATEGIES BY KEY AREAS OF WORK

KEY AREA: HEALTH SERVICE DELIVERY (5 STRATEGIES)

	STRATEGY	OUTCOMES	INDICATOR (identified 2003)	BASELINE	NEW INDICATOR (If Applicable)	TARGET FOR 2006	TARGET REACHED 2006	TARGET FOR 2007 OR OTHER 'END POINT'' NOTE	'TRAFFIC LIGHT' SUMMARY SCORE
1	Further improve coverage and access to health services, especially for the poor and other vulnerable groups through planning the location of health facilities and strengthening outreach services	• Improved access to health services delivery	• Outreach visits to slum areas • Up-dated health coverage plan (HCP)	• Establish baseline + define slum areas • No baseline		• Finalised HCP distributed	• DPHI: Finalised, distributed, website	-	

SRATEGIES BY KEY AREA OF WORK

KEY AREA: HEALTH SERVICE DELIVERY (5 STRATEGIES)

	STRATEGY	OUTCOMES	INDICATOR (identified 2003)	BASELINE	NEW INDICATOR (If Applicable)	TARGET FOR 2006	TARGET REACHED 2006	TARGET FOR 2007 OR OTHER 'END POINT'' NOTE	'TRAFFIC LIGHT' SUMMARY SCORE
2	Strengthen the delivery of quality basic health services through health centres and outreach based upon minimum package of activities (MPA) Cont. over page	• Increased utilisation of preventive and curative services especially by the poor	• Review of MPA • Guideline for health posts • No. of health centres that implement IMCI • Average number of outreach visits per village per year • No. of health centres with functioning VHSGs and HCMCs • Joint MoH / MoEYS policy / agreement on school health • Consultations (new cases) per inhabitant per year - al consultations - children under 5 years	• No baseline • No baseline • 45 health centres • 0 • *13 outreach visits per village per year* • Establish baseline • No baseline • 0.38 0.54	• No. of health centres implement MPA Module 10 (Nutrition)	• Revised MPA service - • 404 HCs • 383 HCs (41%) • 12 - - • 0.5 1.0	• DPHI + Hospital dept • DPHI + Hospital dept • 456 CDC • MCH/Nutrition • PM • 0.56 1.0 [DPHI]	• 440	

STRATEGIES BY KEY AREAS OF WORK

KEY AREA: HEALTH SERVICE DELIVERY (5 STRATEGIES)

	STRATEGY	OUTCOMES	INDICATOR (identified 2003)	BASELINE	NEW INDICATOR (If Applicable)	TARGET FOR 2006	TARGET REACHED 2006	TARGET FOR 2007 OR OTHER 'END POINT'' NOTE	'TRAFFIC LIGHT' SUMMARY SCORE
2	Strengthen the delivery of quality basic health services through health centres and outreach based upon minimum package of activities (MPA) Cont. over page	• Increased utilisation of preventive and curative services especially by the poor	• Percentage of children under 1 year that received DTP3 • Percentage of pregnant women who received at least 2 ANC consultations • Percentage of deliveries attended by trained public health staff • Percentage of pregnant women who received at least 2 TT vaccinations • Percentage of married women aged 15-49 years using a modern contraceptive method (current users by 31/12)(public sector services) • Percentage of children aged 6 – 59 months who received vitamin A: March November • Percentage of women who received 1 capsule vitamin A within 8 weeks of delivery	• 64% • 29 % • 20.3 % • 45 % • 18.3% • 57% 34% • 13%		• 89% • 60% • Public sector : 40% • 70% • Public: 35% • 85% • 65%	• 81% [DPHI] • 59% [MCH] • 34% [MCH] • 50% [NIP] • 27% (CDHS2005) [MCH] • R 1 = 77% R 2 = 78% VA Coverage not yet complete [MCH /Nutrition • 50% MCH/Nutrition	• 90% • 60% • 55% • 75% • 30% • 85% • 65%	

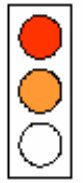
STRATEGIES BY KEY AREAS OF WORK

KEY AREA: HEALTH SERVICE DELIVERY (5 STRATEGIES)

	STRATEGY	OUTCOMES	INDICATOR (identified 2003)	BASELINE	NEW INDICATOR (If Applicable)	TARGET FOR 2006	TARGET REACHED 2006	TARGET FOR 2007 OR OTHER 'END POINT'' NOTE	'TRAFFIC LIGHT' SUMMARY SCORE
2	Strengthen the delivery of quality basic health services through health centres and outreach based upon minimum package of activities (MPA)	• Increased utilisation of preventive and curative services especially by the poor	-	• 0	• Percentage of pregnant women who received 60 iron/folate supplements during the 1st visit, either at health centre or during outreach	• 60%	• 86% [MCH]	• 80%	
				• 0	• Percentage of pregnant women who received 30 iron/folate supplements during the 2nd visit, either at health centre or during outreach.	• 60%	• 58% [MCH]	• 80%	
				• 0	• Percentage of postpartum mothers who received 42 iron/folate supplements, either at health centre or during outreach	• 60%	• 39% [MCH]	• 80%	
				• 12%	• Percentage of household consumed iodized salt	• 80%	• MCH 73% (CDHS 2005/06)	• 80%	

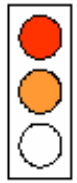
STRATEGIES BY KEY AREAS OF WORK

KEY AREA: HEALTH SERVICE DELIVERY (5 STRATEGIES)

	STRATEGY	OUTCOMES	INDICATOR (identified 2003)	BASELINE	NEW INDICATOR (If Applicable)	TARGET FOR 2006	TARGET REACHED 2006	TARGET FOR 2007 OR OTHER 'END POINT'' NOTE	'TRAFFIC LIGHT' SUMMARY SCORE
3	Strengthen the delivery of quality care, especially obstetric and paediatric care, in all hospitals through measures such as CPA	• Increased hospitalisation rate • Increase in % deliveries attended by trained health staff • Increase in rate of justified caesarean section rate • Increase in antenatal care consultations by trained health staff • Children under 1 year of age fully immunised • Increase in % women 15-49 years protected against tetanus during pregnancy • Increase in Contraceptive Prevalence Rate	• CPA guidelines • Number of RHs that perform major surgical interventions, including C-sections • Number of hospitals implementing the baby friendly hospital initiative • Number of hospital admissions per 1000 population: - All admissions - Children under 5 years • Hospital mortality rate	• N/A • 35 • 0 • 20.6 28 • 2.6		• CPA guideline finalised distributed - • 3 hospitals more • >25 >45	• Hospital Dept. Done • 7 hospitals [MCH] • 18 64	• 13	

STRATEGIES BY KEY AREAS OF WORK

KEY AREA: HEALTH SERVICE DELIVERY (5 STRATEGIES)

	STRATEGY	OUTCOMES	INDICATOR (identified 2003)	BASELINE	NEW INDICATOR (If Applicable)	TARGET FOR 2006	TARGET REACHED 2006	TARGET FOR 2007 OR OTHER 'END POINT'' NOTE	'TRAFFIC LIGHT' SUMMARY SCORE
4	Strengthen the management of cost-effective interventions to control communicable diseases Cont. over page	• Reduction of incidence /prevalence rates of communicable diseases • Regular delivery of cost effective interventions at facility levels	• Report that fully analysis the reasons for slow progress in reducing child mortality	• No baseline			• Child survival Cambodia profile 2005 & • Child survival progress report 2004	• Finalise Child Survival costing exercise • Expand IMCI Training sites	
			• No. of health centres implementing DOTS	• 381 health centres		• 381 (386) health centres	• All health centres	• Strengthen the implementation of DOTS at all health centres	
			• Detection rate of smear positive pulmonary TB	• 57%		• ≥70%	• 67% • CENAT	• ≥70%	
			• No. of Operational Districts with voluntary counselling and testing (VCT)	• 22 Operational Districts (ODs)		• 21 ODs (22)	• 20 more VCCT sites in 4 more OD	• Expand 6 sites of Pediatric OI/ART services	
			• No. of provinces implementing 100% condom use	• 24					
			• Percentage of children aged 12– 59 months who received mebendazole: March November	• No baseline available (not included in HIS reports)		• 40%	• 56.7%	• CNM Increase Mebendazole coverage through outreach activities	
			• Review of disease surveillance system	• No baseline			• B asic specimen collection kits at provinces		
			• Guidelines for outbreak response at provincial and Operational District levels	• No baseline		• No baseline	• Ongoing - implement		

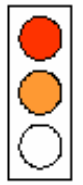
STRATEGIES BY KEY AREAS OF WORK

KEY AREA: HEALTH SERVICE DELIVERY (5 STRATEGIES)

	STRATEGY	OUTCOMES	INDICATOR (identified 2003)	BASELINE	NEW INDICATOR (If Applicable)	TARGET FOR 2006	TARGET REACHED 2006	TARGET FOR 2007 OR OTHER 'END POINT'' NOTE	'TRAFFIC LIGHT' SUMMARY SCORE
4	Strengthen the management of cost-effective interventions to control communicable diseases	• Reduction of incidence /prevalence rates of communicable diseases • Regular delivery of cost effective interventions at facility levels	• % of endemic villages that have re -treatment and replacement of bed nets annually	• 74%		• 85%	• 81%		
			• Malaria case fatality rate (severe cases only)	• 10.85% (8.2%)		• 10.2%	• 7.9%	• <10%	
			• Malaria Incidence Rate/1000	• 8.6		• 5/1000	• 7.2/1000	• 7.2/1000	
			• Dengue case fatality rate	• 1.23%		• <0.9	• <0.9%	• <0.9%	

STRATEGIES BY KEY AREAS OF WORK

KEY AREA: HEALTH SERVICE DELIVERY (5 STRATEGIES)

	STRATEGY	OUTCOMES	INDICATOR (identified 2003)	BASELINE	NEW INDICATOR (If Applicable)	TARGET FOR 2006	TARGET REACHED 2006	TARGET FOR 2007 OR OTHER 'END POINT'' NOTE	'TRAFFIC LIGHT' SUMMARY SCORE
5	Strengthen the management and coverage of support services such as laboratory, blood safety, referral, pharmaceuticals, equipment and other medical supplies and maintenance of facilities and transport Cont. over page	• Increased availability of supplies and functioning equipment • Effective referral system	• Percentage of patients who received antibiotics IPD OPD • Percentage of children under 5 years with diarrhoea, and treated in health centres, who received ORS • Percentage of essential drugs (15 items listed) at health centre that faced stock-out • Review of the existing referral system • No. of Referral Hospitals that have blood bank or depot • No. of Health Centres with refrigerator • No of high temperature incinerators	• 100% • 50.2% • 81.4 % • 7.6 % • No baseline • 31 • 96 • 24		• < 70% • < 48% • >98% • 5.2% • Referral guideline distributed • 37 Blood Depots • All Health Centres • All ODs	• Hosp Dept • Hosp Dept • 5.71% • Referral guideline distributed • 32 Blood Banks • All Health Centres • 54 OD	• 5% • Print more copies and distribute • 37 • All Health Centres are equipped with fridge • All ODs	

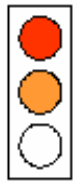
STRATEGIES BY KEY AREAS OF WORK

KEY AREA: HEALTH SERVICE DELIVERY (5 STRATEGIES)

	STRATEGY	OUTCOMES	INDICATOR (identified 2003)	BASELINE	NEW INDICATOR (If Applicable)	TARGET FOR 2006	TARGET REACHED 2006	TARGET FOR 2007 OR OTHER 'END POINT'' NOTE	'TRAFFIC LIGHT' SUMMARY SCORE
5.	Strengthen the management and coverage of support services such as laboratory, blood safety, referral, pharmaceuticals, equipment and other medical supplies and maintenance of facilities and transport	• Increased availability of supplies and functioning equipment • Effective referral system		• General Lab + Blood banks 81. 12%	• Percentage of provincial labs and blood banks supervised by NIPH	• General Lab + Blood banks 85.50%	• (93% archived) More than 8% increased compared to the target 2005 [NIPH]		
				• Blood banks 80.95%	• Percentage of blood donor samples for validation testing (HIV, HBS, HCV, Syphilis) from provincial level were sent to NIPH	• Blood banks 85.71%	• 82.95% 0nly 2% achieved compared to 005		
				• Blood banks 86.36%	• Percentage of Cambodian External Quality Assurance Scheme panel ,including blood bank (HIV) from NIPH, were sent to provincial level	• Blood banks 100%	• 100% achieved [NIPH]		

STRATEGIES BY KEY AREAS OF WORK

KEY AREA: BEHAVIOUR CHANGE COMMUNICATION (3 STRATEGIES)

	STRATEGY	OUTCOMES	INDICATOR (identified 2003)	BASELINE	NEW INDICATOR (If Applicable)	TARGET FOR 2006	TARGET REACHED 2006	TARGET FOR 2007 OR OTHER 'END POINT'' NOTE	'TRAFFIC LIGHT' SUMMARY SCORE
6	Change for the better the attitudes of health providers sector-wide to communicate effectively with consumers, especially regarding the needs of the poor, through sensitization and building inter-personal communication skills Cont. over page	• Appropriate health practices and healthy lifestyles as a result of informed decisions, especially by women	• IEC materials on Inter-Personal Communication Skills and Professional Ethic developed and approved	• NNP develop IPC training materials on Breastfeeding Counselling		• 6 new hospitals will be declared as Baby Friendly hospital (Total = 10) • Monitor the implement-ation of the professional ethic	• Range of Breast feeding activities listed in 2007 JAPR (pg 31) • No progress made on implementation of the professional ethic	• Continue to broadcast the existing TV spots • Select 6 more hospitals to implement Baby Friendly Hospital Scheme • 933 villages to implement Baby Friendly Community activities • Monitor the implementation of the professional ethic	
			• IPC materials	• Review and update IPC curriculum on BS/RH. Review MPA Module 7		• Conduct training on Module 7 to 5 provinces	• Recruit consultant to revise MPA-7 Started to Revise Curriculum MPA-7 (one WS) at the end of the Year.	• Conduct training on MPA Module 7 to 5 provinces and 18 ODs	

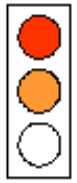
STRATEGIES BY KEY AREAS OF WORK

KEY AREA: BEHAVIOUR CHANGE COMMUNICATION (3 STRATEGIES)

	STRATEGY	OUTCOMES	INDICATOR (identified 2003)	BASELINE	NEW INDICATOR (If Applicable)	TARGET FOR 2006	TARGET REACHED 2006	TARGET FOR 2007 OR OTHER 'END POINT'' NOTE	'TRAFFIC LIGHT' SUMMARY SCORE
6	Change for the better the attitudes of health providers sector-wide to communicate effectively with consumers, especially regarding the needs of the poor, through sensitization and building inter-personal communication skills	• Appropriate health practices and healthy lifestyles as a result of informed decisions, especially by women	• IEC materials on the roles and responsibilities of health providers	• Roles and responsibilities of providers	• Number of Referral(RH) hospitals and Health Centres implemented "Provider Behaviour Change	• Officially accepted by Ministry of Health on training curriculum • Organize second dissemination workshop on PBCI • Implement PBCI in Kratie, Sieamreap & Kampot provinces and Phnom Penh municipality. • Organize ToT on PBCI in targeted areas • Organize training course on pre-training needs assessment of PBCI to targeted areas	• Conducted training on provider change interventio n & Municipal Referral hospital level • Coaching on provider behaviour change interventio n	• One training on PBCI' s Evaluation skill to PHPU / PHD & One Training of trainer on PBCI to PHPU / PHD in 6 provinces • Monitor and evaluate PBCI at Municipal Referral Hospital 4-Coorperat and technical support on PBCI's activities in these 6 provinces	
			• Dialogue on the role of the National Centre for Health Promotion in managing behaviour change research	• None		• Disseminate the coordination role of NCHP on behavior change research • Implement the approved role	• None	Assign departments assigned for leading and initiating this dialogue Define the role of the NCHP in managing BCC research	

STRATEGIES BY KEY AREAS OF WORK

KEY AREA: BEHAVIOUR CHANGE COMMUNICATION (3 STRATEGIES)

	STRATEGY	OUTCOMES	INDICATOR (identified 2003)	BASELINE	NEW INDICATOR (If Applicable)	TARGET FOR 2006	TARGET REACHED 2006	TARGET FOR 2007 OR OTHER 'END POINT'' NOTE	'TRAFFIC LIGHT' SUMMARY SCORE
7	Empower consumers, especially the poor and women, to interact with other stakeholders in the development of quality health services through mass media and inter-personnel communication	• Appropriate health practices and healthy lifestyles as a result of informed decisions, especially by women	• Review exiting materials on consumer rights	• None		• Conduct a baseline survey on clients' rights and providers' rights. • Produce IEC materials on clients' rights and providers' rights • Launch and test clients' rights and providers' rights in four provinces	• Baseline survey on clients' rights and providers' rights conducted • IEC materials on clients' rights drafted.	• Disseminate and implement the clients' rights in five provinces • Monitor the implement the clients' rights in five provinces	
			• Reactivation and reinforcement of the existing community volunteer network HCMCs, VHSGs	• Number of functioning HCMCs, VHSGs		• Reactivate and reinforce the existing community network in 4 provinces • Monitor the implementation of the Primary Health Care Policy and Guideline for the implementation of the Primary Health Care Policy	• No achievements made	• Monitoring and strengthen the activities of the VHSGs in 5 provinces	

STRATEGIES BY KEY AREAS OF WORK

KEY AREA: BEHAVIOUR CHANGE COMMUNICATION (3 STRATEGIES)

	STRATEGY	OUTCOMES	INDICATOR (identified 2003)	BASELINE	NEW INDICATOR (If Applicable)	TARGET FOR 2006	TARGET REACHED 2006	TARGET FOR 2007 OR OTHER 'END POINT'' NOTE	'TRAFFIC LIGHT' SUMMARY SCORE
8	Promote healthy life-styles and appropriate health seeking behaviour through advocating for healthy environments and implementing counselling and behavioural change activities. Cont. over page	• Appropriate health practices and healthy lifestyles as a result of informed decisions, especially by women	• Reactivate and update the existing IEC database	• Existing IEC database at National Centre for Health Promotion		• IEC database functioning NCHP website is accessible	• NCHP website was launched	• IEC database will be updated and functioning • NCHP website will serve the most up-to-date NCHP information	
			• Reactivate the IEC working group	• Draft the Terms of Reference of the IEC Working Group		• Conduct regular Meetings	• Functioning BCC forums in five provinces	• Continue with BCC forum in five provinces: and expend to other 19 provinces	
			• Policy on BCC/IEC development and coordination	• None		• Review BCC policy. • Develop the implementation guidelines			
			• The roles and responsibility of different departments within MoH and of other key ministries for food hygiene	• None		• Workshop for dissemination the roles and responsibility of NCHP for food hygiene	• No achievement was made	• Workshop for dissemination the roles and responsibility of NCHP for food hygiene	

STRATEGIES BY KEY AREAS OF WORK

KEY AREA: BEHAVIOUR CHANGE COMMUNICATION (3 STRATEGIES)

	STRATEGY	OUTCOMES	INDICATOR (identified 2003)	BASELINE	NEW INDICATOR (If Applicable)	TARGET FOR 2006	TARGET REACHED 2006	TARGET FOR 2007 OR OTHER 'END POINT'' NOTE	'TRAFFIC LIGHT' SUMMARY SCORE
8	Promote healthy life-styles and appropriate health seeking behaviour through advocating for healthy environments and implementing counselling and behavioural change activities Cont. over page	• Appropriate health practices and healthy lifestyles as a result of informed decisions, especially by women	• Anti-smoking law	• None		• Anti-smoking law will be approved by council of ministers and ratified by National Assembly and Senate. and implemented • Establish smoke free workplace and conducting a campaign on the adverse effects of tobacco use • Conduct training on quit smoking	• The draft of Anti-smoking law has been revised for resubmission to MoH. • 8 smoke free hospitals, schools, and temples were established • On air talk show about adverse effects of tobacco use on health organized. • One ToT quit smoking training conducted	• Anti-smoking law will be approved by council of ministers and ratified by National Assembly and Senate. and implemented • Establish smoke free workplace and conducting a campaign on the adverse effects of tobacco use and on cigarette advertising ban. • Conduct training on quit smoking SiemReab, Kg. Speu, Takeo,	

STRATEGIES BY KEY AREAS OF WORK

KEY AREA: BEHAVIOUR CHANGE COMMUNICATION (3 STRATEGIES)

	STRATEGY	OUTCOMES	INDICATOR (identified 2003)	BASELINE	NEW INDICATOR (If Applicable)	TARGET FOR 2006	TARGET REACHED 2006	TARGET FOR 2007 OR OTHER 'END POINT'' NOTE	'TRAFFIC LIGHT' SUMMARY SCORE
8	Promote healthy life-styles and appropriate health seeking behaviour through advocating for healthy environments and implementing counselling and behavioural change activities Cont. over page	• Appropriate health practices and healthy lifestyles as a result of informed decisions, especially by women	• Develop sub-decree to implement the Anti-Tobacco law. • Marketing breast milk substitute	• Draft the policy /law on marketing breast milk substitute		• National implementation of sub-degree.	• Sub-decree on Marketing of IYCF Products widely disseminated for high level officials from relevant line ministries, PHD/OD directors PHD/OD/Nutrition Focal Person from all 24 provinces and representative of milk companies, private hospitals were participated.	• Develop sub-decree to implement the Anti-Tobacco law • Dissemination and Orientation for effective implementation of the Joint Prakas for enforcement of the Sub-decree on Marketing of Foods for IYCF	

STRATEGIES BY KEY AREAS OF WORK

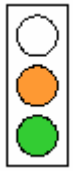
KEY AREA: BEHAVIOUR CHANGE COMMUNICATION (3 STRATEGIES)

	STRATEGY	OUTCOMES	INDICATOR (identified 2003)	BASELINE	NEW INDICATOR (If Applicable)	TARGET FOR 2006	TARGET REACHED 2006	TARGET FOR 2007 OR OTHER 'END POINT'' NOTE	'TRAFFIC LIGHT' SUMMARY SCORE
8	Promote healthy life-styles and appropriate health seeking behaviour through advocating for healthy environments and implementing counselling and behavioural change activities – Cont. Cont. over page	• Appropriate health practices and healthy lifestyles as a result of informed decisions, especially by women		• None • Poster, leaflet. T-shirt, hat, video sport, song ,	• IEC materials for Health education for NCHADS • EC materials on malaria	• 24 provincial AIDS offices will implement outreach and peer education to sex workers • Malaria health education messages will reach 70% of the villagers in 22 provinces	• A set of SOP for outreach and peer education to sex workers • 400bags, 8,800games , 22,000poster stories and 8,8000cartoon magazines(school health children) 3radio spots, 4songs , 1VDO stories , 3VDO spot ,5,000Wall Calendars, 5,000Desk calendars, 5,500Caps, 5,800T-Shirts ,10,250flipcharts, 52,500leaflets, 30,272posters. 1,780News letters and 2020 books	• Coordination meetings with all stakeholders • Strengthening IEC distribution to community • Develop IEC material for community needed • Develop IEC material for school health children	

STRATEGIES BY KEY AREAS OF WORK

KEY AREA: BEHAVIOUR CHANGE COMMUNICATION (3 STRATEGIES)

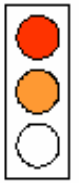
	STRATEGY	OUTCOMES	INDICATOR (identified 2003)	BASELINE	NEW INDICATOR (If Applicable)	TARGET FOR 2006	TARGET REACHED 2006	TARGET FOR 2007 OR OTHER 'END POINT'' NOTE	'TRAFFIC LIGHT' SUMMARY SCORE
8	Promote healthy life-styles and appropriate health seeking behaviour through advocating for healthy environments and implementing counselling and behavioural change activities – Cont.	• Appropriate health practices and healthy lifestyles as a result of informed decisions, especially by women		• Poster, leaflet. Flip chart, Booklet, Billboard, T-shirts, Caps video spot	• IEC materials for Health education of CNAT	• Disseminate TB health education to TB patients and general population in 24 provinces	• TB patients and most of general population received health education messages on TB	• Introduce & distribution of TB health education materials: -Poster, leaflets. -Flip chart, -Booklet, -T-shirts, - Caps. • Disseminate TB health education messages through: -TV spot, -Radio -news paper. - world TB day	

STRATEGIES BY KEY AREAS OF WORK									
KEY AREA: QUALITY IMPROVEMENT (2 STRATEGIES)									
	STRATEGY	**OUTCOMES**	**INDICATOR (identified 2003)**	**BASELINE**	**NEW INDICATOR (If Applicable)**	**TARGET FOR 2006**	**TARGET REACHED 2006**	**TARGET FOR 2007 OR OTHER 'END POINT'' NOTE**	**'TRAFFIC LIGHT' SUMMARY SCORE**
9	Introduce and develop a culture of quality in public health, service delivery and their management through the use of the MoH quality standards		• Qualified active QI Working Group in place	• Working Group exists • Quality Assurer responsible at central MoH level not yet appointed		• QIWG meetings to be held regularly at least every two months. • At least 2/3 of members attend each meeting • Record of Minutes for each QIWG meeting • QIWG to make in depth plan for 2005 activities	• QIWG meetings were held regularly every two months. • At least 2/3 of members attended each meeting • Record of Minutes for each QIWG meeting	• QIWG meetings to be held regularly at least every two months. • At least 2/3 of members attend each meeting • Record of Minutes for each QIWG meeting	
			• Capacity building for quality management, ongoing: Number of persons / teams trained in Quality Management International QM training HSMT by NIPH Hospital Management training by NIPH Planning cycle training according to HSSP.	• 2 persons • 58 teams • 0 • 0		• 2 people from QIWG, Departments & Provincial QI team • 12 teams • 6 teams • Continue to support by TA & follow up Continue to collect of all documentation related to quality standards	• 4 persons were trained • 12 teams were trained • 6 teams were trained • Continue to support by TA & follow up • Some docs located	• 2 people from QIWG/ Departments / Provincial QI team • No target • 6 teams • Continue to support by TA & follow up • Continue to collect of all documentation related to quality standards	
			• Collection and coordination of the development of National quality standards by QA office	• Many documents exist somewhere					

* To ***: baselines reported in JAPR 2003 and JAPR 2007 is different. The baselines used in JAPR 2003are used in this table

STRATEGIES BY KEY AREAS OF WORK

KEY AREA: KEY AREA: QUALITY IMPROVEMENT (2 STRATEGIES)

	STRATEGY	OUTCOMES	INDICATOR (identified 2003)	BASELINE	NEW INDICATOR (If Applicable)	TARGET FOR 2006	TARGET REACHED 2006	TARGET FOR 2007 OR OTHER 'END POINT'' NOTE	'TRAFFIC LIGHT' SUMMARY SCORE
10	Develop and implement minimum and optimum quality standards for the public and private sector incorporating pro-poor and gender issues through established structures and use of appropriate tools	• Improved quality of health services sector wide (public and private sectors)	• Number of PHD transforming PHTAT team to QA team	• Blank – nothing identified		• Siem Reap, Kampot and Kg Cham to create QAT	• Not yet started	• 3 other provinces	
			• Number of OD implementing pilot QA	• Blank – nothing identified		• Kg Cham Internal medicine and surgery wards • 10 HCs in SMOD and 10HCs in BKOK	• Not yet started	• 3 more ODs • Full wards in Pursat provincial hospital • All 31HCs in PS province	
			• Number of meeting / workshop in a pilot province attended by QI member from central level	• Blank – nothing identified		• 20 meetings in various sites completed	• One meeting was conducted with participation of QA central	• Same number of meetings in the same areas identified for 2007	
			• Number of public hospitals with quality licence	• Blank – nothing identified		• Hospital quality performance assessment tool test in Pusat and Kg Thom.	• 14 hospitals in the country assessed by Hospital Assessment tools	• 10 hospitals in the country will assess by Hospital Assessment tools	
			• Number of public HCs with quality seals	• Blank – nothing identified		• All pilot provinces will obtain accreditations	• Not yet started	• All pilot provinces test accreditations standard	

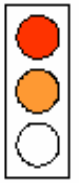
STRATEGIES BY KEY AREAS OF WORK

KEY AREA: KEY AREA: QUALITY IMPROVEMENT (2 STRATEGIES)

	STRATEGY	OUTCOMES	INDICATOR (identified 2003)	BASELINE	NEW INDICATOR (If Applicable)	TARGET FOR 2006	TARGET REACHED 2006	TARGET FOR 2007 OR OTHER 'END POINT'' NOTE	'TRAFFIC LIGHT' SUMMARY SCORE
10	Develop and implement minimum and optimum quality standards for the public and private sector incorporating pro-poor and gender issues through established structures and use of appropriate tools	• Improved quality of health services sector wide (public and private sectors)	• Number Private Clinics with quality licence (Law No. NS/RKM/1100/10 of 2000) • Number of Private practitioner with quality licence (Law No. S/RKM/1100/10 of 2000) • Degree of users satisfaction with public services in Pilot area	• Some clinics are registered Phnom Penh: 28 out of 36 IPD are illegal • Some practitioners are registered. Phnom Penh: 517 out of 557 are illegal • Blank – nothing identified	• Clear quality standards for practitioners licensing and registration are developed • Illegal clinic and polyclinics reduced by a further 20%	• Process started • Illegal clinic and polyclinics were reduced by 80% in Phnom Penh	• Clear quality standards for practitioners licensing and registration are developed • At least 70% of get clinics and polyclinics are legal		

STRATEGIES BY KEY AREAS OF WORK

KEY AREA: HUMAN RESOURCE DEVELOPMENT (3 STRATEGIES)

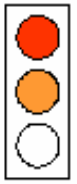
	STRATEGY	OUTCOMES	INDICATOR (identified 2003)	BASELINE	NEW INDICATOR (If Applicable)	TARGET FOR 2006*	TARGET REACHED 2006*	TARGET FOR 2007 OR OTHER 'END POINT'' NOTE*	'TRAFFIC LIGHT' SUMMARY SCORE
11	Increase the number of midwives through quality basic training and strengthen the capacity and skills of midwives already trained through quality continuing education Cont. over page	• Better essential obstetric care	• Proportion of Health Centres having staff with midwifery skills • Ratio of secondary midwives in health centres to population • Number of midwives in each health centre in North East Region • % births attend by trained midwife	• 67% • 5.3: 100,000 • 50% of provinces has 2 midwives at each HC with limited delivery experience • 32% (% births)	• Up to 80 new entrants and up to 80 new graduates (baseline =0) • Number of new primary midwife graduate from RTCs (baseline=0)	• Up to 80 new entrants and up to 80 new graduates • Up to approx 38 primary midwifery students recruited at each of the 4 RTCs	• 88 new intakes recruited for fiscal year 2006-2007 • 85 will be graduated from 3 RTCs and TSMC • 398 Primary Nurse Midwife graduates from the 4 RTCs for fiscal year 2006-2007. Among them, 192 are Primary midwife graduates • 246 Primary Nurse Midwife new intakes recruited for the 4 RTCs for fiscal year 2006-2007. Among them, 146 are Primary midwife students	• Up to 80 new entrants recruited and up to 80 new graduates from TSMC and 3 RTCs every year • Up to 120 Primary Midwives gradated and up to 120 new intakes recruited every year	

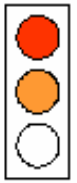
STRATEGIES BY KEY AREAS OF WORK

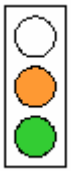
KEY AREA: HUMAN RESOURCE DEVELOPMENT (3 STRATEGIES)

	STRATEGY	OUTCOMES	INDICATOR (identified 2003)	BASELINE	NEW INDICATOR (If Applicable)	TARGET FOR 2006	TARGET REACHED 2006	TARGET FOR 2007 OR OTHER 'END POINT'' NOTE	'TRAFFIC LIGHT' SUMMARY SCORE
11	Increase the number of midwives through quality basic training and strengthen the capacity and skills of midwives already trained through quality continuing education	• Better essential obstetric care	• Number of staff completing basic EOC course (MPA 11 and 12, 4 month, MCH course, LSS) – baseline =395	• 395	• Number of secondary midwife graduates from pre service training program (baseline =0) • Up to 80 HC staff will receive 4 month midwifery course • 40 midwives will receive NMCHC RH/CPA course • 50 midwives will receive LSS course	• 84HC staff (60 funded by HSSP, 12 by RACHA, and 12 by BTC) received 4 month midwifery course • 19 midwives received NMCH-RH/CPA course • 117 staff from 91 HCs received LSS course	• Not achieved	• Curriculum development for 3 year midwifery program • 100 HC staff will be updated midwifery skills	

- Performance against 2006 targets and targets set for 2007 (as reported in JAPR 2007) relates to the 'new indicators' – i.e. the indicators identified in JAPR 2003 have been replaced by the new indicators

STRATEGIES BY KEY AREAS OF WORK									
KEY AREA: HUMAN RESOURCE DEVELOPMENT (3 STRATEGIES)									
	STRATEGY	**OUTCOMES**	**INDICATOR (identified 2003)**	**BASELINE**	**NEW INDICATOR (If Applicable)**	**TARGET FOR 2006**	**TARGET REACHED 2006**	**TARGET FOR 2007 OTHER 'END POINT'' NOTE**	**'TRAFFIC LIGHT' SUMMARY SCORE**
12	Strengthen human resource planning to reduce mal-distribution of the numbers and type of workforce through identification of posts and the reallocation of staff	• Appropriate distribution of health staff at facility levels	• % of facilities at each level with appropriately qualified staff according to guidelines for OD	• Blank – nothing identified		• At least 70% of midwifery post will be filled with new midwifery graduates	• Only 51% of Midwifery post are fulfilled (34 post are filled by Primary Midwives and 17 by Post Basic Midwives	• At least 70% of midwifery graduates applied to work at 194HCs where have no midwives	
			• The number of HC having staff with updated midwifery skills (4 month, MCH course, Life saving skills, post basic midwifery and primary nurse and midwife)	• 361		• 100 HCs will be equipped with updated midwifery skills staff	• 170 HCs are equipped with updated midwifery skills (4 month, MCH course, Life saving skills) and midwife graduates (Post Basic Midwives and Primary Midwives)	• 100 HCs will be equipped with Midwives and staff with midwifery skills and 100 % allocation of midwife candidates who apply to MoH post	
			• Number of referral hospitals (CPA2 and CPA3) with at least two doctors formally trained in basic surgery (Total 51)	• 21		• 16 surgeons from at least 9 RHs to be graduated from the BST, • 20 nurses from ISAR course	• 14 RHs equipped with 16 surgeons graduated from BST course • 16 RHs equipped with nurses graduated from ISAR course.	• 9 RHs will be equipped with Basic Surgeons • 14 RHs with ISAR nurses	
			• Health workforce development plan 2004 – 2013	• Blank- nothing identified					
			• Number of population per secondary nurse by provinces grouped according to high, medium or low density	• High 3,154 Medium 1,483 Low 569					

STRATEGIES BY KEY AREAS OF WORK									
KEY AREA: HUMAN RESOURCE DEVELOPMENT (3 STRATEGIES)									
	STRATEGY	**OUTCOMES**	**INDICATOR (identified 2003)**	**BASELINE**	**NEW INDICATOR (If Applicable)**	**TARGET FOR 2006**	**TARGET REACHED 2006**	**TARGET FOR 2007 OR OTHER 'END POINT'' NOTE**	**'TRAFFIC LIGHT' SUMMARY SCORE**
13	Enhance the management and technical skills and competence of all Ministry of Health workforce through quality, comprehensive training and education and retention and support measures	• Improved management and performance and technical skills of health staff throughout the sector • Effective management of health personnel	• Number of HC staff received MPA training	• Blank- nothing identified		• 5652 HC staff to be trained with MPA (6 staff /HC) through TNA	• No activity	• 5652 HC staff to be trained with MPA (6 staff /HC) through TNA	
			• % targeted staff received management training – HSMT and HMT	• HSMT - 71% ODs; 62% PHDs. HMT – curriculum developed		• 35 health managers at PHD & OD levels will attend the HSMT • 35 RH managers will attend the HMT course	• No HSMT course provided • 44 RH managers attend the HMT course	• Provision of HSMT based on demand from PHDs • 35 RH managers will attend the HMT course	
			• Accreditation mechanism for training courses and training institutions by end of 2006	• Blank- nothing identified		• Finalize QAP • Finalize the details of 9 point indicators • Continue to develop school approval criteria for each field as tools to meet the ACC requirement	• 30 % of QAP was finalized • Sub Decree on Training for Health is submitted to the Council of Ministers	• All public training institutions (UHS,TSMC, 4 RTCs) are targeted to implement QAP and Sub decree on Training for Health	
				• Provision of lab courses at NIPH	• Percentage of provincial laboratory staff trained at NIPH	• Provision of lab courses at NIPH	• 149 lab staff attended lab training courses at NIPH.	• Provision of 5 lab courses with 35 participants per course at NIPH	

STRATEGIES BY KEY AREAS OF WORK									
KEY AREA: HEALTH FINANCING (3 STRATEGIES)									
	STRATEGY	**OUTCOMES**	**INDICATOR (identified 2003)**	**BASELINE**	**NEW INDICATOR (If Applicable)**	**TARGET FOR 2006**	**TARGET REACHED 2006**	**TARGET FOR 2007 OR OTHER 'END POINT'' NOTE**	**'TRAFFIC LIGHT' SUMMARY SCORE**
14	Ensure regular and adequate flow of funds to the health sector especially for service delivery through advocacy to increase resources and strengthening financial management Cont	• Improved total public expenditure from internal and external sources • Improved regularity and adequacy of funding flow to health	• Budget allocation as % of GDP (Annual budget allocation to the Ministry of Health) • National health budget as proportion of government budget • Proportion of recurrent expenditures compared to total recurrent budget ("Recurrent" refers to Chapters 10, 11, 13, 31) • Public expenditure per capita in health • Budget expenditure for health after 6 and 12 months as % of total budget allocation for Chapter 11 and 13 by national and provincial level (Approved: Mandated ceilings agreed on by the Ministry of Economy and Finance Cash released: Amount of cash released from the national and provincial treasury for operating expenditures)	• 1.2% • 10.9% [10.44%]* • Approved: 93% Cash Released: 77% • Including drugs: US$ 2.94 Excluding drugs: US$ 1.7 • Proportion of cash approved and released tracked for Chapter 11 and 1 *Chapter 11 by June* National: Approved: 4% Cash released: 4% Provincial: Approved: 21% Cash released: 15% *Chapter 13 by June* National: Approved: 62% Released: 13% Provincial: Approved: 47% Cash released: 22		• 1.26% • 10% • 95% • Including drugs = 4.59 USD Excluding drugs: 3 USD *Chapter 11 by June* National : Approved: 35% Cash Released: 35% Provincial: Approved: 35% Cash Released: 35% *Chapter 13 by June* National: Approved:50% Cash released: 40% Provincial: Approved:50% Cash released: 40%	• 1.08% • 6.84% • 92.8% • Including drugs = 4.64 USD Excluding drugs: 3.35 USD *Chapter 11 by June* National : Approved: 36.12% Cash Released: 36.12% Provincial: Approved: 12.82% Cash Released: 19.10% *Chapter 13 by June* National: Approved: 51.96% Cash released: 47.45% Provincial: Approved:32.25% Cash released: 6.78%	• 1.08% • 7.29% • 99% • Including drugs = 5.87 USD Excluding drugs: 3..85 USD *Operating cost for non program by June* National : Approved: 40% Cash Released: 35% Provincial: Approved: 40% Cash Released: 35% *Operating cost for program by June* National : Approved: 40% Cash Released: 40% Provincial: Approved: 40% Cash Released: 40%	

STRATEGIES BY KEY AREAS OF WORK

KEY AREA: HEALTH FINANCING (3 STRATEGIES)

	STRATEGY	OUTCOMES	INDICATOR (identified 2003)	BASELINE	NEW INDICATOR (If Applicable)	TARGET FOR 2006	TARGET REACHED 2006	TARGET FOR 2007 OR OTHER 'END POINT'' NOTE	'TRAFFIC LIGHT' SUMMARY SCORE
14	Ensure regular and adequate flow of funds to the health sector especially for service delivery through advocacy to increase resources and strengthening financial management	• Improved total public expenditure from internal and external sources • Improved regularity and adequacy of funding flow to health		*Chapter 11 by Dec.* National: Approved: 90% Cash released: 90% Provincial: Approved: 80% Cash released: 64% *Chapter 13 by Dec.* National: Approved: 90% Cash released: 53% Provincial: Approved: 90% Cash released: 80%		*Chapter 11 by Dec.* National: Approved: 95% Spend = 95% Provincial: Approved: 95% Spend = 95% *Chapter 13 by Dec.* National: Approved: 95% Spend = 95% Provincial: Approved: 95% Spend = 95%	*Chapter 11 by Dec.* National: Approved: 99.4% Spend = 99.4% Provincial: Approved: 91.6% Spend = 82% *Chapter 13 by Dec.* National: Approved: 97.5% Spend = 94.3% Provincial: Approved: 100% Spend = 100%	*Operating cost for program by Dec.* National: Approved: 99% Spend = 99%	

- 10.44 % reported as the baseline figure in JAPR 2007 where as JAPR 2003 reports the baseline as 10.9%. For the purpose of these tables baseline figures reported in JAPR 2003 are adopted.

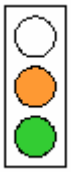
STRATEGIES BY KEY AREAS OF WORK

KEY AREA: HEALTH FINANCING (3 STRATEGIES)

	STRATEGY	OUTCOMES	INDICATOR (identified 2003)	BASELINE	NEW INDICATOR (If Applicable)	TARGET FOR 2006	TARGET REACHED 2006	TARGET FOR 2007 OR OTHER 'END POINT'' NOTE	'TRAFFIC LIGHT' SUMMARY SCORE
14	Ensure regular and adequate flow of funds to the health sector especially for service delivery through advocacy to increase resources and strengthening financial management	• Improved total public expenditure from internal and external sources • Improved regularity and adequacy of funding flow to health	• Review lessons from evaluation of ADD and PAP systems • Approval from MEF for commitment to purchase drugs. Contract signed with supplier and MoH	• TORs developed for the study • Approval from MEF for commitment to purchase drugs Contract signed with supplier and MOH	• Procurement of drugs and medical supplies through competitive tender	• CMS receipt 100% of total allotment for drugs and medical supplies requirement in 2005. Approved: 99% Mandate: 99%	• Finished Reporting and disseminated to the provinces • CMS receipt 100% of total allotment for drugs and medical supplies requirement in 2005. Central Approved: 113.3% Mandate: 113.3%	• CMS receipt 100% of total allotment for drugs and medical supplies requirement in 2007. Approved: 100% Mandate: 100%	

STRATEGIES BY KEY AREAS OF WORK

KEY AREA: HEALTH FINANCING (3 STRATEGIES)

	STRATEGY	OUTCOMES	INDICATOR (identified 2003)	BASELINE	NEW INDICATOR (If Applicable)	TARGET FOR 2006	TARGET REACHED 2006	TARGET FOR 2007 OR OTHER 'END POINT'' NOTE	'TRAFFIC LIGHT' SUMMARY SCORE
15	Allocate financial resources to improve the accessibility of health services for the poor through alternative health financing schemes	• Increased cost-effectiveness and efficiency of health service systems • Reduced barriers to access to hospital services for the poor	• Proportion of budget to Provinces out of total budget (Proportion of budget allocated to recurrent costs at provinces out of total MOH budget • Allocation of budget to Health Centres and Referral Hospitals: operating budget as proportion of total budget (excluding drugs) • Government commitment to financing services for the poor at referral hospitals	• Including drugs: 66% Excluding drugs: 34% • Referral Hospitals: 18% Health Centres: 15% • Chapter 31 experiment in process for equity fund at Takeo Provincial Hospital • N/A	• Increase EFs Schemes from 16 to 30 in non contracting ODs. • Continue EFs in 11 contracting ODs • Number of poor individuals/ household who has been pre-identification	60% • Budget allocate to: RH 20% HCs: 30% (Proportion to total provincial budget) • To allocate national budget for EF to 13 ODs (Non contracting districts) • HEF to increase from 16 to 30 ODs (including 7 to contracting ODs) • Increase a number of individuals/ household who received an identification	26% N.A. Disseminated Prakas on subsidy to the poor patients Allocate government budget for subsidy in 1 ODs, and 3 National hospital EF Schemes increased from 30-40 ODs (including 11 contracting ODs), and 5 national hospitals Number of poor households 86,483 (432,415 poor persons) has been pre- identification	60% • Budget allocate to: RH 20% HCs: 30% (Proportion to total provincial budget) • Introduce subsidy schemes in 12 ODs and 5 national hospitals • Increase a number of individuals/ household who received an identification	

STRATEGIES BY KEY AREAS OF WORK									
KEY AREA: HEALTH FINANCING (3 STRATEGIES)									
	STRATEGY	**OUTCOMES**	**INDICATOR (identified 2003)**	**BASELINE**	**NEW INDICATOR (If Applicable)**	**TARGET FOR 2006**	**TARGET REACHED 2006**	**TARGET FOR 2007 OR OTHER 'END POINT'' NOTE**	**'TRAFFIC LIGHT' SUMMARY SCORE**
15	Allocate financial resources to improve the accessibility of health services for the poor through alternative health financing schemes	• Increased cost-effectiveness and efficiency of health service systems	• Number of poor patients with assistant from equity funds	• 5,234		Increase number of poor patients with assistant by Equity Funds from 47,600 to 200,000 - Develop a standard information system	- Number of poor patients with assistant by Equity Funds 89,320 - Finalized monitoring tool and reporting form	Increase a number of poor patients with assistant by Equity Funds from 89,320 to 150,000	
		• Reduced barriers to access to hospital services for the poor		• 7%	• Percentage of Health facilities (ODs) deliveries HEF out of total health facilities	Increase a proportion of Health facilities (ODs) deliveries EF from 28% to 39%	The proportion of health facilities (ODs) deliveries EF has increase 28% to 38% (29 ODs)	Increase a proportion of Health facilities (ODs) deliveries EF& subsidy from 38% to53% (40 ODs)	
			• Contracting as a strategy to improve access in poor areas	• Plans for scaling up to 11 ODs through HSSP in place – JAPR 2003 [5 ODs]*		Contracting in 11 ODs are ongoing Review contracting strategy in the process		Continue contracting in 11ODs	
			• Proportion of poor patients out of total patients being exempted from fees at referral hospitals	• RHs:14% [16]* HCs: 12		RHs: 16 % HCs: 16%	RHs: 16% HCs: 18% NH: 11	RHs: 16 % HCs: 16%	
				• NA	• Average unit cost of contribution from user per cases(OPD & IPD)	• NA	OPD: 0.19 USD IPD: 5.59	Improve the monitoring information system on HF	
				• 1	• Number CBHI Schemes Implemented.	Collaborate with MEF to develop sub degree on SHIIncrease number of CBHI schemes from 4-8	Total number of CBHI schemes in 2006 is 8.	- Develop sub decree on CBHI - Increase number of CBHI schemes from 8-20	

* Baseline =16 in JAPR 2007 but was cited as 14% in JAPR in 2003

STRATEGIES BY KEY AREAS OF WORK

KEY AREA: HEALTH FINANCING (3 STRATEGIES)

	STRATEGY	OUTCOMES	INDICATOR (identified 2003)	BASELINE	NEW INDICATOR (If Applicable)	TARGET FOR 2006	TARGET REACHED 2006	TARGET FOR 2007 OR OTHER 'END POINT'' NOTE	'TRAFFIC LIGHT' SUMMARY SCORE
15	Allocate financial resources to improve the accessibility of health services for the poor through alternative health financing schemes	• Increased cost-effectiveness and efficiency of health service systems		• NA	• Number of insured members with assistance (Reimbursement) from Community based Health Insurance (CBHI)	• Increase number of insured with assistant from CBHI: OPD: 28,293-60,000	• Number of insured with assistant from CBHI: OPD: 98,484 IPD: 2,187	• Increase a number of insured with assistant from CBHI: OPD: 98,484-200,000 IPD: 2,187-6,000	
		• Reduced barriers to access to hospital services for the poor		• NA	• Number of insured member/ household cover by Community based health insurance (CBHI)	• Increase number of insured from 12, 398-25,000 peoples (2,655HH-5,080HH)	• Number of insured members are 33,122 (7,012HH)	• Increase a number of insured household from 7, 012HH-14,000	

STRATEGIES BY KEY AREAS OF WORK									
KEY AREA: HEALTH FINANCING (3 STRATEGIES									
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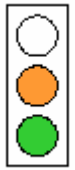
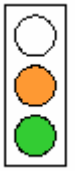
16	Ensure transparent, efficient and effective health expenditures through strengthening resource allocation, coordination of different sources of funds and monitoring	• Improved transparency in management of funds	• Strengthen resource allocation for expenditures at different levels based on appropriate roles and responsibilities	• Costing of services at provincial and district referral hospitals and health centres conducted		• To be finalized the model for resource allocation for the poor. • Building capacity of DBF' staff on Program Based budgeting	• N/A	• Budget allocation should be based on the AOP	? 
			• Improvement in monitoring of financial performance	• PAP performance indicators established		• Setting and disseminating the new financial reporting system of all levels	• Disseminated the new public financial reform to all health facilities at both levels	• Setting and disseminating the new financial reporting system of all levels	
STRATEGIES BY KEY AREAS OF WORK									

KEY AREA: INSTITUTIONAL DEVELOPMENT (4 STRATEGIES)

	STRATEGY	OUTCOMES	INDICATOR (identified 2003)	BASELINE	NEW INDICATOR (If Applicable)	TARGET FOR 2006	TARGET REACHED 2006	TARGET FOR 2007 OR OTHER 'END POINT'' NOTE	'TRAFFIC LIGHT' SUMMARY SCORE
17	Organizational and management reform of structures, systems and procedures of the Ministry of health to respond effectively to change	• Increased efficiency, effectiveness and accountability of the Ministry of Health at all levels	• Staff posts redefined, staffing levels (establishments) set, job descriptions prepared and internal employment procedures reviewed to prevent mal distribution of staff	• Data collected from functional analysis (FA) for human resources in 7 sites		• Accurate HR data quarterly report used for decision making. • Personnel policy to address mal distribution of staff and to attract staff to the remote area developed and approved • SSLP for RH and HC used for employment and training decisions • MoH MBPI posts defined	• HR Database updated regularly and reported quarterly • Staff Lists received from all PHD's June 2006 (50% updated to the databases) • Contract of new recruits • SSLP for RH & HC approved	• Accurate HR Data for management decision making • Improve the skills of the database administrators • Accurate, timely and relevant production of reports • Improved information processes between central and provincial units	? 

STRATEGIES BY KEY AREAS OF WORK									
KEY AREA: INSTITUTIONAL DEVELOPMENT (4 STRATEGIES)									
	STRATEGY	**OUTCOMES**	**INDICATOR (identified 2003)**	**BASELINE**	**NEW INDICATOR (If Applicable)**	**TARGET FOR 2006**	**TARGET REACHED 2006**	**TARGET FOR 2007 OR OTHER 'END POINT'' NOTE**	**'TRAFFIC LIGHT' SUMMARY SCORE**
17	Organizational and management reform of structures, systems and procedures of the Ministry of health to respond effectively to change	• Increased efficiency, effectiveness and accountability of the Ministry of Health at all levels	• All levels of the MoH responding appropriately to change	• Blank – nothing specified		• ID plan developed and approved • Implement functional analysis recommendations • AOPs developed into detailed work plans	• The IDP synthesis report submitted to MTR • Department OD plans preparation is in process using the recommendation of functional analysis • Work plans for 2006 were developed • The performance management system(PMS) successfully adopted by central departments and all staff have been trained to complete PMS documents • Each department has clearly identified working objectives PMS process is continuing	• Hold workshop • Implement programme activities as scheduled in ID plan • Monitor and evaluate progress of programme each quarter	

STRATEGIES BY KEY AREAS OF WORK

KEY AREA: INSTITUTIONAL DEVELOPMENT (4 STRATEGIES)

	STRATEGY	OUTCOMES	INDICATOR (identified 2003)	BASELINE	NEW INDICATOR (If Applicable)	TARGET FOR 2006	TARGET REACHED 2006	TARGET FOR 2007 OR OTHER 'END POINT'' NOTE	'TRAFFIC LIGHT' SUMMARY SCORE
17	Organizational and management reform of structures, systems and procedures of the Ministry of health to respond effectively to change	• Increased efficiency, effectiveness and accountability of the Ministry of Health at all levels		•	• Number of staff with performance base salary supplement	• Staff performance according to agreed performance indicators • Further PMG approved and implemented • PMG indicators are achieved	• Design Team presented scheme to the Minister in September 2006. • Extend the Implementation of PMG in Kg. Trach District • PMG proposal prepared and submitted to CAR for implementation in 2007 in Takeo and North-West region	• Design Team presented scheme design to the Minister in September 2006. • Extend the Implementation of PMG in Kg. Trach District • PMG proposal prepared and submitted to CAR for implementation in 2007 in Takeo and North-West region	

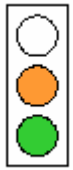
STRATEGIES BY KEY AREAS OF WORK

KEY AREA: INSTITUTIONAL DEVELOPMENT (4 STRATEGIES)

	STRATEGY	OUTCOMES	INDICATOR (identified 2003)	BASELINE	NEW INDICATOR (If Applicable)	TARGET FOR 2006	TARGET REACHED 2006	TARGET FOR 2007 OR OTHER 'END POINT'' NOTE	'TRAFFIC LIGHT' SUMMARY SCORE
17	Organizational and management reform of structures, systems and procedures of the Ministry of health to respond effectively to change	Increased efficiency, effectiveness and accountability of the Ministry of Health at all levels	Develop integrated planning and budgeting at all levels An effective monitoring framework in place	Revised planning manual being developed Initial monitoring and evaluation framework for the National Strategic Plan		Sector AOP produced by agreed finding Guidelines for preparing AOP 2007 DHS dissemination to all levels Introduce ME Framework and tool to central and provincial levels Central, PHD and OD implement revised HIS forms and software.	Health sector AOP 2006 published and disseminated. AOP guide line for AOP 2007 developed and disseminated to all health institutions Finalized Health sector AOP 2007 DHS finding report finalized JAPR 2006 conducted Revised HIS software was implemented and used GIS training to provincial and OD levels. 02 training course on data use were conducted to provincial, OD and health facility levels. Spot check on some HCs to improve health info data	Health sector AOP 2008 and 3 year rolling plan 2008-2010 Guidelines for preparation AOP 2008 DHS dissemination to all levels Finalized M&E framework. Develop 05 year HIS strategic plans Improve staff capacity through training on data use for planning, monitoring and evaluation. Refresh training on HIS software and GIS Post training follow-up	

STRATEGIES BY KEY AREAS OF WORK

KEY AREA: INSTITUTIONAL DEVELOPMENT (4 STRATEGIES)

	STRATEGY	OUTCOMES	INDICATOR (identified 2003)	BASELINE	NEW INDICATOR (If Applicable)	TARGET FOR 2006	TARGET REACHED 2006	TARGET FOR 2007 OR OTHER 'END POINT'' NOTE	'TRAFFIC LIGHT' SUMMARY SCORE
18	Effective public private partnerships to improve accessibility, quality and affordability through the participation of private sector participation and enforcement of regulation	Laws are appropriate and fully enforced Improved supervision and regulation of private sectors Increased participation of private sectors in health service delivery	Medical practitioners registered and aware of "professional ethics	Blank – nothing specified		Strengthen the implementation of Royal decree on the establishment of Medical Council and the Sub-decree on medical ethic Continue to review the membership of medical council in provincial level according to royal decree on medical council establishment Membership of Dental Council at national level established Disseminate the royal decree on the establishment of Dental Council Royal decree on Midwife Council and Nurse Council establishment Drafted and approved	69% medical doctors were registered Membership of Dental Council has been approved by sub-degree	Continue to disseminate sub degree of professional ethics and promise of membership of Medical Council Post the membership of Dental Council to provinces Establish Midwife Council and Nurse Council	? 

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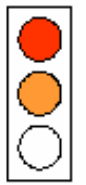
18	Effective public private partnerships to improve accessibility, quality and affordability through the participation of private sector participation and enforcement of regulation	Laws are appropriate and fully enforced Improved supervision and regulation of private sectors Increased participation of private sectors in health service delivery	Effective donor coordination mechanism in place	Blank – nothing specified		SWiM progress assessed in MTR / 2006	SWiM study conducted as part of MTR	Set up specific action plan	

STRATEGIES BY KEY AREAS OF WORK									
KEY AREA: INSTITUTIONAL DEVELOPMENT (4 STRATEGIES)									
	STRATEGY	**OUTCOMES**	**INDICATOR (identified 2003)**	**BASELINE**	**NEW INDICATOR (If Applicable)**	**TARGET FOR 2006**	**TARGET REACHED 2006**	**TARGET FOR 2007** **OR OTHER 'END POINT'' NOTE**	**'TRAFFIC LIGHT' SUMMARY SCORE**
19	Enhance Ministry of Health capacity to address chronic and other non-communicable diseases and emerging public health problems	Increase public awareness on prevention of chronic diseases and new public health problems	Evidence based strategies to prevent non communicable disease in place Quality data on NCD available to inform policy and strategies *Sub-indicators* National Strategy for the prevention and control of non communicable disease 2007-2010	Inter Ministerial Committee on Tobacco Control drafting regulation Phnom Penh hospital cancer registry		National tobacco control law finalized and approved Implementing the policy thru raising awareness on breast self examination Extending the collection of Cancer cases in 5 provinces Develop finalize national strategy for the prevention & control of non-communicable disease	Reviewed by MOH Training done in 3 ODs in Prey Veng Province (HSSP) **Extending data collection to the 5 provinces not done - data collected only in central hospitals** Strategy developed and finalized	National Tobacco Control law finalized and approved Ensuring the data analysis by updating the software Approved, printing, dissemination thru WK and implementation	

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	STRATEGY	OUTCOMES	INDICATOR (identified 2003)	BASELINE	NEW INDICATOR (If Applicable)	TARGET FOR 2006	TARGET REACHED 2006	TARGET FOR 2007 OR OTHER 'END POINT'' NOTE	'TRAFFIC LIGHT' SUMMARY SCORE
19	Enhance Ministry of Health capacity to address chronic and other non-communicable diseases and emerging public health problems	Increase public awareness on prevention of chronic diseases and new public health problems	Guidelines for the management of Diabetes & hypertension patients in RHs Rate of utilization of helmet wearing among motocyclist & seatbelt in Phnom Penh Arsenicosis: Mitigation Program Detection (Outbreak) Detection and Surveillance Guideline Development (Khmer and English) IECs Development			Develop guidelines for the management of Diabetes & hypertension patients in RHs 2 surveys on utilization of helmet wearing increase 20% August 2006 Case Detection	Draft developed 2 surveys of helmet wearing increased from 11.3% to 15.3% and to 21.4%. 3 TV spot on helmet wearing. 1 TV spot on alcohol drinking Case Confirmation (selected areas in Kandal & Prey Veng Provinces)	Finalization, approval printing. Available for training. Guidelines used by health staff in pilot clinic Utilization of helmet wearing and seatbelt used increase to 30% in PPenh. Mortality rate from RTA and other injury decrease to 5% Detect new cases and Surveillance Guideline of Arsenicosis Development Arsenicosis IEC materials Development	

STRATEGIES BY KEY AREAS OF WORK

KEY AREA: INSTITUTIONAL DEVELOPMENT (4 STRATEGIES)

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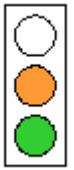
20	Further develop the health sector to strengthen management effectiveness and service delivery responsiveness through: Enhanced management and leadership culture sector-wide; Good leadership; Appropriate decentralization and de-concentration and institutionalized SWiM	Effective and efficient approach to sector wide management through joint planning, monitoring and evaluation Improved accountability and effectiveness of the health system Improved stewardship of the sector by the Ministry of Health	Enhanced management capacity resulting in the MoH departments working effectively in integrated manner on agreed objects in accordance with good governance Increased effective decentralization and documentation	A management and leadership development programme approved for funding Functional analysis in 7 sites		Continue implementation All staff have a copy of their post description Performance management agreements in place Performance management system in operation	PMS implemented in all the departments Quarterly reviews conducted to assess the progress Workshop in December 2006 to present the progress and to develop plans for 2007 was conducted to all departments Performance management agreements in place Training PMS process completed at the central MoH level Monitored and evaluated on activities of PMS progress	All departments implement PMS All department team leaders are trained and in turn they impart training to the team members Continue the quarterly monitoring and review process Operationalise the functioning of Performance Review Committee	? 

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20	Further develop the health sector to strengthen management effectiveness and service delivery responsiveness through: Enhanced management and leadership culture sector-wide; Good leadership; Appropriate decentralization and de-concentration and institutionalized SWiM	• Effective and efficient approach to sector wide management through joint planning, monitoring and evaluation • Improved accountability and effectiveness of the health system • Improved stewardship of the sector by the Ministry of Health	• Sector Wide Management institutionalised	• First sector wide plan completed and approved		• Will be discussed Follow up guidance from MEF about Medium Term fiscal frameworks.	• AOP 2007 completed • MTEF not completed	• Specific action plan set up	

Annex 7– Progress in Budget Execution

Budget Expenditure			2002	2003		2004		2005		2006		2007	2008
				Target	Actual	Target	Actual	Target	Actual	Target	Actual	Target	Target
Chapter 11 by **June**	National	Approved	4			35	6	35	4	35	36.12	40	40
		Released	4	35	9	35	3	35	3	35	36.12	35	35
	Provincial	Approved	21		10.2	35	19	35	31	35	12.82	40	40
		Released	15	35	6	35	15	35	27	35	19.1	35	35
Chapter 13 by **June**	National	Approved	62		59	50	76	50	50	50	51.96	40	40
		Released	13	50	4	50	40	40	40	40	47.45	40	40
	Provincial	Approved	47		30	50	36	50	50	50	32.25	40	40
		Released	22	50	5	50	22	40	40	40	6.78	40	40
Chapter 11 by **December**	National	Approved	90		80	95	90	95	96	95	99.4	99	99
		Released	90	95	**72**	95	**86**	95	**96**	95	**99.4**	99	99
	Provincial	Approved	80		68	95	70	95	84	95	91.6	99	99
		Released	64	95	**56**	95	**63**	95	**71**	95	**82**	99	99
Chapter 13 by **December**	National	Approved	90		90	95	100	95	97	95	97.5	99	99
		Released	53	95	**85**	95	**45**	95	**81**	95	**94.3**	99	99
	Provincial	Approved	90		77	95	84	95	97	95	100	99	99
		Released	80	95	**41**	95	**52**	95	**60**	95	**100**	99	99

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