Final Draft

NEPAL HEALTH SECTOR PROGRAMME - IMPLEMENTATION PLAN II (NHSP -IP 2)

2010 – 2015

Ministry of Health and Population

Government of Nepal

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Abbreviations and Acronyms

BHKIHS	B.P. Koirala Institute of Health Sciences
DHO	District Health Office
DPHO	District Public Health Office
EDPs	External Development Partners
EHCS	Essential Health Care Services
EPI	Expanded Programme on Immunization
FP	Family Planning
GoN	Government of Nepal
HSRSP	Health Sector Reform Support Programme
HURIS	Human Resource Information System
MARPs	Most At-Risk Populations
MDGP	Medical Doctor - General Practice
Ministry	Ministry of Health and Population
NGO	Non Governmental Organization
PPP	Public Private Partnership
RTI	Research Triangle Institute
WB	The World Bank

Executive Summary

Lessons from Nepal Health Sector Programme (NHSP) 2004-10

Nepal has experienced two decades of steady improvement in health outcomes and impact. Progress accelerated and was accompanied by significant improvements in equality of access during the first NHSP (2004-10). Nepal met or exceeded nearly all of the outcome and service output targets that were set for 2004-10, and is on track to meet the child and maternal mortality MDGs. It is estimated that NHSP-1 saved 96,000 deaths and nearly 3.2 million disability-adjusted life years (DALYs) at a cost of $144 per DALY saved. The current plan thus represents a continuation and further refinement of earlier policies and plans that were based on the implementation of cost-effective, evidence-based health interventions. If the targets of NHSP-2 are broadly achieved by public health spending in line with a "middle case" scenario, this achievement would be broadly maintained, saving a further 45,000 deaths and nearly 1.5 million DALYs at a cost of $147.

Expenditure in health remains low at 5.3 percent of GDP and per capita health expenditure at USD 18.09 in 2006. More than 55 percent (USD 9.0) of total health expenditures is financed through out-of-pocket expenditure by households at the time of service. EDPs finance nearly half of Government spending on health, and the substantial gains achieved in reducing child and maternal mortality will not be sustained without continued external support.

NHSP-2 examines three scenarios for the future growth in resources available, low, middle and high. All three scenarios adopt the 2010-11 budget ceiling for health that was proposed by the Ministry of Finance in February 2010, but they make different assumptions about absorption and about future growth in resources.

NRs. 2009-10 Prices	Low case	Middle case	High case
GON spending on NHSP, NRs. (billions)	57.90	59.17	73.98
EDP spending on NHSP NRs. (billions)	41.73	55.81	69.36
Total public expenditure for health NRs. (billions)	99.63	114.98	143.34
Spending per capita, US$ (average)	8.62	9.92	12.32

Problems that will need to be addressed in the next NHSP period include sustaining and expanding the existing essential health care services (EHCS) package to those who have yet to benefit from it, achieving further progress in reducing maternal and newborn deaths, addressing the continuing problem of very high levels of malnutrition, increasing the use of modern methods of family planning, dealing with the challenge of new, neglected, and re-emerging diseases, and finding an affordable way of responding to increasing levels of non-communicable disease. Community-based mental health and promotional and preventive eye, oral and environmental health services are proposed as additions to the essential health care services package.

Vision

NHSP-2's vision or goal is to improve the health and nutritional status of the Nepali population, especially for the poor and excluded. The Government will contribute to poverty

reduction by providing equal opportunity for all to receive high-quality and affordable health care services. The three objectives set out in the results framework are:

- To increase access to and utilisation of quality essential health care services;
- To reduce cultural and economic barriers to accessing health care services and harmful cultural practices in partnership with non-state actors;
- To improve the health system to achieve universal coverage of essential health services.

The results framework in Annex 1 summarises how the vision will be achieved. The table below reproduces the outcome and impact indicators with progress since 1991 and the targets to 2015, which, where relevant, were chosen to reflect the health MDG targets.

MDG/Impact Indicator	Achievement					Target	
	1991	1996	2001	2006	2009[1]	2010-11	2015
Maternal Mortality Ratio	539	539	415	281	229[2]	250	134
Total Fertility Rate	5.3	4.6	4.1	3.1	2.9[3]	3.0	2.5
Adolescent Fertility Rate (15 -19 years)	NA	127	110	98	NA	98	70
CPR (modern methods)	24	26.0	35	44	45.1[4]	48	55
Under-five Mortality Rate	158	118.3	91	61	50[5]	55	38
Infant Mortality Rate	106	78.5	64	48	41[6]	44	32
Neonatal Mortality Rate		49.9	43	33	20[7]	30	16
% of underweight children		49.2	48.3	38.6	39.7[8]	34	29
HIV prevalence among pregnant women aged 15-24 years[9]	NA	NA	NA	NA	NA	Halt and reverse trend	
TB case detection and success rates (%)	NA	48 79	70 89	65 89	71[10] 88[11]	75 89	85 90
Malaria annual parasite incidence per 1,000	NA	0.54	0.40	0.28	NA	Halt and reverse trend	

Essential Health Care Services

Population and Family Planning: Over three-quarters of modern contraceptive methods are dispensed free of cost by the public sector, although non-Government sources supply 70% of the condoms, half of the contraceptive pills, 40% of the implants, and conduct 40% of voluntary surgical contraception (VSC).

[1] Achievements for 2009 should not be construed as trends. The sources are not necessarily nationally representative and the estimates may not be significantly different from 2006 estimates.

[2] Estimate from Suvedi, Bal Krishna, et al. Maternal Mortality and Morbidity Study 2008/2009: Summary of Preliminary Findings. Kathmandu, Nepal. Family Health Division, Department of Health Services, Ministry of Health and Population, Government of Nepal.

[3] Estimate from Family Planning, Maternal, Newborn and Child Health Situation in Rural Nepal: A Mid-term Survey for NFHP II, New ERA, September 30, 2009.

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[8] Family Planning, Maternal, Newborn and Child Health Situation in Rural Nepal…

[9] The Ministry recognizes the MDG 6 target of halting and reversing the trend of HIV prevalence among pregnant women aged 15-24 years. However, a data source is not yet available.

[10] 2008

[11] 2008

NHSP-2 will aim to raise the CPR by increasing BCC activities; micro-planning to target pockets of low use and unmet demand; ensuring all public health facilities offer at least 5 methods, and that district hospitals offer VSC all year; integrating family planning advice in other services to ensure that opportunities to offer timely family planning advice are fully utilised; and continuing public-private partnerships (PPP) to increase the availability of family planning services and supplies.

Safe Motherhood: There will be a further increase in the coverage of the safe motherhood programme. Community services delivered by female community health volunteers (FCHVs) will be scaled up, leading to further demand creation for institutional delivery. Facilities should have adequate budget provision to enable them to respond. Access to BEOC/CEOC facilities will continue to be extended and the programme planned in coordination with the training and deployment of staff teams to ensure that all of the requirements for CEOC are met. The SBA training strategy will be implemented, training 5,000 by 2012, and reaching full coverage (7,000) by 2015. Birthing units will be added to SHPs. Safe abortion services will be extended in remote areas based on the 6-district pilot, including medical abortion.

Child health and mother and child nutrition: Sustaining community-based Integrated Management of Childhood Illness (CB-IMCI) in all districts and maintaining and further strengthening immunisation coverage remain high priorities. Further reductions in under-five and infant mortality will be accomplished by scaling up community-based newborn care and by implementing a more comprehensive nutrition programme—a major focus of NHSP-2. The Ministry will expand existing micronutrient and de-worming programmes for pregnant women and preschoolers, and will also scale up de-worming in schools. The major new nutrition activities targeted at mothers and young children will include a pilot and scaling up of a community-based nutrition programme, expansion of community-based rehabilitation of acutely malnourished, and multi-sectoral actions.

Communicable Disease Control: Existing communicable disease programmes will be maintained. The Ministry will introduce an integrated disease surveillance policy and guidelines to monitor existing and new threats, such as new viruses and the impact of climate change on the geographical spread of vector-born diseases, as well as strengthen the capacity of public health laboratories. The Ministry will aim to eliminate or significantly reduce three neglected tropical diseases—lymphatic filariasis, soil-transmitted helminthes, and trachoma—that are responsible for high levels of morbidity but which are readily treatable.

Non-Communicable Diseases (NCDs) and Injuries: NCDs are now responsible for more than 44% of deaths and 80% of outpatient contacts. The main response will be to expand the prevention effort through BCC to encourage healthy lifestyles. The multi-disciplinary effort will also support BCC and consider regulation and taxation measures to, for example, encourage the use of seatbelts and helmets, and discourage smoking. As a response to the growing burden of road traffic accidents, emergency capacity will be strengthened in facilities near to major highways.

Mental Health: As recommended by WHO, and reflecting the high incidence associated with the legacy of conflict and gender-based and domestic violence, mental health services will be added to the EHCS package. There has been a dramatic increase in suicides among women of reproductive age such that it is now the leading single cause of death. The Ministry will integrate mental health within existing and future health and social programmes; develop a low-cost and sustainable district system to provide mental health promotion, prevention and treatment; improve the quality of mental health data from the Health Monitoring Information System (HMIS) and census data; and appoint a focal person for mental health within the Ministry.

Eye, Oral and Environment Health: In collaboration with non-state actors, the Ministry will add promotional and preventive eye care. Promotional and preventive oral health care will be introduced and scaled up in schools, and improved water, air quality, sanitation, hygiene, and waste disposal will be promoted with the assistance of other ministries and non-state actors.

Curative Care: The extension of free services in 2007-8 resulted in a 35% increase in OPD contacts. OPD contacts nevertheless remain relatively low at about 1 per capita, excluding consultations with pharmacists.

The Ministry presently makes available some limited support to meet catastrophic health costs requiring referral. The referral system will be strengthened, and support will be available for referral to non-state hospitals, which have over 66% of hospital beds.

Working with Non-State Actors

Private-sector pharmacies are widespread in Nepal providing diagnosis and examinations as well as drugs, and are a major recipient of out-of-pocket spending by all income groups. The rest of the private-for-profit sector is urban based and serves predominantly the better off. The for-profit private sector has over two thirds of the hospital beds and trains 90% of doctors. It remains heavily underutilised.

The not-for-profit sector is more broadly involved in partnering with the Government and in delivering EHCS. Although contracting out service provision and the management of facilities has progressed very slowly, there are existing partnerships of differing types in many areas of the sector. Examples include NGO management of Government hospitals, NGOs conducting family planning, safe motherhood, TB, and HIV/AIDS services, and the prevention and treatment of uterine prolapse.

Future directions will address clarifying PPP policy, further expansion of PPPs to provide services to underserved communities, encouraging the private sector to provide specialised services in rural areas, and implementing quality assurance and accreditation to private partners receiving public funds.

External Development Partners and Aid Effectiveness

Progress on the aid effectiveness agenda to which Nepal and EDPs have committed themselves through international agreements has been slow. Areas to be prioritized for faster progress in NHSP-2 are:

- More Ministry guidance on where non-pool EDPs should focus their support.
- Align EDP planning and approval cycles with the GoN budget cycle.
- Reduce transaction costs and rely on the SWAp planning and monitoring processes, minimise additional bilateral requirements, and conduct more joint missions, co-financing or "silent partner" arrangements.
- Prior Ministry agreement on all TA, and include an annual TA 'plan' to complement the AWPB.
- A strengthened SWAp management capacity in HSRU.
- A balanced partnership, with more attention in JARs to assessing EDP performance on aid effectiveness commitments.
- Improved longer term indications of support to facilitate planning through informal consultations if easier for EDPs.

Inter-Sectoral Coordination

The Ministry will ensure that multi-sectoral programmes are designed with key partners and there is effective inter-sectoral coordination and collaboration. A multi-sectoral approach will be adopted for both health and non-health interventions that promotes access to and utilisation of services. Effective mechanisms for inter-sectoral coordination and collaboration will be established.

Human Resources

Deployment and retention of human resources (HR) is a major problem in the health sector. NHSP-2 will address the problems of fragmented HR management and incomplete HR information, and will revisit the skill needs for achieving the goals of NHSP-2. The current public workforce has increased only 3% while the population grew 35%, and about 25% of the workforce is unskilled. The Government aims to continue with ongoing programmes to upgrade the skills of the workforce. A modest first step is being taken towards a more multi-skilled workforce able to operate more integrated services. A cadre of public health supervisors is currently being trained to gradually replace more narrowly trained supervisors working in specific vertical programmes.

Staff attendance and motivation problems also need to be addressed. Although there is spare capacity, some form of incentive may nevertheless be needed, because the higher productivity required of staff as utilisation increases will reduce the time available to staff for private practice, and will have financial consequences for them. Problems of social exclusion will be addressed by allocating more staff to underserved areas, and recruiting them from marginalised groups.

Physical Investment

Future physical investment will be focused on underserved locations, with increased attention to optimal location for serving the catchment area and poor and excluded, which may require re-consideration of the policy of only building on donated land. The main effort will be to continue with the facility upgrading programmes (CEOC in all district hospitals, birthing units in all health and sub-health posts, upgrading district facilities in locations most likely to increase access by the poor and excluded).

Financial Management

Problems in financial management include slow disbursement, lower than desirable efficiency and effectiveness in budget implementation, and a generally weak control environment. The Ministry has been addressing the problems by implementing a financial management improvement plan from March 2008, now incorporated in the governance and accountability action plan. There has been progress in some areas, for example the rate of budget execution has improved.

During NHSP-2, the Ministry will focus on timely distribution of grants to health facilities; alternative assurance arrangements such as social and performance audits; implementation of transparency and disclosure measures; capacity development supported by technical assistance; and general systems development and integration at central, district and facility levels.

Procurement

The timeliness and value for money from Ministry procurement activities will be improved by:

- Mandatory submission of procurement plans with proposed budgets, not after budget approval.
- Standardisation of specifications.
- Building capacity in procurement, with a specialist procurement cadre at all levels to provide a career path. Training on the 2007 procurement act and procurement procedures offered to bidders too.
- Improved transparency, complaints handling, e-bidding.
- Improved budget estimates to reduce the risk of cancelled tenders, combining orders into larger packages, increased use of multi-year contracts.
- Central bidding and local purchasing for essential drugs, to address disparities in price, quality and quantity of medicines districts procure.
- Improvements to storage, vehicles, transport budget to ease distribution problems in the districts.
- Improved quality control of drug procurement, with improved capacity of DDA and LMD to test quality on site, and PPP with private sector laboratories for testing of health commodities and drugs.

Governance and Accountability

Measures to make services more client-centred and accountable to those they serve, with a particular focus on the poor and excluded, will include:

- Participatory planning, social and public audit, mandatory public hearings to strengthen accountability at local level.
- Capacity building of local health management committees, with clearer financial management procedures.
- Implementing a 3-5 district pilot on Strengthening Local Health Governance, to develop a more integrated and locally accountable approach to health sector planning and management, with a view to expanding to more districts.
- Building on existing policy forums at national level (e.g. Health Sector Decentralization Policy Forum and others) and involve civil society organizations in policy discussions, in order to strengthen voice, transparency and accountability.
- Continue documenting local innovations, learning and best practices of local health management committees.
- Regular and timely public disclosure activities through the Ministry's website, radio/TV, newspapers, performance auditing, and annual progress report among other activities.

Costs and Financing

In the middle scenario, the Ministry would spend an additional $2.80 at 2009-10 prices and would be able to expand and scale up cost-effective health interventions that are capable of saving an additional 45,000 lives cost-effectively.

Monitoring and Evaluation

HMIS produces detailed service data, disaggregated by age and gender. The accuracy is broadly confirmed by survey-based estimates. HMIS data are supplemented by regular surveys for information not obtainable from facility reporting–health seeking by socio-economic characteristics, user satisfaction, human resources in place, detailed budget and expenditure analysis to explore efficiency, effectiveness, and accountability issues.

Future directions during NHSP-2 will include:

- Ensure all NHSP-2 results matrix indicators have baseline and means for tracking progress.
- NHSP indicators and targets to inform performance reviews at all levels.
- Ensure that analysed HMIS data reach and are used at facility and district levels.
- Review HSIS [pilot] of disaggregation by caste/ethnicity, consider whether to take to national scale or continue to rely on surveys.
- Mandatory annual social audit at each level.
- Additional ad hoc surveys, for example, on women's health-seeking behaviour.
- Stronger analytical capacity at the Ministry (strengthen HEFU).

1. Introduction

1.1 Long-term trends in health status and inequality

During the past two decades, amidst profound political change and instability, and with a largely poor, rural population living among formidable natural barriers to public services, Nepal has taken initiatives that have achieved significant reductions in both child and maternal mortality, while significantly improving equity of access to health services, beginning to reduce the extreme disparities between the poor and non-poor, and to improve the access of the marginalised castes and ethnic groups.[12] The improvement in the relative health status of the poor and marginalised is notable because it has taken place in a context in which the incidence of poverty decreased markedly from 41% to 31 % between1996-2004, but the overall disparity between rich and poor has increased. The wealthiest consume eight times more than the poorest, and 3 of 10 Nepali citizens remain below the poverty line.

Progress is being made, but there is a long way to go. Although deaths of children under five years of age have decreased by 48 percent in the past 15 years, in 2010 six of 100 children are likely to die before their fifth birthday. Deaths of infants have declined by 41 percent, but 5 of 100 babies still die before their first birthday. Deaths of new born babies during the first month of life have decreased by 33 percent, but 3 percent of babies die during their first month of life. Maternal mortality has declined by 48 percent in the last decade, but 42 women are dying each week due to child bearing related problems. Although the situation has improved since 2001, Nepal remains one of the most malnourished countries in the world, with nearly half of under five year olds stunted, indicating early chronic malnutrition. This reduces survival chances, causes permanent impairment of physical and cognitive development, and perpetuates poverty by reducing their achievement in school and their future earnings.

Utilisation of health services has increased and has been associated with a reduction in inequality for many services and for some health outcomes, but progress has been uneven and severe inequalities remain. Disparities between castes, ethnicities, and wealth quintiles have decreased in contraceptive use, childhood immunisation, diarrhoeal disease control, and treatment for acute respiratory infection. Differences between castes, ethnic groups, and wealth quintiles in birth weight or size at birth have also diminished. Differences in under-five and infant mortality rates between castes, ethnic groups and wealth quintiles have decreased. However, disparities in maternity care increased for much of the period – although recent policy initiatives have begun to close the gaps. The wealthiest women are still 12 times more likely to use a trained health worker during delivery than the poorest. At the same time, differences in neonatal mortality rates between Brahmins/Chhetris and Dalits, and between Newars and Janajatis have increased.

[12] RTI International, 2008. Equity Analysis of Health Care Utilization and Outcomes. Research Triangle Park, NC, USA .

1.1.1 Health Policy

The Government of Nepal's National Health Policy of 1991 has sought "to upgrade the health standards of the majority of the rural population by strengthening the primary health care system and making effective health care services readily available at the local level." Access to essential health care services (EHCS) was increased by establishing health posts in villages and an extensive work force of female community health volunteers. The Geography of Nepal poses serious challenges in delivering health services to all. In the Mountain Region, 4 of 10 individuals have to travel 1-4 hours to reach the nearest health or sub-health post. In the Hill Region, 3 of 10 individuals have to travel 1-4 hours to reach the nearest health or sub-health post.

A large number of health institutions were established by the private sector to train health care professionals, and the number of private hospitals grew quickly thereby greatly expanding secondary and tertiary care in urban areas. Nepal's pharmaceutical industry also grew in the last twenty years and now produces one-third of the national requirement for medicines.

In 2004, the Government of Nepal (GoN) introduced a "Health Sector Strategy: An Agenda for Reform" and the first "Nepal Health Sector Programme 2004-2009". Recognising that external development partners finance over 40% of public-sector health expenditure**,** Government adopted a Sector Wide Approach (SWAp) for NHSP, to improve aid effectiveness by coordinating the efforts of Government and External Development Partners (EDPs) in support of a single Government-owned and led programme that aimed to put the country on track to achieve the 2015 Millennium Development Goals for health.

With the popular people's movement of April 2006 came a period of transition that led to an Interim Constitution, electing a constituent assembly, and formation of a federal republic of Nepal. The Interim Constitution established the right of all Nepali citizens to free basic health services, the right to a clean environment, access to education and a means of livelihood, in a social environment free of discrimination and institutionalized inequality.

1.1.2 Federalism and the Health Sector

Whatever form of federal system Nepal will adopt in its new constitution (expected by mid-2010), the need for preparing the country's institutions for the transition to federalism has already arisen. Notably, the federal structure will affect every area of the health system, from planning to service delivery and overall health governance. However, basic elements of structure and level of governance have not been defined by the Constituent Assembly yet. Therefore, at this time the future functions of different levels of government are yet to be decided.

1.2 Rationale for NHSP-IP 2

The second five-year health sector programme will continue to build on the successes of the first six-year programme, and begin to address the remaining constraints to increasing access

and utilisation of essential health care services, with a particular focus on continuing to address the remaining disparities between the wealthier population and the poor, vulnerable and marginalised populations. The achievements to date have depended heavily on financial and technical support from the EDPs. Government will continue to increase domestic financing of health services, but sustaining and building on the achievements of the health sector will require the generous level of support from the EDPs to be sustained and increased. Nepal has so far been successful in turning the support that has been provided by EDPs into substantial improvements in the health status of the population. This plan will give careful attention to further improving health systems and achieving efficiency improvements. The Ministry is determined to maximise the health benefit of every rupee that is spent and to thereby ensure that Nepali taxpayers and external development partners continue to be convinced that NHSP-IP 2 represents an excellent use of scarce resources.

2. Review of NHSP-IP (2004-2010)

2.1 Review of Nepal Health Sector Program-Implementation Plan 1

2.1.1 Budget and Expenditures

The Government consistently increased the health sector's budget during NHSP-IP1, from NRs. 6.5bn (US$88mn) in 2004-5 to NRs. 17.8bn (US$228mn) in 2009-10. As a share of the national budget, it increased from 5.87 percent in 2004-5 to 7.16 percent in 2007-8. Health spending continued to grow rapidly to 2009-10, but the share declined in the two subsequent years to 6.33 and 6.24, reflecting rapid growth of the total budget rather than any lack of commitment to the health sector. The Ministry succeeded in raising actual spending as a share of the rapidly increasing health budget from 70 percent in 2004-5 to 85% in 2008-9, exceeding the NHSP-IP target of 'at least 80%.'

The allocation of the budget has also improved. The share of essential health care services increased from 65% of the health budget in 2004-5 to75% in 2009-10, in line with the 'high scenario' share envisaged in NHSP-IP 1. More funds have been distributed to the 75 districts and less to the centre during the past five fiscal years. Last year districts received about half of the health budget (49.5%) directly or indirectly from central funds. Over the past three years, 20 percent of the health development budget was allocated to child health, and Nepal is on track to achieve MDG 4. The budget allocation for maternal health and to achieve MDG 5 has increased significantly during the past 3 years, from 9 percent to almost 15 percent of a growing health development budget.

2.1.2 Reduced Mortality and Morbidity

The available evidence from several surveys using different methodologies all points in the same direction. GoN has met or exceeded the targets for child and maternal mortality reduction that were set in the NHSP-IP 1, and is on track to achieve MDG 4 and MDG 5 (Table 2.1). The total fertility rate has also declined rapidly, from 4.1 births per woman to 3.1 between 2001 and 2006, and the increase in contraceptive use is one of several factors that explain the dramatic decline. A survey of rural communities in 40 districts conducted by the Nepal Family Health Program (NFHP) and New ERA in 2009 shows the TFR down to 2.9. TB and malaria both show declining incidence. The only less positive note is that acute malnutrition (wasting) appears to have increased since 2006, although the proportion of children who are stunted due to chronic malnutrition has continued to decline though it continues to affect 45% of rural children.

A year-long study by the Family Health Division starting April 2008 validated the dramatic decline in the Maternal Mortality Ratio (MMR) reported by the NDHS in 2006. The study revealed an MMR of 229 per 100,000 live births in eight districts representing Nepal. Maternal causes now account for only 11 percent of all deaths of WRA.

The 2009 NFHP mid-term survey of 40 districts also affirmed continuing reductions in infant and under-five mortalities and increased utilisation of reproductive and child health services. The 40 district survey of Nepal's rural communities in 2009 shows infant mortality reduced to 41per 1,000 live births in 20 intervention districts and to 35 in the 20 control districts. Under-five mortality is reported to be 50 per 1,000 live births and 40 in the intervention and control districts, respectively. Surprisingly, the survey also shows neonatal mortality significantly decreasing to 20 per 1,000 live births in the intervention districts and to 24 in the control districts, although interpretation of the results should be made cautiously because of the few cases found in the survey.

Table 2.1: Achievements for NHSP 2004-2010 and Targets for NHSP 2010-2015

MDG/Impact Indicator	Achievement					Target	
	1991	1996	2001	2006	2009[13]	2010-11	2015
Maternal Mortality Ratio	539	539	415	281	229[14]	250	134
Total Fertility Rate	5.3	4.6	4.1	3.1	2.9[15]	3.0	2.5
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CPR (modern methods)	24	26.0	35	44	45.1[16]	48	55
Under-five Mortality Rate	158	118.3	91	61	50[17]	55	38
Infant Mortality Rate	106	78.5	64	48	41[18]	44	32
Neonatal Mortality Rate		49.9	43	33	20[19]	30	16
% of underweight children		49.2	48.3	38.6	39.7[20]	34	29
HIV prevalence among pregnant women aged 15-24 years[21]	NA	NA	NA	NA	NA	Halt and reverse trend	
TB case detection and success rates (%)	NA	48 79	70 89	65 89	71[22] 88[23]	75 89	85 90
Malaria annual parasite incidence per 1,000	NA	0.54	0.40	0.28	NA	Halt and reverse trend	

Source: Nepal Family Health and Demographic and Health Surveys 1991, 1996, 2001, 2006. 2009 estimates from Maternal Mortality and Morbidity Study in 8 districts and Mid-Term Survey for NFHP II of family planning, maternal, newborn and child health.

2.2 Output 1: Increased Access to and Utilisation of EHCS

Analysis in the 2007 mid-term review showed that most of the reduction in child mortality, and a significant share of the reduction in maternal mortality can be explained in large part by the success in expanding coverage of health interventions. Table 2.1 shows that the Ministry met or exceeded nearly all of the coverage targets by 2009.

[13] Achievements for 2009 should not be construed as trends. The sources are not necessarily nationally representative and the estimates may not be significantly different from 2006 estimates.

[14] Estimate from Suvedi, Bal Krishna, et al. Maternal Mortality and Morbidity Study 2008/2009: Summary of Preliminary Findings. Kathmandu, Nepal. Family Health Division, Department of Health Services, Ministry of Health and Population, Government of Nepal.

[15] Estimate from Family Planning, Maternal, Newborn and Child Health Situation in Rural Nepal: A Mid-term Survey for NFHP II, New ERA, September 30, 2009.

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[20] Family Planning, Maternal, Newborn and Child Health Situation in Rural Nepal…

[21] The Ministry recognizes the MDG 6 target of halting and reversing the trend of HIV prevalence among pregnant women aged 15-24 years. However, a data source is not yet available.

[22] 2008

[23] 2008

Immunisation coverage met or exceeded the targets. By 2006, childhood immunisation by all basic vaccines exceeded 80 percent nationwide. The 2009 NFHP survey also reports 83.5 percent of children age 12-23 months received all basic vaccinations, which suggests a higher national average that would include urban areas. DPT3 coverage was 89.8 percent and measles was 85.6 percent in the rural areas of 40 districts.

The chosen indicator for utilisation of EHCS at health and sub-health posts does not adequately capture the full impact of the expansion of IMCI. IMCI includes training of health personnel to combat major killer diseases of children. It has been extended to community-based IMCI by training female community health volunteers (FCHVs) and traditional healers. By the last fiscal year (2008-09), the IMCI programme covered all 75 districts.

IMCI has proved to be effective in improving child health by reducing morbidity and mortality in an effort to achieve MDG 4. Acute respiratory infections among children dropped to 5 percent from 23 percent in 2001 and from 34 percent in 1996. By 2009, ARI symptoms among children under age five decreased since 2006 from 5.5 percent to 4.4 percent, and in NFHP's 20 intervention districts prevalence has decreased to 3.4 percent. The percentage for which treatment was sought from a health facility or provider has increased dramatically from 36.1 percent in 2006 to 54.4 percent in 2009. More children were treated for diarrhoea and knowledge of ORS among women who delivered in the past five years became universal.

Nutrition interventions have been significantly scaled-up to address 3 major micronutrient deficiencies, namely vitamin A, iron and iodine among children and women. Vitamin A supplementation is almost universal with the involvement of FCHVs. Sixty-four districts have been covered with an iron distribution programme for pregnant women, and consumption of adequately iodized salt by households has reached 77 percent. Malnutrition is posing a significant public health problem among children under five and women of reproductive age. Piloting evidence-based, cost-effective, community-based interventions to improve their nutrition have been initiated.

NFHP's 2009 mid-term survey shows almost 29 percent of births were attended by SBAs, exceeding the NHSP-1 target, and up from 17.4 percent in 2006, and deliveries in health facilities were 27 percent, up from 17 percent. More pregnant women are using antenatal care in 2009 than reported in 2006. Only 39 percent of pregnant women in rural communities in 2006 were availing of antenatal care from a doctor, nurse or midwife but 48 percent did so by 2009.

These improvements reflect the impact of a major Government programme to reduce the MMR. Almost 1,000 Skilled Birth Attendants (SBAs) have been trained to assist deliveries in institutions and at home, and almost 200 basic emergency obstetric sites open 24 hours a day have been established in the past 4 years. In February 2005, the Government of Nepal initiated a maternity incentive scheme, later renamed the Safe Delivery Incentive Programme, a demand- and supply-side financing scheme designed to promote maternal health and to achieve MDG 5. In February 2009, delivery services were declared free by the GoN in all public-sector health facilities and partner health facilities and free delivery services, together with the incentive programme, was renamed the "Aama" Programme.

Safe abortion services have also contributed to reducing the number of maternal deaths by reducing unsafe abortion. Abortion was legalized in 2002 by parliament with an amendment to the civil penal code that criminalized medical abortion. Safe abortion services were scaled-up in a very short time and services are now available at 240 sites in 75 districts, and 280,000 women have utilized safe abortion services. The "partnership approach" to expanding services was the main strategy behind the development of a national network of services.

The NFHP mid-term survey of rural communities reported a 1 percent increase in modern method use since the 2006 NDHS, but the contraceptive prevalence rate of 45% in 2009 is below the target of 48% to be achieved by 2010. However, the figures are distorted by the large numbers of migrant workers living away from home. For married women age 15-49 who are living with their husbands, modern contraceptive method use was reported in 2009 to be 55.5 percent.

Tuberculosis (TB) is a major public health problem in Nepal. About 45 percent of the total population is infected with TB, of which 60 percent are adult. Every year, 40,000 people develop active TB, of whom 20,000 have infectious pulmonary disease. Treatment by Directly Observed Treatment Short course (DOTS) has been successfully implemented throughout the country since April 2001. The NTP has coordinated with the public sectors, private sectors, local government bodies, I/NGOs, social workers, educational sectors and other sectors of society in order to expand DOTS. By July 16, 2008, DOTS had been expanded to 1,079 treatment centres with 3,147 sub-centres. The treatment success rate stood at 88.1% and case finding rate of 71.39%. These rates are short of the national target, but exceed the global targets of diagnosing 70 percent of new infectious cases and curing 85 percent of these patients. If the current performance of the DOTS programme can be sustained, nearly all of the 5,000-7,000 annual deaths from TB can be prevented, avoiding up to 30,000 deaths over the next five years.

HIV/AIDS remains a concentrated epidemic but with high potential risks via low coverage of high-risk groups with prevention messages, with the large migrant worker population a particular concern. Knowledge of means to prevent HI|V/AIDS among young women seems to have improved and to exceed the target, judging by the high percentage of respondents to the 40 district survey who were able to identify means to prevent transmission (condoms, faithfulness to an uninfected partner, abstaining). Government spends less than the somewhat arbitrary 15% of budget target, but there is also significant EDP and NGO spending outside the Ministry and outside Government. Anti-Retro Viral therapy has been provided free of cost by 21 hospitals to 3,424 persons living with AIDS. The number of voluntary counselling and testing centres number 179 in 65 districts. The prevention of mother to child transmission scheme has been implemented in 17 hospitals and an increasing number of HIV-positive women have enrolled in the scheme. There are 13 CD4 count centres in the country to support ARV therapy. The Government gets support for surveillance, policy development, prevention, care and treatment, improving the capacity of public and private sectors to deliver services, and quality assurance for the national HIV/AIDS supply chain and logistics management. USAID will support private-sector partnerships to lay the foundation for a long-term, self-sustaining condom market in Nepal.

Reduced Disparities of Access and Utilisation

The NHSP-IP 1 document gave little emphasis to tackling poverty and social exclusion, and lacked targets or indicators to monitor progress in improving access by the poor and marginalised. This lack of emphasis has been addressed during implementation, and significant gains have been made in reducing inequalities in access to and utilisation of family planning and child health care services between castes and ethnic groups, as well as between poor and wealthier citizens in Nepal. Inequalities have fallen among castes/ethnic groups, except Muslims, for contraceptive use. Inequality in the use of immunisation services has decreased between caste/ethnic groups over the last decade. There is virtually no inequality among ethnic groups in the incidence of diarrhoea. Inter-caste/ethnic equity in the treatment of ARI has improved. The trends in the under-five and infant mortality rates by caste/ethnic group show a sharp decline among the most disadvantaged ethnic group. The proportion of low birth weight or smaller than average children at birth has decreased by 20 percent among the poorest.

Free to user health care policies have progressively expanded their scope during NHSP-IP 1, in order to reduce barriers to access by the poor and marginalised. Essential health care services related to maternal health, child health and control of communicable diseases have been free for a long time. Today, essential health care services at health and sub-health posts and Primary Health Care Centres are free of charge to all. At district hospitals, outpatient, inpatient and emergency services are free of charge to poor, vulnerable, and marginalised groups, including medicines, and 40 essential medicines are free of charge to all. Institutional deliveries are free of charge to all women nationwide.

The changes appear to have been successful in increasing utilisation by the poor and disadvantaged groups. Disadvantaged groups used outpatient services more than proportionately to their population share, and used inpatient services at least in proportion to their share in the population during 2 trimesters in 2008. More women appear to be using inpatient care for deliveries as a result of the safe delivery incentive programme, and the increase is greater among the poor, albeit starting from a very low base. The Ministry’s first three trimester health facility surveys have shown utilisation of services to Dalits proportionate to their populations. Institutional deliveries—normal, complicated or caesarean section—also became free of charge in all government facilities in 2009.

Some disparities persist. Disparities have increased between the advantaged and disadvantaged for antenatal care. Visits by the wealthier have increased much more rapidly. Utilisation of antenatal care has increased to 18 percent among the poorest but to 84 percent among the richest. The 2009 survey of 40 districts shows the share of deliveries attended by an SBA nearly doubling between 2006 and 2009, with the moderately poor (second wealth quintile) showing the fastest rate of increase. However, only 8.5% of the lowest wealth quintile has an SBA at birth compared to 58% for the richest.

2.3 Output 2: Decentralised Management of Health Facilities

About 58% of the Ministry's budget is allocated directly to district programmes (FY 2009/2010). However, not much progress has been made decentralising management of health facilities and involving local bodies in planning health services in districts. An absence of elected officials has precluded local bodies forming for such purposes. Also, a plan to develop work plans for 14 proposed devolved districts was not carried out.

The Ministry handed over 1,433 local health institutions (health and sub-health posts and PHCCs) in 29 districts to local health management committees though 2004/2005. However, the process was halted because of a lack of political will and commitment. A total of 17 district hospitals were granted increased autonomy under a management board. In total, 52 of the 88 public hospitals of all types have semi-autonomous status, although the extent of their autonomy varies.

The Ministry designed and approved 'Strengthening Local Health Governance Programme' (a pilot programme) to be implemented in 3-5 districts from current fiscal year, which includes provisions and mechanisms to provide formula-based health grants to pilot districts.

2.4 Output 3: Public-Private Partnerships

The NHSP-IP vision was of a sector in which the Ministry would gradually retreat from service delivery, making more use of public private partnerships to ensure services are delivered. In practice, Government has continued for the most part to deliver the services that it finances, but has used PPP approaches where they offer clear advantages. The issue is discussed in more detail in chapter 5.

2.5 Output 4: Sector Management

Institutional arrangements for sector-wide policy dialogue and joint planning and monitoring have been put in place, although aid effectiveness has not improved to the extent that was hoped (see chapter 6). Progress has been made towards decentralising the budget, but there has been less progress in the aim of deconcentrating real management authority to districts. The Ministry developed an electronic Annual Planning and Budgeting system (*e*-AWPB) for enhanced programming and budgeting to achieve its national targets and MDGs, and reduce the external development partners' fiduciary risk. Ministry staff were trained use the new *e*-AWPB database software. Each Ministry Section and Department of Health Services Division used the new technology to programme and budget for FY 2009/10.

A Decentralisation Forum was established in 2007 to guide policy making, strategy development and decentralisation activities. As reform activities progressed during NHSP-1, more funds have been sent to districts to manage and implement health care services. During the last two years of NHSP-1, direct allocations to the districts increased from 27 percent to 34 percent. In addition, central funds are disbursed to districts such that 58 percent of the budget in 2009/10 was for districts.

A pilot study in 5 districts will begin in late 2009/10 or early in the next fiscal year. It will identify public health functions most relevant to district and local governments, and health management committees and facilitate restructuring the Ministry and Department of Health Services.

2.6 Output 5: Sustainable Financing of the Sector

At the onset of the first NHSP it was expected that local bodies and communities should finance a larger share of health costs and that the private sector would increase its financial contribution. However, the Government proceeded rapidly to abolish user fees for target groups to receive emergency, inpatient and outpatient care at district hospitals free of charge and to expand universal free care, including essential drugs, at peripheral facilities and primary health care centres. By 2009, essential health care was free for all at health and sub-health facilities and at primary health care centres. Services at district hospitals were free for targeted groups representing the poor, vulnerable, and marginalised people. Drugs at the peripheral facilities were free and 40 selected essential drugs at primary health care centres and district hospitals were free. Institutional deliveries were also made universally free of charge at all public hospitals.

2.7 Output 6: Physical Assets management and Procurement of Goods

Procurement issues are discussed in chapter 6.5. In brief, procurement problems continue to be experienced, especially for essential drugs. Drug procurement has been affected by delays in the annual budget approval process and transfer of funds and responsibility to district health offices inexperienced in the procurement process. Stock outs have risen significantly in 2008 and 2009, and problems of local procurement of over-priced drugs have been experienced. Seventy-five percent of health and sub-health posts had stock outs between March 2008 and March 2009.

To correct the problem, the Ministry developed a new drug procurement scheme in 2009 in which manufacturers and suppliers are prequalified and prices are fixed centrally for local purchasing. The drug policy is designed to ensure only quality drugs are purchased locally at bulk prices and are readily available at district facilities. Guidelines were prepared and approved by the Cabinet.

2.8 Output 7: Human Resources for Health

Human resource management has improved since the NDF 2004 meeting, but challenges still remain. A study carried out in 2006 by the Ministry showed that 76 percent of health personnel posts were filled in comparison to sanctioned posts. The main problem of human resources is deployment and retention of physicians and one category of nurses in peripheral health facilities. However, there is a problem of deployment and retention of all categories of health personnel in the high mountain districts.

The Ministry has implemented a two-year compulsory service scheme for physicians who studied under the scholarship scheme of the GoN, and to date 280 medical doctors in the

scheme have joined the Department of Health Services to work in peripheral health facilities. To improve maternal health, 1,000 maternal and child health workers working in sub-health posts enrolled in an 18-month ANM course, all have graduated, and are now posted at their respective duty stations. The vacant posts of MCH workers and assistant nurse midwives have been filled by contractual services in many districts. To improve the biomedical equipment maintenance system, a one-year biomedical equipment technician course has been developed and 90 technicians have graduated in four batches.

2.9 Output 8: HMIS Improvements

Nepal has an excellent HMIS that produces a range of detailed service delivery information unrivalled in the region. The HMIS data have been supplemented by a range of regular household and facility surveys that yield data that can not easily be collected from routine reporting, including shedding light on inequality of utilisation of services and collecting views on the quality of what is provided. Household and service delivery data confirms the overall accuracy of the HMIS data that is collected. The HMIS data is regularly compiled, reported, and reviewed at regional and national level. The main weaknesses in the system are the lack of good and timely data on human resources.

A pilot study on disaggregating health services data by age, gender, caste, ethnicity and religious minority was initiated in core program areas of three districts in 2009. The availability of the disaggregated data will help the Ministry analyse access to and use of EHCS by the poor, vulnerable and marginalised, and help in designing interventions to better serve them.

2.10 Lessons from EHCS Experience

NHSP-IP 1 has proved highly successful in achieving improvements in health outcomes and services by concentrating the bulk of a small but rapidly growing budget on financing essential health care services of proven cost-effectiveness, mostly delivered via the public sector and increasingly provided free of cost to the user. The **initial** vision of a system that would rely increasingly on user contributions with targeted subsidies to protect the poor was abandoned in favour of free to user services, a decision that has been vindicated by the substantial increase in the utilisation of services by those who were previously marginalised. Similarly, public private partnerships have been used where they can best contribute, but there has been no dogmatic insistence on Government retreating to a stewardship role. It is difficult to argue with a track record that, in terms of outcomes and service delivery targets, has proved an almost unqualified success.

A major lesson is that pragmatic adaptation in the light of evidence of what works has served Nepal well. The current plan is therefore not a blueprint, and will be adapted and adjusted in the light of evidence. Some clear service delivery and policy priorities emerge from the experience. One implication of the success that has been achieved is that the next NHSP-IP needs to focus from the beginning much more on inequality, bringing the services and interventions that have saved so many lives to those mainly poor and marginalised groups that have yet to benefit. It will also be important not to lose sight of the need to sustain the results that have been achieved,

which requires EDPs to sustain and increase their support until economic growth enables Nepal to finance universal access to essential health care services from domestic resources.

Success brings change, and the health problems going forward are in significant respects different from those faced under NHSP-IP 1. Nepal has already exploited many (though not all) of the most cost-effective interventions for reducing mortality and morbidity. The next reductions will be more expensive and more difficult to achieve. Further reductions in neo-natal and maternal deaths will require a functioning health system able to respond to emergencies 24/7. Tackling nutrition will require a multi-sectoral approach. The burden of disease is changing, and the population will increasingly demand quality curative services for non-communicable diseases. This is an area where public private partnerships and alternative financing mechanisms may have more of a role to play. At the same time, technology will continue to change, and developments that have made it possible for FCHVs to treat problems that were previously the province of physicians will continue to be made, and Nepal needs to continue to be alert to new ways of tackling old problems.

The best practices of the family planning programme during NHSP-1, such as ensuring services 24/7 by making providers and commodities readily available, promoting choices, expanding services through CBOs and FCHVs, institutionalising services at referral hospitals, adapting the cafeteria approach to service delivery, and promoting the role of the private sector in delivering services will be capitalised on and maintained during NHSP-2.

The best practices of the safe motherhood programme, such as promoting equity and access to maternal and newborn care in remote areas, encouraging pregnant women to deliver in institutions, abolishing user fees and implementing a safe delivery incentive programme,, joint planning and review with I/NGOs, building referral linkage, integration of PMTCT with maternal care, and social auditing will be continued during NHSP-2 as well.

The best practices of the child health programme such—treating pneumonia cases by FCHVs and community participation in communicable disease control—will also be continued over the next five years.

3. Vision, Mission, and Strategies for the Health Sector

3.1 Vision Statement for Health Sector

The Ministry's vision or goal of the health sector is to improve the health and nutritional status of the Nepali population and provide equal opportunity for all to receive quality health care services free of charge or affordable thereby contributing to poverty alleviation.

3.2 Mission Statement

The Ministry will promote the health of Nepal's people by facilitating access to and utilisation of essential health care and other health services, emphasising services to women, children, poor and excluded, and changing risky life styles and behaviours of most at-risk populations through behaviour change and communication interventions.

3.3 Value Statement

The Ministry believes in

- Equitable and quality health care services;
- Patient/client centred health services;
- Rights-based approach to health planning and programming;
- Culturally- and conflict-sensitive health services; and
- Gender-sensitive and socially inclusive health services.

3.4 Strategic Directions

For the Ministry to achieve its three objectives for the second NHSP, it will embrace the following key directions.

- Poverty reduction
- The agenda to achieve the health MDGs by 2015
- Essential health care services free to patients/clients and protection of families against catastrophic health care expenditures
- Gender equality and social inclusion
- Access to facilities and removal of barriers to access and use
- Human Resource Development
- Modern Contraception and safe abortion
- Disaster Management and Disease Outbreak Control
- Eradication, elimination, and control of selected vaccine preventable diseases
- Institutionalising health sector reform
- Sector-wide approach: improved aid effectiveness
- EDP harmonisation and International Health Partnership
- Improved financial management

- Inter-sectoral coordination, especially with MLD and Education
- Local Governance: devolution of authority
- Health systems strengthening, especially monitoring and evaluation

For the Ministry to increase access to and use of EHCS and achieve the health MDGs by 2015, it will implement a number of major strategies and activities, and measure progress made towards targets by outcome indicators (see results framework in Annex 1). These strategies will be implemented to achieve several outcomes as measured by reduced mortality rates, including reduced neonatal, infant and under-five mortality rates, the maternal mortality ratio and the total fertility rate. Data related to intermediate indicators, as well as the outcome indicators, will be disaggregated by gender, caste/ethnicity, wealth and region.

3.5 Issues and Challenges

In 2008, UNDP ranked Nepal 142 of 177 countries on the Human Development Index. Life expectancy was 63 years in 2006. Adult literacy was 55.2 percent but only 45 percent among the deprived. Political instability, exacerbated by the economic crisis, rising food prices, constant power outages, street demonstrations and general lack of law and order, constitutes the health sector's backdrop of the recent past and, most likely, for the foreseeable future. There have been major accomplishments in a short time but there is much to be done if Nepal is to achieve its health sector goals and the MDGs.

The Government alone cannot reach the remote rural communities and deliver more basic health services, especially to the poor and excluded, without partnering with the NGO community. Failing to deploy and retain health care providers, particularly doctors and nurses in remote areas, persists and will continue to damage quality of care at PHCCs and district hospitals. Posting teams at district hospitals for comprehensive emergency obstetric care must be pursued if Nepal is to continue reducing maternal mortality. Logistic management, especially procurement of quality drugs at bulk pricing, distributed to facilities based on consumption nationwide, must be improved to reduce stock outs of essential drugs. Maintaining and procuring equipment for district hospitals must also be a high priority. New schemes to solve both problems are underway.

Access to health care facilities continues to be a problem in rural areas, especially for the most disadvantaged. They are too few in number and often not built at a location likely to provide access to those who need care the most. New construction is costly and time consuming. Building standards need to be established.

There is some evidence that local management of health facilities is improving health care but the local bodies have little capacity to govern and manage. Minimum standards will need to be developed and local committees oriented. Supervision by district health office will become more critical to delivery, as will monitoring of pro-poor programmes.

We will continue to be challenged to improve access to health care, the quality of health care services, and decrease health disparities in utilisation of health services. Public funds will be more and more consumed by the burden of non-communicable diseases, injury and violence,

as will funding for expanding prevention, care, and treatment for populations most at risk of HIV infection.

Learning to partner more effectively with the private health sector and utilising its growing resources for training and expanding coverage of public programmes will take time because, to date, it is unregulated.

4. Description of Programmes and Services for NHSP-IP 2

4.1 Essential Health Care Services

The three objectives set out in the results framework are:

- To increase access to and utilisation of quality essential health care services
- To reduce cultural and economic barriers to accessing health care services and harmful cultural practices in partnership with non-state actors
- To improve the health system to achieve universal coverage of essential health services.

Government assumes responsibility for ensuring that these three objectives are met for the defined essential health care services package, because universal coverage will not be achieved if left to the market. EHCS (see Table 4.1) include services that the market will not provide sufficiently because the costs can not be recovered by charging for them, such as public health campaigns, or because benefits are broader than to the individual directly receiving the service, such as immunisation. It also includes some services that are only profitable for the private sector to provide at prices many people cannot afford. The services included in the package are those that are the most cost-effective—that have the biggest potential impact in reducing mortality per rupee spent.

The focus of the three objectives is on extending and sustaining coverage of EHCS. Although impressive progress was made during NHSP-IP 1 in extending the coverage of essential services, access and utilisation is far from universal, and a significant though shrinking share of the population is still not covered by some of the most effective life-saving interventions. The task of NHSP-2 is therefore to continue to increase the proportion of the population benefiting from the existing EHCS package of services, with a particular focus on all women receiving reproductive health services and the poor and excluded gaining access to essential services and utilising the services as do the wealthier and advantaged households.

Supply-side constraints to the delivery of quality EHCS, with a particular focus on planning how best to reach those populations that have previously not had good access to services must be overcome. Services will need to be brought closer to more remote communities, ensuring that necessary drugs and supplies and sufficiently trained and motivated staff are available, and making services more results focused and accountable to the population.

Demand-side constraints to the utilisation of services that are available should be reduced. This partly involves reducing the cost barrier to accessing services through the extension of free EHCS, and through support to help meet transport and other costs for accessing services. It also involves action to tackle other factors that prevent people from using services, including improving knowledge, and helping to empower women and socially excluded groups to demand the services which, under the interim constitution, they have a right to receive.

There are inevitably pressures to expand the range of services offered within the EHCS package. With the limited availability of financial and human resources, additions to the EHCS package come at significant opportunity cost, with addition of a new service implying fewer resources available for extending the coverage of the existing package of interventions of proven worth. At this stage, the resources available and the precise costs of some aspects of the programmes that are planned to be scaled up or added remain to be estimated. The approach taken will continue to be an incremental one, based on the resources available, and the evidence from international experience and careful piloting within Nepal.

Although the main priority is to continue to extend the coverage of services defined in the existing EHCS package, it is also necessary to reconsider and amend the package of services in the light of the changing burden of disease, and of the policy priorities of the Government. This is a continuous process, and the EHCS package in 2009 is already significantly different from that defined in the NHSP-IP 1 implementation plan.

During NHSP-IP 2, the Ministry will add several services to the existing EHCS package that are needed to further address reproductive and child health problems, communicable and non-communicable diseases, and improve the health status of Nepal's citizens, especially the poor and excluded (see Table 4.1). Medical safe abortion and prevention and treatment of uterine prolapse will be added to reproductive health services. Community-based newborn care and significantly expanded nutrition care will be added to the child health programme. Community-based mental health services and health education and behaviour change services will be added to address the growing burden of non-communicable diseases. Promotional and preventive eye and oral health education will be provided in schools and, together with other Ministries, hygiene and sanitation will be promoted. All essential services are free of charge to reduce financial barriers to access and utilisation, especially for the poor and excluded.

Table 4.1: Essential Health Care Services Package for NHSP-IP 2

(new programmes and services in bold and italics)

Programme	Service	Status	Implementation Modality
1. Reproductive Health	1.1 Family planning	Scaling up	Partnerships with FPAN, Marie Stopes, CRS, PSI, NFCC and others
	1.2 Safe motherhood, including newborn care (free institutional deliveries nationwide for all)	Scaling up	Expanding to medical colleges and private hospitals
	1.3 Medical safe abortion	Piloting and scaling up	Partnerships with I/NGOs (Marie Stopes, FPAN and others) and private clinics and hospitals
	1.4 Prevention and repair of uterine prolapse	Piloting and scaling up	Partnerships with medical colleges and private hospitals
2. Child Health	2.1 Expanded program on immunisation 2.2 Community-Based Integrated Management of Childhood Illness 2.3 Nutrition 2.3.1 Growth monitoring and counselling 2.3.2 Iron supplementation 2.3.3 Vitamin A supplementation 2.3.4 Iodine supplementation 2.3.5 De-worming	Scaling up Maintaining Scaling up Scaling up Maintaining Maintaining Maintaining Maintaining	Government
	2.4 Community-based newborn care (emerged as a separate component) 2.5 Expanded nutritional care and support (added to community-based nutrition care, community nutrition rehabilitation with institutional care, and school nutrition programme)	Piloting and scaling up Piloting and scaling up	Partnerships with local governments and inter-sectoral coordination (schools)
3. Communicable Disease Control	3.1 Malaria control 3.2 Kala-azar control 3.4.Japanese Encephalitic control 3.5 Prevention and of snakebites and rabies control	Scaling up Elimination Maintaining Maintaining	Government
	3.6 Tuberculosis control 3.7 Leprosy control	Maintaining Elimination	Partnerships with INF and other NGOs
	3.8 HIV/AIDS/STDs control	Scaling up	Partnerships with I/NGOs
4. Non-Communicable Disease Control	4.1 Community-based mental health programme* 4.2 Health promotion for non-communicable disease control	Piloting and scaling up	Partnerships with local governments and CBOs
5. Oral Health	5.1 Promotion and Prevention oral health care	Piloting and scaling up	Partnerships with schools and private clinics and hospitals
6. Eye Care	6.1 Promotion and Prevention 6.2 Examination, correction and surgery	Scaling up	Partnerships with Nepal Netra Jyoti Sangh (NNJS) and Tilganga Eye Hospital
	6.2 Trachoma (SAFE Programme)	Scaling up	Partnerships with NNJS, DWSS and ITI
7. Rehabilitation of Disabled	7.1 Promotion and Prevention 7.2 Rehabilitation, surgery and therapy	Piloting and scaling up	Partnerships with HRDC and Khagendrad Nawa Jeevan Kendra
8. Environmental Health	8.1 Promotion and Prevention (water, air quality, sanitation, hygiene, waste disposal, etc.)	Piloting and scaling up	Inter-sectoral partnerships
9. Curative Care	9. 1 Outpatient care at district facilities	Increasing access and use	Partnerships with local governments, NGOs and medical colleges

* Including Gender-based Violence Services

The following sections address the programmes and services of the EHCS package that will be implemented during NHSP-IP 2. The focus of attention is on those aspects of the programmes that are new, or that will be significantly scaled up, or where the implementation approach or management will undergo significant change.

4.1.1 Family Planning and Population

The long-term aim has been to achieve replacement level fertility by 2017 to permit faster progress in sustainably reducing poverty. Fewer children being born means that more can be spent on ensuring that each child is educated, healthy and has the opportunity to develop the skills to contribute to a more prosperous society.

The reduction in the total fertility rate from 4.6 births per woman in 1996 to just 3.1 in 2006 reflects a number of factors, including the large migrant worker population out of the country, the effects of internal and external displacement due to the conflict, and increases in urbanisation and in women's education increasing the demand for smaller families and better birth spacing.

The achievement also reflects the success of the family planning programme. The contraceptive prevalence rate increased rapidly, with the proportion of married women who were currently using a modern method of contraception increasing from 26% in 1996 to 44% in 2006. There is a good mix of methods, with over 80% of modern contraceptive use consisting of permanent or longer-lasting methods. Although the overall rate has not increased since then, the 40 district NFHP survey showed that the overall CPR is influenced by the large number of women with husbands living away. Among married women living with their husbands, the CPR is 55.5%.

Over three-quarters of modern contraceptive methods are supplied by the public sector, although non-Government sources supply 70% of condoms, half of contraceptive pills, and 40% of implants. The explanation for the popularity of Government as a supplier may be that 84% of those obtaining their method from Government received it free of cost. Availability is good, with no recent stock-outs.

Differences in CPR by wealth quintile seem to have narrowed. In the 2006 DHS, only 30% of women in the poorest quintile use a modern method compared to 54% in the wealthiest. The 2009 survey of 40 rural districts found that the modern-method CPR was over 40% in all wealth quintiles. The biggest differences now are by religion (only 16% of Muslim women using a modern method) and ecological region (only 33% of hill-mountain women), and by whether the husband is away (only 22% of those with absent husbands currently using a modern method). Other differences are less predictable: contraceptive use is lowest among better educated women, which may reflect the effect of delayed marriage.

According to the 2006 DHS, 25% of women had an unmet need for family planning for spacing or fertility reduction, which if met would imply a CPR of 73%.

Although the fertility rate has come down substantially since the introduction of family planning in the 1960s, the combination of a young population (40% under 15), and the success in reducing mortality rates, means that there is built-in momentum for future population growth. This is exacerbated by the young age at marriage for girls (18 years), with the rate lower in rural areas.

The strategy for accelerating progress towards replacement level of fertility during NHSP-IP 2 will focus on:

- BCC using multiple channels (media, FCHVs, health institutions) to communicate messages and raise demand. Priority will be accorded to public awareness programs for the targeted groups in order to promote small families and delayed age at marriage. Among different population groups, priority will be given to youth (10-24 years).
- Continued micro-planning to focus on raising the prevalence rate in low CPR districts, and for poor and marginalised communities.
- All district hospitals, PHCCs, and health posts will offer at least 5 family planning methods. All district hospitals will offer year-round VSC, which will also be introduced in selected PHCCs, while mobile VSC clinics will continue.
- All available routes will be used to integrate family planning services with other Ministry services. SBAs will be encouraged to offer post-partum family planning advice, and family planning services will be integrated with safe abortion services.
- Reduce barriers to people accessing services, including making services more "adolescent friendly" to encourage young people to utilise services. The Ministry will also work with the Ministry of Education to advocate retaining reproductive health issues within the school curriculum.
- Public-private partnerships will be used to raise awareness and increase access and utilisation, particularly to population groups that are not being adequately reached by current approaches.

4.1.2 Safe Motherhood

Maternal mortality has come down very rapidly since 1996. Two separate surveys using quite different approaches have confirmed that a substantial reduction has occurred. Maternal deaths now account for only 11% of deaths among women of reproductive age.

Part of the significant achievement is likely to have been influenced by substantial fertility decline and the success of family planning measures. These occurrences reduce the absolute number of deaths because fewer births take place, but also reduce the mortality rate because of better birth spacing. The emphasis being given to safe motherhood in community-based services will also have contributed. The survey of 40 rural districts in 2009 found evidence in both NFHP intervention and control districts of further improvement in maternity services since 2006: statistically significant increases in the percentage of women using ANC, greater frequency of ANC visits, increased percentage of women protected with tetanus toxoid, and

provided with treatment for anaemia and intestinal parasites.[24] The MMMS[25] found strong evidence of a positive response to health education messages during ANC, with some women more conscious of their well-being during pregnancy, improving their diet and not doing heavy work.

The availability of safe abortion services is likely to have contributed to a reduction in the number of deaths due to abortion-related complications, although this is difficult to assess because the legalisation of abortion increased the number of reported cases. Abortion has not been free to patients, and a recent survey implies that services are being accessed disproportionately by women who are urban (43%) and literate (74%), with only 14% of the sample coming from the remote and more impoverished West and far West where 22% of the population live[26].

Access to care at childbirth has increased. Home delivery continues to be strongly preferred, but the share of births attended by health staff has increased from less than 10% to nearly one third. The NFHP survey of 40 districts shows a further increase in deliveries attended by an SBA from 19% in 2006 to 33% in 2009, and in institutional deliveries from 17% in 2006 to 27% in 2009. The MMMS found that 41% of maternal deaths now occur in a health facility, up from 21% in 1998, an indication of greater willingness to take women to a facility when complications arise, although they are often put at risk by being taken too late. Although substantial inequalities remain, they appear to be narrowing. The 2009 survey of 40 districts suggests little change since 2006 in the 58% of women from the wealthiest quintile who have skilled attendance at birth, but (if the survey districts are representative) the proportion of women from the two poorest quintiles delivered by an SBA has more than doubled, from 7.4% in 2006 to 17.6% in 2009. Reaching the women from the poorest quintile remains a challenge, however, with SBA attendance found to be 8.5%, higher than the 4.8% in the 2006 DHS but still very low.

The substantial increase in the proportion of births attended by a health worker reflects incentives for workers paid under the SSMP programme. The availability of basic and comprehensive obstetric care is being improved, and the financial barriers to accessing the services are being reduced by the policy of free institutional delivery, plus payment of transport subsidies to enable women to reach a facility when needed.

However, the current low level of care at childbirth, including care for women with complications, will need to improve in order for the maternal mortality rate to decline further. Government will continue to offer free delivery services at hospitals, PHC, health posts and selected sub-health posts, and accredited non-Government facilities. Transport subsidies and provider incentives will continue to be paid for women delivering with SBA or in a facility.

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[24] Family planning, maternal, newborn and child health situation in rural Nepal: a mid term survey for NFHP 2. Data tables, New Era, September 30th 2009.

[25] Maternal Mortality and Morbidity survey, 2009.

[26] http://www.mariestopes.org/documents/IPAS -CAC-full.pdf. DOHS Annual Report 2007 -8 shows a similar pattern of geographical concentration with two-thirds in Central and Eastern regions.

The incentive to SBAs for home delivery has been reduced, in order to ensure that there is no disincentive to institutional delivery.

During NHSP-IP 2 the following additional measures will be implemented in order to achieve MDG5 and improve services for women of reproductive age:

- Further strengthening the community-based support organized through FCHVs, including mothers groups, and birth planning. Particular stress will be placed on identifying the danger signs, strengthening the referral link, and reducing the immediate financial constraint inhibiting women from travelling to a facility by encouraging mothers to save funds for transport in preparation for the birth, and establishing or expanding the emergency funds that are managed by FCHVs on behalf of the community. These funds are quite distinct from the FCHV revolving fund, although one possible use for expanded FCHV revolving funds could be to advance loans to meet the upfront cost of reaching a facility, given the delays that have been experienced in payment of the transport allowance payable to women delivering in a health facility.
- Training of SBAs will be expanded in line with the National In-Service Training Strategy for SBAs, which estimated that achieving MDG 5 would require 60% of births attended by an SBA. To achieve this target, 4,573 will be needed by 2012 and, allowing for attrition, the Ministry will provide some kind of SBA training and/or orientation to around 5,000 nurses and doctors by that date, and ensure their proper placement in relation to need. The precise form of training will depend on assessment of current skills against the competencies defined in the training strategy.
- To encourage increased institutional delivery, there will be continued investment in BEOC and CEOC towards national coverage. This investment will be planned alongside training and deployment of the necessary staff teams to ensure that facilities can be brought into operation. Where there are existing NGO or private facilities with the capacity to provide CEOC in locations where there is currently no public facility able to do so, consideration will be given to negotiating a public-private partnership to secure the required CEOC coverage through a contract with the non-Government facility.
- An additional 1,000 sub-health posts will be upgraded to health posts with the addition of birthing units.
- The current six-district pilot will be expanded to extend safe abortion services to poor and disadvantaged populations in remote locations who currently lack effective access. This will include “medical abortion,” a cost-effective alternative to surgical abortion.
- In areas with poor physical access to facilities, making referral impractical, community-based administration of misoprostal is being piloted, to reduce the risk of post-partum haemorrhage.
- Based on the Blood Policy, 1991 (Revised in 2006) and the National Strategic Plan (2009-2013), coordination in existing blood centres will be strengthened and expanded, skill of human resources will be strengthened, and quality will be ensured through accreditation process in addition to other interventions.

4.1.3 Adolescent Sexual and Reproductive Health

The Ministry is committed to providing adolescent sexual and reproductive health services (ASRH) services. Providing the services will be considerable challenge because Nepal’s

population is characterized by a young age structure. Nepal's adolescent population (10–19 years old) constitutes 22 percent of the total population. The NDHS 2006 shows that 5 percent of women 15-19 years of age had sexual intercourse by the age of 15 years, 50 percent by age 18 among women 20-24 years, and 70 percent by the age of 20 among women 20-24 years. As the average age at marriage increases, cases of adolescent pregnancy and motherhood among women aged 15-19 years are slowly but steadily declining. In 1996, 24 percent of women aged 15-19 were either mothers already or pregnant with their first child. By 2001, this figure had decreased to 21 percent. However, the contribution to the Total Fertility Rate (TFR) by this specific age group has been continuously increasing (NDHS 2006). In Nepal, very few of the adolescents are utilizing ASRH services from any kind of health facility. Out of 1,980 respondents, only 25.5 percent have reported to have ever used sexual reproductive health-related services (*New ERA, January 2006, A Final Report on Baseline Survey of HIV/AIDS Program among Adolescents, Young Adults and Migrant Labourers in 6 Districts of Nepal*). The two major reasons behind it are services are not friendly and services are not easily accessible.

Building on the lessons learned from the past and existing ASRH programme interventions and experiences, the national ASRH programme, consisting of behaviour change interventions and youth-friendly health services, will be scaled-up in public and private health sectors in line with the *Implementation Guide on Adolescent Sexual and Reproductive Health (2007)* for district health managers. The public services will be made youth-friendly through a Family Health Division programme that consists of orientations for district health managers and key actors at district level, a training package for mid-level health care workers and operational guidelines on how to operate an adolescent and youth-friendly service at each respective level of government health facility. At least 1,000 health facilities in 75 districts will provide adolescent friendly health services by 2015.

4.1.4 Newborn Care

Between 2001 and 2006, the DHS surveys showed a steeper reduction in overall under-five mortality than in neonatal deaths, with the result that neonatal deaths as a percentage of all under-five deaths increased from 42% to 54%. This prompted a particular focus on reducing neonatal deaths as part of the preparation work for the new five-year health sector plan. Very recent evidence from a 2009 survey of 40 rural districts suggests that neonatal deaths may have subsequently declined at an unprecedented rate, from 33 per thousand in 2006 to about 20 per thousand, close to the target of 17 per thousand for 2015.[27] The sample of deaths covered over the three most recent years is small, and the statistical significance and probable cause of this rapid decline need further analysis. Even if confirmed, neonatal deaths still account for 40% of deaths in children under-five, and there remains a case for further efforts to ensure that the recent reduction is sustained and neonatal mortality is further reduced. The child health interventions will therefore include an expanded programme of activities aimed at reducing newborn deaths.

[27] Family planning, maternal, newborn and child health situation in rural Nepal: a mid term survey for NFHP 2. Data tables, New Era, September 30th 2009

According to the 2006 NDHS, over one-third of neonatal deaths were caused by birth injury and asphyxia, nearly 20% by ARI and a further 21% by other infections likely to include some ARI and diarrhoea. Other significant causes are low birth-weight/pre-term (6%), congenital disorders (8%), and tetanus (2%), with the remaining 10% of deaths undiagnosed.

The 2009 survey of 40 rural districts seems to show a sharp acceleration in the reduction of neonatal mortality, from an average of 33 per 1,000 in 2006 to around 20 per 1,000. The reasons for this sharp reduction are not well understood, and the relatively small number of neonatal deaths in the sample means that the decline may be smaller than estimated, although the change since the 2006 survey is statistically significant. A significant contributor to the change is likely to be the big increase in the share of deliveries occurring in health facilities, increasing from 17% to 27% of all deliveries. According to the 2007-8 annual DoHS report, the neonatal death rate in hospital deliveries is much lower at just 8.3 per 1,000. If the additional hospital-based deliveries were typical then the increase in institutional deliveries would lower the neonatal mortality rate by about 3 per 1,000. However, the free delivery policy and incentive payments have narrowed inequalities and brought more women from relatively higher risk groups to hospital to give birth. We also know from the MMMS that women tend to come to the hospital to give birth only when complications arise, which is likely to mean that the increased institutional deliveries include a considerable share of high-risk deliveries and the potential number of avoided deaths is therefore higher. Depending on the assumptions made about the home delivery risk of the additional 10% of births now taking place in hospital, and on assumptions about how successful institutional delivery is in reducing neo-natal deaths per thousand deliveries, it is plausible that the increase in institutional deliveries could reduce the neonatal mortality rate by 5-10 per thousand.

Modest but consistent improvements in antenatal and postnatal care may account for some additional improvement. Environmental factors may also be partly responsible, particularly improved access to cash from remittances and improved communications with the spread of mobile phones making it easier for women to reach help when complications arise. These environmental factors could not account, however, for the speed with which mortality has reduced.

New innovations, such as the Morang Innovative Neonatal Intervention (MINI), community-based management of low birth weight babies, behaviour change and communication (BCC) activities for newborn, postnatal care visits by volunteers, and mothers' group meetings, were successfully tested in different parts of the country. In 2007, the Ministry developed a Community-Based Newborn Care Package (CB-NCP) containing the above interventions for addressing three major killers of newborns. The programme is now being piloted in ten districts.

The strategies being employed in the pilot focus on the following:

- Awareness creation, through BCC campaigns and at community level through mothers groups, and one-on-one health education by FCHVs.
- Performance-based incentives for the FCHV to accompany the mother to deliver in a facility, or to be present at all home births. Home delivery is being made safer by free

distribution and social marketing of clean delivery kits, and by training FCHVs to identify birth asphyxia and resuscitate if no SBA is present.

- Training FCHVs to identify neonatal infection and low birth-weight, to provide antibiotics for infection and to recognise when to refer, and to respond appropriately with home-based care, including advice on feeding and keeping the baby warm.

The aim is to reduce neonatal mortality from 33/1,000 live births in 2006 to 16/1,000 by 2015. During NSHP-2, the focus will be on community-based programmes to ensure that every family has access to newborn care. Community-based programmes are expected to increase referral to the health system. To cater to increased demand on the health system, simultaneous strengthening of the health system will be a priority per the provisions laid out in the *National Neonatal Health Strategy 2004*. Newborn care will be incorporated as a component in child survival and safe motherhood programmes. The following additional measures will be implemented in order to achieve MDG 4 and improve services for newborns.

- Strengthening of newborn care services at various levels of health institutions so that they are able to provide services per the provision laid out in the *National Neonatal Health Strategy 2004*.
- CB-IMCI programme at the health facility level has provisions to provide services to sick newborns up to the age of 2 months. This will be extended to the community level in all districts with the addition of immediate and essential care of newborns and care of sick newborns.
- The existing newborn interventions will be integrated and strengthened at all levels, including referral. CB-NCP should be integrated with safe motherhood and CB-IMCI programmes for maintaining a continuum of care from pregnancy to childhood, thereby ensuring wider coverage of newborn care interventions.

The programme objectives focus on preventing and managing the major causes of neonatal mortality: newborn infection, hypothermia, low birth-weight, managing post-delivery asphyxia, and developing an effective system of referral of the sick newborn.

4.1.5 Child Health

The objective is to reduce the under-five mortality rate further, from the 51 per 1,000 live births estimated to have been reached in 2008, to 38 by 2015. The main focus will be on infant deaths, which now account for 80% of under-five mortality. The objective is to reduce them from 41 per 1,000 live births (2006) to 32 per 1,000 by 2015.

Child health programming will focus on child-centred activities from community to health institute maintaining a continuum of care with integrated services for a “Healthy Child Approach.” The general strategies for child health include the following:

- Working in partnership
  extend services beyond the public sector with greater inclusion of non-state actors

partner with the Ministry of Local Development (MoLD) and Ministry of Education (MoE) for leveraging VDC resources for MCH programming

- Selecting evidence-based interventions and operational strategies using a life-cycle approach
- Using community-level approaches for social mobilization and demand creation through revitalization of mothers' groups and FCHVs.
- Building capacity of health providers to deliver child health services through on-site coaching, on-the-job training, in-service training and pre-service training in the curriculum
- Strengthening regional directorates and identifying focal points for the child health programme at regional level for effective monitoring and supervision
- Implementing effective supportive supervision and monitoring—performance-based monitoring
- Integrating micro-planning for MCH programming to scale
- Developing a "National Standards Document" for child health to maintain uniformity of and consistency in the quality of services provided
- Revitalising PHC/ORC clinics for delivering child health services in the form of a "healthy child clinic."

The areas that will require emphasis include:

- Accelerated implementation at country level of newborn care and zinc for the treatment of diarrhoea
- Monitoring and evaluation of programme implementation, coverage and impact through the HMIS, NDHS and other population-based surveys and intervention-specific surveys
- Better planning and pre-positioning of supplies for supporting timely- and high-quality humanitarian actions in flood affected areas, to combat disease outbreaks and other emergency situations.

In addition to the existing child health programme activities—immunisation, nutrition, and CB-IMCI—childhood disability services, early childhood development and emergency preparedness and response will be included.

Immunisation

Routine immunisation coverage. Currently the Government is providing BCG, DPT-Hep B-Hib, Polio, Measles and JE vaccines in routine immunization. Although the NFHP 2009 survey reported 83.5 percent of children aged 12-23 months received all basic vaccinations, DPT3 coverage of 89.8 percent and measles at 85.6 percent in rural areas of 40 districts, the HMIS continues to report a declining trend of routine immunization coverage over the past 3 years. The national DPT3 coverage for FY 2008/09 was 81 percent and measles coverage was 76 percent. A significant gap exists in immunization coverage in municipalities. The coverage differs between mothers' educational status, urban versus rural, and by ecological zone and region. There is shortage of vaccinators in many districts. The comprehensive *Immunization Multi Year Plan (2007-2011)* aims to achieve 90 percent coverage in at least 65 districts for all antigens by 2010 and in all 75 districts by 2011. The government continues

to monitor injection safety and vaccine quality management. A high-level committee has been formed to monitor AEFI cases should they occur.

Introduction of new vaccines into routine immunisation. The Government will introduce new vaccines based on burden of diseases, financial sustainability and existing infrastructures. A vaccine to protect against *Hemophilus influenzae* type b (Hib) was introduced in the form of DPT-HepB-Hib in 2 regions in April 2009 and was expanded to the remaining 3 regions by the end of 2009. A vaccine against Japanese Encephalitis has been introduced in 22 high-risk districts that have completed JE campaigns in phases. Currently, 16 districts are providing JE vaccines in their routine immunization. A high-level committee, "National Committee for Immunization in Practice (NCIP)," has been established to provide guidance to the Government on issues related to immunisation, including introduction of new vaccines.

Eradication, Elimination and control of Vaccine Preventable Diseases (VPD). The Government is committed to eradication of poliomyelitis in Nepal. The last indigenous case of wild poliovirus was detected in 2000, with importations each year from 2005 to 2008. There were no wild poliovirus cases detected in Nepal during 2009. Measles elimination strategies have been initiated, including initiation of case-based surveillance, providing a second opportunity for measles vaccination through measles catch-up and follow-up campaigns, and supporting routine measles vaccination. The Government has set a goal to achieve measles elimination by 2015. The numbers of measles and Japanese Encephalitis cases have decreased significantly following mass vaccination campaigns, but the cases of Rubella have increased significantly. MNT elimination was achieved and validated in 2005, and has been sustained. The immunization program has succeeded in reducing deaths from VPDs to less than 2 percent of under-five deaths.

Financing of immunisation. All immunisation costs are included in the national work plan and budget. All routine vaccines are procured using Government funds. However, DPT-Hep B—Hib vaccine has been introduced with GAVI support. Currently, the Government is co-financing US$ 0.20 per dose and the remaining financing by GAVI. A significant amount of GAVI funds were received (ISS and HSS) to support the health system, including immunisation.

The Child Health Division aims to achieve high routine immunization coverage as mentioned in its MYP. A policy on immunisation in municipalities is in the process of development to ensure immunisation service access to all municipal populations. Partnership with schools, private and social organizations and enhanced ownership by local communities will further strengthen the programme to minimize the number of children missing immunisations.

Approval will be sought for a policy of local recruitment and contracting of vaccinators in vacant positions to ensure coverage in remote and underserved areas.

The cold chain and vaccine management system will be maintained to high standards so as to provide quality vaccines to the population. Financial provision will be made for ensuring the good condition of the physical infrastructure, including maintenance and replacement of elements of the cold chain and appropriate equipment at the peripheral level.

Micro-planning will continue to be used in low performing districts and municipalities in order to focus on missed and hard-to-reach children who are not fully immunised.

A comprehensive social mobilization and communication plan will be developed and implemented to create awareness among the parents, teachers, students and other community members.

The Government will continue to maintain polio free status, support the measles elimination goal by 2015, and sustain MNT elimination, as well as control of other vaccine preventable diseases such as Rubella and Japanese Encephalitis.

Vaccines against other vaccine preventable diseases such as rubella, rotavirus and pneumococcal disease, typhoid, human papilloma virus (HPV) and others will be evaluated for possible introduction in the routine immunisation programme. Introduction of new and under-used vaccines will be prioritised based on disease burden, financial sustainability and infrastructure.

Immunisation is the most cost-effective public health programme. With the introduction of new vaccines more finances will be required. Advocacy meetings with the Government, Parliamentarians and EDPs will be carried out to raise funds for immunisation.

The Ministry commits to making significant progress towards a more integrated health systems approach during the period of NHSP-2. Immunisation will be integrated with other public health interventions so as to achieve synergies among effects.

Community-Based Integrated Management of Childhood Illness (IMCI)

Integrated Management of Childhood Illness, through the progressive implementation and improvement of community-based IMCI programme, will contribute to the reduction in deaths due to major illnesses that cause 70 percent of child mortality globally. These major illnesses addressed by CB-IMCI are acute respiratory infections, diarrheal diseases, malaria, measles, malnutrition and other common childhood illnesses. At the community level, CB-IMCI is more focused on diarrhoea and pneumonia management/treatment by Community Health Workers (CHWs). The Programme expects that the poor and excluded groups will benefit because of higher rates of illnesses and less access to care at facilities. Although more difficult to measure, CB-IMCI is also expected to improve community-based and facility-based management of pneumonia, diarrhoea, malnutrition, malaria, measles, neonatal care and prescribing practices of health workers.

Community-based IMCI is now functional in all 75 districts of Nepal. It is managed by the network of the Ministry's IMCI Section, Child Health Division, 5 Regional Health Directorates, 75 District (Public) Health Offices and district facilities, and over 50,000 female community health volunteers (FCHVs). The package of interventions delivered at community level has been expanded based on evidence from pilots, with FCHVs now prescribing Cotrimoxazole paediatric tablets for pneumonia, and zinc and ORS for the treatment of diarrhoea.

The CB-IMCI programme includes curative services for major killer diseases such as ARI, diarrhoeal diseases, malaria, measles, ear infection and management of malnourished children with more than 30 key behaviour change messages to be delivered at the community level. Although the curative component of CB-IMCI has a very strong implementation history, follow-up after training in various districts has revealed that assessment and counselling on nutrition is the weakest component at the health facility level and will need innovative approaches to improve it. The community component of IMCI has also revealed that the 30 key behaviour change messages as envisioned in the generic IMCI package have been implemented less effectively.

The mid-term review of NHSP-1 calculated that CB-IMCI had probably been responsible for a reduction of 8 per 1,000 deaths in the under-five mortality rate based on CB-IMCI coverage of 66 percent in the country, mostly as a result of improved treatment of pneumonia. The challenge for NHSP-2 will be to maintain programme quality nationwide. Staff in all 75 districts have been trained and are now operating CB-IMCI. Various innovative plans will be developed and executed to maintain programme quality, including plans for training new entrants to replace the 3-4 percent annual attrition of health workers, as well as refresher and updated training. CB-IMCI will also be expanded beyond the public sector and training will also be offered to private clinics wishing to offer equivalent services. Focus will also be on strengthening pre-service CB-IMCI through inclusion of IMCI in the curriculum for all levels of health providers with effective implementation and monitoring. Furthermore, emphasis will be given to the private sector for managing the under-five sick children per CB-IMCI protocol.

Another challenge will be to incorporate the community-based elements of the newborn care package in the CB-IMCI and Safe Motherhood Package. From the present level covering neonates it will be difficult to reduce under-five mortality to the desired level by 2015. Therefore, the DoHS have approved the management of sepsis/infection for infants under 2 months at the community level as one component of CB-IMCI. FCHVs can treat neonatal (infection) cases with Cotrimoxazole and refer to health facilities for Gentamicin Injection.

Therefore, NHSP-2 will focus on

- maintaining programme quality by training new entrants (health workers and FCHVs), conducting refresher training, intensive supervision, monitoring and periodical review of the programme
- developing public private partnerships for implementing the CB-IMCI programme
- incorporating CB-IMCI protocols into the pre-service curriculum of health workers
- integrating tested CB-NCP interventions with CB-IMCI after evaluation of CB-NCP programmes in piloted districts
- revitalizing the programme in low performing districts.

Nutrition

Improving nutritional status of children and women has been recognised as a top priority by the Government and it has adopted the targets of MDG 1 and has also adopted the World Fit for Children's (WFC) Goals on micronutrients. Malnutrition remains as a major contributor to child health problems, as well as contributing to future poverty by damaging the cognitive and physical development of children who are affected, reducing their educational achievement, normal physical development, and their future earnings[28]. Nearly half of all Nepali children are stunted, the most direct indicator of damage to future cognitive and physical development. Damage done in the early years leads to permanent impairment with life-long irreversible impact. Furthermore, children who are undernourished, not optimally breastfed or suffering from micronutrient deficiencies have substantially lower chances of survival than children who are well nourished. They are much more likely to suffer from a serious infection and to die from common childhood illnesses such as diarrhoea, measles, pneumonia and malaria.

It is therefore proposed to introduce a broader package of nutritional interventions.

Although the situation of chronic malnutrition has improved since 2001, Nepal remains one of the most malnourished countries in the world. Nearly half of Nepali children under five are stunted, indicating early chronic malnutrition, 39% are underweight, and 13% in 2006 were wasted, an indicator of acute malnutrition. The survey of 40 rural districts in 2009 reported 17% of children were wasted. Malnutrition is much higher in the mid- and far-west hill and mountain regions, and in the central Terai. Some 54% of children in the poorest wealth quintile are underweight compared to just 24% of children from the wealthiest quintile.

Nepal has achieved near universal coverage of some micronutrient interventions, notably Vitamin A distribution. Problems of goitre exist despite salt iodisation, partly due to importation of less adequately iodised Indian salt. In 2006, 48% of children aged 6-59 months were anaemic, 23% of them moderately to severely, and 36% of pregnant and lactating women were also anaemic. The problem of anaemia is being addressed through a national anaemia strategy, involving free distribution of iron folate tablets to pregnant women, and iron fortification of rice to tackle the more general problem. There was a decline in coverage of iron tablet distribution to pregnant women to just 63% in 2007/8. De-worming tablets are administered to children under five together with Vitamin A, and are also made available to pregnant women.

- During NHSP-2, de-worming will be introduced through the school health programme, in response to evidence that intestinal worms are a major problem for school-age children as well as children under 5 years.

[28] World Bank, Supplementing nutrition in the early years: the role of early childhood stimulation to maximise nutritional input s. Child and youth development notes, March 2009.

The main causes of general protein-energy malnutrition are low birth-weight and poor feeding practices, together with poor water and sanitation and household food insecurity. Some 34% of babies have low birth-weight, due to poor maternal nutrition, with 25% of mothers having a lower than normal body mass index. Only 53% of children are exclusively breastfed for the first six months, and only 57% of infants and young children are fed in line with WHO advice on what is required for healthy development.[29]

Action against general protein-energy malnutrition has focused on growth monitoring at health facilities, which covers nearly sixty percent of under-three year olds, linked to raising awareness on appropriate feeding practices. In some remote districts, the MCHC programme is providing supplementary food to 6-36 month old children and to pregnant and nursing mothers, using WFP support. The national mid-day meal programme may have benefits to educational attendance, but has little impact on nutrition. Community-based services to address the underlying causes of malnutrition, such as the DACAW programme, a joint initiative between the Government and UNICEF, have been implemented in some districts of the country.

The 2009-10 budget introduced another major programme targeted at nutrition, a programme of cash transfers of NRs. 200 per month for the first two children under five, targeted to the remote and impoverished Karnali zone, and to Dalit families. The scheme is administered by the Ministry of Local Development, and payments are made directly to the mother. The programme responds to evidence from previous research that poor mothers do retain control of cash paid directly to them, and that around 40% is likely to be spent on supplementary food for children, 30% for education, and 11% for health costs. The programme is budgeted at NRs. 720 million for 2009-10, covering just the cost of the payments themselves, and is anticipated to benefit 400,000 children.

A national nutrition action plan was prepared in 2007, but was never finalised. It advocated a comprehensive, integrated, inter-sectoral strategy on nutrition. Linkages with line ministries will be made during NHSP-2 to increase their support, as well as to utilise their programmes and structures to promote nutrition.

Malnutrition is an outcome of two most common interrelated causes, inadequate food intake (in quantity and in the quality and range of foodstuffs consumed), and disease load. The strategy to reduce it will be partly concerned with addressing the disease load through health interventions and micronutrient supplementation, and partly concerned with behaviour change to improve maternal and child feeding practices within the constraints of household income. However, malnutrition is also related to deeper problems of poverty and food insecurity, requiring a response that is wider than the health sector.

- During NHSP-IP 2, the Ministry is committed to a major expansion in support for combating malnutrition. This expansion will continue to come under the child health

[29] http://siteresources.worldbank.org/SOUTHASIAEXT/Resources/223546 -1171488994713/3455847-1232124140958/5748939-1234285802791/NepalNutritionBrief.pdf

division, but will also focus on maternal nutrition as many child nutrition problems start with malnourished mothers having low birth-weight babies.

- A community-based nutrition programme will be progressively introduced, starting from the wards with the highest incidence of malnutrition. The community-based approach will need piloting but, if the experience in the pilot districts is positive, the programme will be progressively scaled up to cover 45% of wards in the country by 2013. Piloting is important, because some previous projects of this nature in Nepal have struggled to achieve a positive impact on nutritional outcomes. The focus will be on promoting improved feeding and health practices via the network of community-based health volunteers and health workers, as well as using media-based campaigns. Key messages relate to appropriate food for pregnant and lactating women, exclusive breast feeding, weaning foods that are locally available, hygiene and the use of ORT and proper feeding of sick babies. The messages will be aimed to reach not only mothers, but also husbands and others within the extended family with influence over the allocation of household resources, as well as opinion formers and leaders within the community. Growth monitoring will be conducted at community level by FCHVs, rather than at facility level as at present. The emphasis of the community-based programme is on what communities and households can do themselves with their existing incomes to improve childhood and maternal nutrition. Maternal nutrition will be a particular focus, to reduce the incidence of low birth-weight babies.
- If the results of ongoing pilots prove promising, the programme will also support community-based management of severe acute malnutrition, using ready-to-use therapeutic foods. This is a potentially cost-effective alternative to rehabilitation of acutely malnourished children in rehabilitation centres. It will work in close cooperation with facility-based rehabilitation centres.
- Action to address the broader impact of poverty and food insecurity on malnutrition requires inter-Ministerial cooperation, and the Ministry may not be the lead Ministry. The Government is reviewing the case for introducing food supplementation for malnourished children and pregnant and lactating mothers on a larger scale. This would be a significantly more expensive intervention. Piloting is needed in order to identify the form of assistance that would have the biggest impact, and how best to deliver it. Options range from developing cash transfer or voucher programmes to directly providing food supplements. Decisions are needed on the extent to which the programme should be targeted, how targeting should be done, and how to durably improve household food security without creating long-term dependence on food subsidies. There are also options regarding the type of conditions that should be attached to the additional assistance to households, and this is an area where the Ministry may have a more direct interest. Because the malnutrition problem is linked to poor feeding practices rather than simply lack of food, there would be a good case for linking the programme to the community-based nutrition programme, in order to ensure that food or financial support is linked to improved knowledge on how to protect children from malnutrition. EDPs have indicated that significant additional funding could be available for an expanded nutrition programme. Partners will be involved in developing the programme. There would be

merit in piloting several alternative models, and scaling up those that appear to be most promising in addressing the problem.

4.1.6 Communicable Disease Control

The CDC division is responsible for overall communicable disease surveillance and control, and for disease control programmes, with the exception of the major childhood killers that fall under Child Health Division. Specific interventions cover malaria, kala-azar, dengue, filariasis, TB, leprosy, HIV/STDs, and Japanese Encephalitis. This group of diseases accounts for between one half and one percent of deaths, and nearly 5% of lost disability-adjusted life years.

The largest killer is TB (5,000-7,000 deaths in 2007-8[30]), down from 15,000-18,000 per year in 1994[31]. In 2007-8, the TB programme detected 71% of cases and had a treatment success rate of 88%. The target is to achieve 85% case detection with at least 70% in all districts, and a national cure rate of 90% with no district below 85%.

HIV remains a concentrated epidemic, but with some concerns that it may break out from the highly at risk groups into the general population. The overall HIV prevalence in Nepal was 0.49 percent in 2007. Prevalence is particularly high among female sex workers (FSW) in Kathmandu (2.2%) and Terai highway districts (2.3%), Truckers, injecting drug users (IDUs) (20.7% in the Kathmandu Valley), and men having sex with men (MSM).

The distribution of estimated HIV infections across different population groups showed that 10% of all HIV infections were in injecting drug users (IDUs), 15% in male clients of FSWs and 4% in MSM. However, 42% of all HIV infections in Nepal are in migrant workers returning from India, and this group appears to account for the further 21% of HIV infections among low-risk rural women—the wives of seasonal labour migrants. Male labour migrants have an infection rate of 1.4% in the Western Region and 0.8% in Mid- and Far-Western districts (IBBS 2008), while 3.3% of wives of migrants in the Far-Western Region are infected. With some 2-million Nepali migrant workers living abroad, they are by far the most numerically significant at-risk group, while their foreign residence by definition makes it more difficult to ensure that they are reached with repeated messages on how to avoid infection.

Under the HIV Strategic plan 2006–2011, progress has been made in improving public awareness, improving rates of protective behaviours among some high-risk groups, and in treatment care and support. However, the concentrated epidemic still exists, it is entering the general population via the returning migrants, and further efforts are needed.

Of the vector-born diseases, malaria and filariasis are the major public health problems. Kala-azar accounts for around 1,400 cases and less than 10 deaths per year. The government

[30] DOHS Annual Review, 2007 -8.

[31] WHO, www.int/inf--new/tuber4.htm, accessed 11 Dec 2009

has committed to eliminate the disease by the year 2015. Although not a killer, filariasis was estimated in 2004 to account for 1.5% of lost DALYs.

- The Government has committed to eradicating the disease by 2015, with support from the USAID-funded Neglected Tropical Disease Programme.

In 2007-8, there were 83,000 cases diagnosed as probable malaria (clinical cases), but only 4,500 laboratory confirmed cases. There were 330 suspected/possible malaria deaths. Malaria control activities are carried out in 65 at-risk districts, with a concentration in 13 highly endemic districts where more than 70% of malaria cases originate.

Roughly 12.5 million people live in areas at risk of JE. The disease affects 1,000-3,000 people each year, with annual deaths of 200 to 400. Expansion of the vaccination campaign is the most cost-effective control measure, and has begun to have an impact in reducing the number of cases. The case fatality rate has also fallen with better public health awareness and improved nursing care.

Other important zoonotic diseases are rabies control and management of snakebites. Approximately 40,000-50,000 pre-exposure treatments (anti-rabies vaccine-ARV) for suspected rabid animal bites are required annually and similarly around 15,000 snakebites are managed by providing anti-snake venom injections. Nepal is phasing out nerve origin ARV and introducing cell culture origin vaccines (CCO-ARV) for rabies control.

In the area of vaccine preventable disease, acute flaccid paralysis surveillance is going on actively to achieve the polio eradication initiative. Case-based surveillance of measles has been initiated in order to achieve the Measles elimination initiative. The country has already reached the neonatal tetanus elimination goal and the Hemophilus Influenza B surveillance activities are going on throughout the country. All these activities are supported by WHO Nepal, but by 2015 a transition plan should be developed for the Government to gradually assume responsibility for these functions.

In response to the threat of pandemic influenza, Nepal has developed a pandemic preparedness plan, which helped to handle the emergence of pandemic influenza H1N1 2009. The surveillance activities, laboratory surveillance and response activities have been intensified throughout the country.

The commitment to the control of communicable diseases is an ongoing one, although a number of new challenges will need to be faced. Climate change may alter the disease burden, bringing mosquito-born diseases, such as dengue, to areas where they were not previously endemic. The year 2009 has already seen the impact of drought leading to increased diarrhoeal disease, including cholera, as the population is forced to use unsafe water resources.

- A key task will therefore be to develop a more integrated disease surveillance system. This will involve the development of a disease surveillance policy, operational guidelines and tools, training and logistical supplies. It will also involve appointing district-level disease surveillance officers. The approach will initially be piloted in 3-5 districts.

- A number of diseases face major problems of cross-border infection. Cooperation with neighbouring countries will be strengthened, especially with India.
- Public health laboratory capacity will be strengthened at all levels. Policy, guidelines and an overall framework for capacity building will be prepared. The NPHL will be the nodal institution in the system, and will also be the national influenza centre. Attention will be given to strengthening laboratory procedures and communication between national, regional and district levels, and to strengthening systems and ensuring the availability of essential equipment and logistics. Some new recruitment, as well as training of existing staff, will be required.
- Achieving MDG 6 remains a priority for Nepal, to halt and begin to reverse the increasing trend of HIV infection by 2015. The focus will continue to be on prevention through strategic BCC, focused on at-risk groups, including migrant workers. Other aspects of the programme will include improved STI management and control, and increased focus on preventing mother to child transmission. Voluntary counselling and testing will be promoted. In cooperation with external partners, Government will aim to ensure universal access to anti retro-viral treatment.

Neglected Tropical Diseases

In Nepal, the Neglected Tropical Disease (NTD) programme will be a partnership between the Ministry and other local organizations, with RTI and WHO providing on-going technical oversight and support. The program plans to treat over 20-million people over a three-year period and will focus on the treatment of three targeted diseases, which Nepal is endemic for and for which chemotherapy is available: lymphatic Filariasis (LF, also known as elephantiasis), soil-transmitted helminthes (STH: hookworm, ascaris, and trichuris), and trachoma (blinding eye infection). LF is endemic in 60 out of 75 districts with 25-million people at risk. The intention of the programme is to eliminate LF by 2015 as a public health problem by reducing the level of disease in the population to a point where transmission no longer occurs. STH is estimated to infect roughly 50% of children and adolescents nationwide. The aim is to reduce STH infections to less than 10% by 2017 among children under five, school-age children and pregnant women. Last, trachoma prevalence in Nepal is 6.9% with 43,000 people suffering from advanced stages of the disease. Through the NTD programme the Ministry expects to eliminate trachoma in Nepal by 2014.

4.1.7 Non-Communicable Diseases

WHO estimate that non-communicable diseases (NCDs) account for 39% of DALYs lost, and for 44% of deaths. About half of the deaths are from cardio-vascular diseases, 18% relate to cancers, 10% to respiratory diseases, and 7.5% to digestive diseases. However, many of these are diseases of old age, and the pattern of lost disability-adjusted life years is somewhat different. Neuro-psychiatric conditions account for 28% of DALYs lost to NCDs, cardio-vascular diseases for 20%, sense organ diseases for 13%, and respiratory and digestive diseases for about 7.5% each. Injuries account for a further 11% of deaths and 12% of DALYs, with around half of the injuries caused by violence or war, and road traffic accidents the other major cause.

NCDs were not part of the essential health care service package during NHSP-1. They are relatively expensive to treat, and it remains unaffordable to offer comprehensive free services during NHSP-2. However, in response to the rising importance of NCDs and injuries in the burden of disease, NHSP-2 will expand prevention activities aimed at reducing the burden of NCDs by encouraging healthier lifestyles. Measures will include:

- BCC via multiple channels, aimed at encouraging better diet, more exercise, reduced smoking and alcohol consumption, and safer driving, including wearing of seatbelts and helmets.
- Ministry will also advocate the implementation and enforcement of tobacco and alcohol controls and legal requirements to wear seatbelts and helmets.
- In addition to prevention activities, the capacity to handle injuries from road traffic accidents will be strengthened in those health facilities located close to highways and to the site of frequent traffic accidents.

- Mental health problems are clearly widespread, and may be associated with the legacy of conflict and with the very high rates of violence and suicide, but it is less clear what can be done that will be effective within the resources that are available.

- Before committing to major expansion of mental health services, one or more scalable pilots will be implemented. The initial approach will focus on giving basic mental health training to health workers in pilot districts, beginning to cover mental health issues in health education programmes, and to integrate mental health within primary health care, following guidance issued by WHO.

The elderly benefit from free services, and appear to make use of health services in proportion to their share in the population, though less than their higher incidence of health problems would predict. The first step to addressing this potential inequality will be a study of the issue, to identify the extent to which the health service meets the needs of this group, as preparation for considering what further measures might be appropriate and feasible.

4.1.8 Health Education and Communication

Health education and communication underlies all public health programs. The ultimate outcome of health education and communication is to promote desired behaviour change among people. Health education and behaviour change communication (BCC) are key components of health promotion. The health education and BCC activities should consider the specific needs of the intended audience and also the local context and availability of communication channels in specific locations as appropriate to the local sociocultural practices. It is important for health education and BCC activities to go hand in hand with service delivery.

For example, evidence from surveys and HMIS shows a low proportion of institutional deliveries and use of modern contraceptives failing to rise. There have been outbreaks of diarrhoea and cholera. Sanitation and hygiene is poor in many parts of the country. Many of these problems could be solved by raising awareness on key health issues and promoting desired behaviours. With new emerging diseases, such as pandemic flu, as well as the

growing burden of non-communicable diseases, and diarrhoea and cholera epidemics, there is a growing need to focus on health education and behaviour change communication to prevent and respond to these health problems. There is also a need to promote key interventions started by the Government, such as free essential health care services, free maternity services, newborn care initiatives, etc. In fact, for all public health programs it is crucial to have a health education and communication strategy integrated and mainstreamed in the overall program design.

Health education and communication is crosscutting to all health programs, aiming to increase knowledge and improve behaviours regarding key health issues of all castes, ethnic groups, disadvantaged, and hard-to-reach population. It also aims to create demand for quality essential health services, thereby improving access, creating public trust in health services and ultimately encouraging people to utilise the existing health services and mitigate public panic and respond to communication needs during emergency situations.

- In NHSP-2, health education and communication will prioritize certain focused programs of EHCS, such as maternal and child health, adolescent health, communicable and non-communicable diseases, tobacco control, emergency and disaster preparedness including pandemic influenza, gender equality and social inclusion, and occupational and environmental health.

Actions will include:

- Mutually reinforcing approaches of advocacy, social mobilisation, behaviour change and communication, and IEC linked to service availability of EHCS and beyond.
- Advocacy activities carried out to gain support for EHCS, occupational and environmental health, and tobacco control, and for political and social commitment, as well as resources for the implementation of the programme.
- Social mobilisation of resources at local level, mobilisation of human resources of existing networks as well as support for FCHVs and health workers.
- Informing people about EHCS, social issues, services availability and promoting positive behaviours.
- Mass media, community-based media and interpersonal communication to disseminate and reinforce messages.
- Catering to specific gender needs and the needs of the poor and socially excluded, and disadvantaged communities, efforts to produce and disseminate messages and materials in local languages and for different socio-cultural contexts. Promotion of health as a right, especially in the context of political restructuring and decentralization in the country.
- Strengthening institutional capacity of NHEICC, Regional Health Departments, District Health Offices, and in hospital settings to provide appropriate health education and communication programmes at all levels. Coordination with other ministries and academic institutions to ensure in-service and pre-service training specifically on health education.
- Multi-sectoral collaboration to implement communication programs. Ensure that the impact of communication interventions is captured by the HMIS and additional resources are available for periodic surveys.

4.1.9 Oral Health Care

Oral health conditions are estimated by WHO to account for 0.6% of disability adjusted life years lost in Nepal, and account for 3% of OPD visits recorded in the 2007-08 Annual Report of the DoHS. More than 57% of Nepali children at 6 years of age and 69% of adults above the age of 50 suffer from untreated dental caries affecting more than 3 teeth. Untreated dental caries is the most prevalent childhood disease in Nepal—more prevalent than malnutrition (53%) and Vitamin deficiency (58%). Nepal ranks among the top 15 in the world in which periodontal disease in the age group of 35-44 years is prevalent. However, Nepal has made significant progress formulating a National Oral Health Policy (2004) and has a National Oral Health Strategic Plan. It also has advocated for fluoridation of toothpastes that are produced in Nepal.

The on-going programmes that need to be strengthened include the following:

- Dental surgeons or dental assistants will be recruited and posted at selected district hospitals to train staff at health posts and PHCCs in basic dental/oral check-ups. Mobile dental camps will work in communities in collaboration with medical and dental colleges.
- PHCWs will be trained on basic oral health care, including extraction and simple fillings (BOPC).
- Dental surgeons will be posted at district hospitals where facilities are available throughout the country helping to ensure availability of oral health services,
- Teachers, school children, FCHVs and health workers will be trained on oral health related subjects to promote good oral health.
- A year round brushing programme will be promoted at schools.

4.1.10 Environmental Health and Hygiene

The basic determinants for better health such as safe water, sanitation and hygiene are still in critical state in Nepal. Water and sanitation related infectious diseases are still being the most common causes of illness and deaths in developing countries where Nepal is not an exception

WASH associated diseases including skin diseases, ARI and diarrhoeal diseases are the top three leading preventable diseases reported. ARI and diarrhoeal diseases remain the leading causes of child deaths. Due to lack of proper access, people especially children, women, marginalized, are exposed to contaminated water, inadequate sanitation, smoke and dust, and mosquitoes. This is a problem that imposes a sustained and heavy burden on the health system. And with the recognition of the environment's contribution to malnutrition, there is an urgent need to broaden the spectrum of interventions beyond the health sector.

Nepal government's commitment to meet the MDG goals and targets in health and sanitation, coupled with the country's poor health, hygiene and sanitation situation indicate urgency to focus on preventive health care. In this context, the role of the Ministry as a lead agency with

respect to promoting health and hygiene are crucial to equally promote preventive health care aspects such as environmental health interventions like hygiene promotion, use of sanitation facilities and household/environmental sanitation promotion.

The environmental health and hygiene programme will improve water quality with particular emphasis on the water quality surveillance and monitoring, promote hygiene and sanitation with a focus on the promotional aspects of improved hygiene practices and manage the health care waste with particular emphasis on preventing health hazards to medical personnel and others including scavengers handling these wastes.

Actions during NHSP-2 include the following:

- Promote hygiene and sanitation through the existing institutional infrastructure.
- Promote hygiene and sanitation in conjunction with other essential health care services to mainstream hygiene and sanitation promotion. Adopt key performance indicators for behaviour change toward improved hygiene practices.
- In partnership with related agencies, establish a water quality surveillance system and promote use of safe water.
- Ministry, MoE and partners promote use of cleaner fuels for cooking, such as biogas, improved cook stoves and improved ventilation in the cooking area.
- Further develop specific standards on HCWM and for the disposal of various categories of health care waste such as needles, mercury, infectious waste, liquid waster emission standards, etc.
- Increase the Ministry's capacity, including human resource capacity, to enforce and monitor implementation of medical waste management to the standards.
- Establish a knowledge network with academia and practitioners on climate change and a public health response team for climate change.
- Collaborate with other Ministries and NGOs, and take steps in preventing the harmful effects of occupational hazards, particularly in urban areas where large numbers of people are exposed every day.

4.1.11 Curative Services

Roughly half of all outpatient visits for acute illness among both children and adults are to private providers (NDHS 2006 and NLSS 2004). Private providers include private pharmacies (many of which are owned by Government health staff), which provide diagnostic services as well as drugs. Nearly two-thirds of households reporting taking a sick child to a pharmacy report that the child was examined (NDHS, 2006). There is a two-tier system of access to public-sector health staff in some areas. Those willing to pay to see staff in their private pharmacy will be given a more thorough examination and access to drugs not available from Government.

The wealthier are more likely to use private-sector providers. Government services are used at similar rates by most socioeconomic groups, but less by the wealthiest.[32]

[32] Mid-term review of NHSP

Government facilities provided curative services to 60% of the population in 2007-8, 45% if only new contacts are included. Over 85% of patient contacts were through health posts, sub-health posts and outreach clinics, about 10% through PHCCs, and the remaining 5% or so via hospitals. There has been a 35% increase in new outpatient contacts in 2007-8 following the introduction of free services at health and sub-health posts, and targeted free services at PHCCs and district hospitals for some population groups in low HDI districts. In addition, FCHVs reported 7.9 million contacts to provide services, raising the per capita public-sector OPD contact rate to about 0.9. However, FCHVs are not health practitioners, and can diagnose and treat only a small number of common conditions. Underreporting by private and NGO service providers makes it difficult to provide figures for them, but adjusting pro rata for underreporting would give total contacts of 1.1 per head for all modern service providers with the exception of private pharmacies and traditional healers. Despite the recent increase in utilisation of public facilities, the rate at which the population is accessing OPD services remains less than half the level required for reasonable coverage of modern health services.

Analysis of the purpose for which patients seek curative health shows that more than 80% is for non-communicable diseases.

- The main reasons for low and delayed utilisation of health services are distance and cost, with qualitative factors such as non-availability of drugs and staff playing a role through raising the risks of incurring significant costs for uncertain benefits. The strategy is therefore to bring services closer to the population, especially the poor and excluded, make them more affordable, and ensure that they meet minimum standards of quality and availability.

At present only 50% of the population live within 30 minutes of a health facility. Problems of gaining access to land have meant that many existing facilities are not optimally located. In principle, the Ministry is committed to progressing towards a target of 80% of the population living within 30-minutes travel time to a health or sub-health post. However, new investment in physical facilities will only make sense if they can be staffed, supervised, and kept supplied with drugs.

- NHSP-2 will address the problems of areas with poor physical access to facilities by looking to locally specific solutions in consultation with populations and service providers. Options to be considered will include new investment in health and sub-health posts where justified, more frequent outreach clinics, options for relocating existing facilities, and the possibilities of contracting services and PPPs to provide services in areas where public providers are not currently operating effectively. Physical investments will be considered alongside the issues of staff recruitment and incentives. Upgrading all sub-health posts to health posts and the addition of birthing units will continue at the current rate of 500 per year until 3,100 are completed during NHSP-2, with the posting of an additional HA and upgrading of the existing MCHW position to Assistant Nurse Midwife.

EHCS include prevention, clinic services, basic inpatient services, delivery services, and a list of essential drugs. In order to make services affordable, these essential health services are

free to all citizens at health and sub-health posts and at PHCCs. At district hospitals, EHCS are currently free for specified target groups (the poor, destitute, elderly, disabled, FCHVs). Delivery services are free to all pregnant women, and there are demand-side subsidies to cover transport costs and encourage women to deliver in a facility. Transport costs are also paid for patients needing treatment for Kala-azar, in order to support the eradication programme. Surgery for uterine prolapse is also being provided free under a new programme.

Although the services provided under EHCS were initially defined on cost-effectiveness criteria, some of the extensions to the list of free services have resulted in a degree of arbitrariness in what is provided for free and for what services there is a charge. All groups including the poor are still required to pay for laboratory and diagnostic services, safe abortion services, and drugs not on the list of essential drugs. Many Government health staff have private pharmacies, and have a potential conflict of interest through an incentive to prescribe drugs that must be bought from them rather than supplied for free.

Although all services provided by Government are partly subsidised, costs of curative care remain a major barrier to access, and are a significant cause of households becoming poor. The current approach of identifying which patients qualify for exemptions at facility level leaves patients facing uncertain risks regarding the costs they will be asked to pay, and is a barrier to seeking care. Approaches such as community health insurance can in principle help households to avoid being pushed into poverty by unanticipated health costs, but schemes exist in only a handful of districts, and have low coverage.

- During NHSP-2, EHCS in district hospitals will be made free to all. As was the case with the earlier extension of free services, this should result in a substantial increase in utilisation of district hospital services, but this will only happen if quality is maintained and, if possible, improved. At present, district hospitals rely on user fees for a quarter of their revenues. Moreover, user fees finance expenditures that Government revenues at present do not. They pay for contract staff where an established public servant is not available, they pay for some performance incentives to staff, and they finance maintenance and additional drugs and supplies. They also help to cover problems caused by delayed or interrupted disbursement of Government funds. Some revenues will continue to be collected for services outside the definition of EHCS, but they will be significantly reduced. Maintaining the quality of services offered at district hospitals and increasing their volume in response to increased demand caused by abolition of fees, will thus require lost fee revenue to be replaced with increased Government funding, and the increased Government funds need to be both timely and flexible as to how they can be used.

- A district hospital strengthening programme will be developed to cater to the demands for basic curative care. Services, such as obstetric care, paediatric care, anaesthesia, basic surgical care, eye care, oral health and mental health care will be expanded up to selected district hospitals according to the need. Human resources, drugs and essential equipment for these services will be ensured by strengthening district health management. To meet the need of curative services at the district level, positions for MDGPs, paediatricians, obstetricians, anaesthetist/aesthetic assistant, dental surgeons/dental assistant, physiotherapist/physiotherapy assistant, optometrist or ophthalmic assistant will be

created, or the services provided will be purchased through service contracts at district hospitals.

- During NHSP-2, the expansion of universal free outpatient, inpatient and emergency care to district hospitals will therefore be pursued in coordination with hospital autonomy, aiming to ensure that free services are extended in a context in which they are replaced by block-grant funding that is timely and flexible, and that is managed and accounted for by committees that are answerable to local authorities and to users of the services.

Modest funds have been available to help patients with catastrophic costs when they require referral to a secondary or tertiary facility, but the safety net is cash limited and does not provide consistent protection. Some referral hospitals operate schemes of their own, and private hospitals are required to provide a small percentage of free beds.

- A more consistent approach will be taken to developing a referral policy and system, and to financing the catastrophic costs of curative care. The approach to financing costs "beyond EHCS" will be developed under the health financing strategy that will be prepared during the first two years of NHSP-2. The approach to referral is likely to include some financial incentives to encourage patients to use the referral chain, reducing bypassing that occurs when patients go directly to the tertiary facility, resulting in overcrowding at that level and underutilisation of district hospitals.

The movement towards increased local autonomy for health facilities will be accompanied by changes in the financing, management and governance of health sector institutions.

- Greater discretion will be given to facilities receiving funding from Government on how the funds are used (block-grant funding), but clearer targets regarding what they are expected to achieve, with sanctions available for non-performance. The funding will be linked to a strengthened system of inspection and accreditation for the services to be provided, covering both public- and private-sector institutions. Norms, standards and quality guidelines will be established and formal inspection and monitoring will be supplemented with social audit and client satisfaction surveys. The public- or private-sector health facilities in receipt of block-grant funding will be required to sign contracts with targets setting out what they are expected to deliver with the funding provided. The Ministry will monitor their progress.
- Within the public sector, facilities at all levels from sub-health post to tertiary hospital will establish health facility management development committees and users groups. Users groups will be involved in the planning and follow-up of services.
- Health facilities will contract out ancillary services such as cleaning and laundry to improve cleanliness and reduce infection.

4.2 Humanitarian Response and Emergency and Disaster Management

Emergencies demand immediate need of shelter, food and health services. Diseases occur in the form of sudden outbreaks such as diarrheal disease, measles, food poisoning, pandemic influenza and others need timely preparedness for appropriate management with competent human resource, logistics support, communications and information systems for timely deployment. Whatever may be the reason, the impact on human life is sudden and often the

response may be late, inappropriate or inadequate. Because it is only the well prepared situations that can adequately and appropriately deal with emergencies thereby minimizing the damage and deaths.

Emergencies are generally taken seriously only when it occurs. But if it does not occur for a long time the preparedness part is almost forgotten and when emergency occurs there is nothing ready to deal with. Also often the relief measures that are intended to be provided to victims depend on other infrastructures in place like road, transport vehicles, bridges and the human resource to operate these items. In absence or delayed availability or unavailability of these essential commodities, support from health sector always faces constraints in reaching to the affected family and provide the emergency health service even if it is in a well prepared form.

The aim of the emergency preparedness and response is to increase the access and utilization of EHCS thereby minimizing human suffering and casualties. Specifically it aims to provide emergency health care within the shortest possible time, minimize long term complications and outbreak of diseases and maintain a good coordination with all the stakeholders.

During NHSP-IP 2, the following actions will be taken:

- Allocate and train staff needed for emergency purposes in all health facilities.
- Assure prepositioning of drugs, medical consumables and equipment for emergencies.
- Prepare working guidelines and orient communities.
- Setup coordination committees with clear chain of command during emergencies.
- Prepare appropriate guidelines to ensure adequate nutrition in emergencies.
- Set up inter-ministerial coordination committee from the centre to the peripheral level to mobilize resources and supplies essential for promoting health and preventing disease during emergencies.

4.3 Ayurvedic and Alternative Medicine

Ayurveda is a method of therapy/treatment in Nepal. Nepalis remain attracted to Ayurvedic treatment. In 2064/65 a total of 706,128 people received treatment through 291 Ayurvedic centres of the government.

According to the National Ayurveda Health Policy-2052, the Government will establish new Ayurveda health services and make all the services well-equipped in proportion to population density, public demand and participation. New Ayurveda Health services will be established in different parts of the country, not only in the Government sector but also in the non-state sector.

The top ten diseases identified for Ayurvedic treatment are Amalpitta (Gastritis), Udara roga (abdominal disease), Swasan wikar (respiratory disease), Vatavyadhi (Vataja disease), Bal rog (paediatric diseases), Stri rog (gynaecological diseases), Karna, Nasa, Mukha, Danta and Kantha-roga (ENT, oral and dental diseases), Jwar (fever), Vrana (wounds, abscesses) and Atisar/Grahani (diarrhoeal disease).

Actions during NHSP-2 include the following:

- Continue treatments with special focus on top-ten diseases at central, regional, zonal, and district hospitals, centres and dispensaries.
- Based on comparative advantages, promote an integrated treatment system with modern medicine.
- Continue to improve availability of human resources with special focus on quality and linking to research activities to enhance quality and reliability of Ayurvedic treatment.
- Establish a National Ayurvedic Research and Training Centre furnished with the required equipment for research of international standards in matters related to the use of Ayurvedic medicines, commodities and Ayurvedic treatment. This institution will be engaged in producing post-graduate level human resources and various training programmes.
- In the remaining four development regions, establish regional hospitals with 30 beds and a medicine production branch in each hospital.
- Improve effectiveness of supervision, monitoring, evaluation and referral for the Ayurvedic hospitals and other institutions.
- Prepare inventory of endogenous knowledge (related to traditional medicine), and skills, carry-out research to validate and update the endogenous knowledge and skills (linking with academic programmes with proper research back-up), respect patient rights and publish.
- Design and implement research for the promotion of herbal medicine, technology and procedures.
- Produce, collect and promote herbs locally available for utilisation in Ayurvedic treatment. Existing District Ayurvedic Health Centres and zonal will be consolidated.
- Ayurvedic dispensaries currently operated will be equipped and made capable of producing, protecting, and promoting herbs available in local level.
- Build Ayurvedic hospitals, health centres and dispensaries and develop model herb farms to encourage herbal production.
- Coordinate with governmental and non-governmental associations related to herbals, so as to maintain standards in domestic trade and export to foreign countries by identifying genuine herbals.
- Establish governmental and non-governmental Ayurvedic medicine manufacturing companies with a quality assurance mechanism.
- Develop one Ayurvedic Medicine Examination Committee and Laboratory for maintaining the quality of Ayurvedic Medicines.
- Naradevi Ayurveda Hospital (Central Hospital of Ayurveda) will be developed as a specialized Ayurvedic medical service centre with different departments of Kaya Chikista (general medicine), Shalakya (ENT and Eye), Shalya (surgery), Stri Prasuti (gyn/obs), Kaumarabhritya (paediatrics), etc.
- Establish 90 Ayurveda Aushadhalaya in different districts (as in the three-year plan).
- Continue the Senior Citizen Rasayana Programme, Lactating Mother Programme, Ayurveda School Health Programme, Local Ayurveda Kit Programme, etc.

5. Role of Non-State Actors

5.1 Context and Background

The Non-State Sector can be classified into for-profit and not-for-profit. The for-profit sector includes private pharmacies, private hospitals, research centres and nursing homes, private practitioners, and private medical colleges. Although not health service providers, Nepal also has a domestic pharmaceutical industry. The not-for-profit sector includes I/NGOs, community organizations, cooperatives, and trust and philanthropic organizations.

According to the 2003-4 NLSS, 44 percent of those who sought treatment for acute illness visited a Government facility, 40 percent went to a private pharmacy (most provide physical examinations and offer diagnosis, as well as drugs), 9 percent went to a private hospital, and the remaining 7 percent were classified as "other." Private hospitals are mainly located in urban areas and are used predominantly by the richest (14% of their consultations) and very little by the poorest (2% of consultations).

Household out-of-pocket expenditure is estimated to account for 50 percent of total expenditure on health, compared to 24 percent by Government and 21 percent by EDPs.[33] Other than households, the financial contribution of the private sector is relatively small. NGOs and philanthropic organizations pay for nearly 4 percent of total health expenditure, and corporations with health insurance schemes for their employees and families account for the remaining 2 percent.

The relative share of Government in both financing and providing health-care has probably increased further since 2005-6. In 2003-4, the average cost to users of seeking treatment from a Government facility was marginally higher than private consultation.[34] Over half of out-of-pocket expenditure was spent in public facilities, with even higher shares in the Far and Mid Western Development Regions where NGO and private service provision is also negligible (World Bank, 2002). Partly as a consequence of high out-of-pocket costs, HLSS found that 43 percent of the poorest did not seek care for their last acute illness, compared to 27 percent of the richest. The subsequent expansion of free care increased out-patient contacts in Government institutions by 35 percent in 2007-8 alone, and will have been associated with both an increase in total care as more people can afford to seek care, and a switch from private to Government facilities as the difference in cost became greater.

Non-state investment in the health sector has been substantial, although almost entirely urban. There are 13 privately run medical colleges, 17 NGO run hospitals, 17 eye hospitals, 87 private research centres and hospitals and nursing homes, 39 pharmaceutical industries of Nepali origin and 240 foreign-based pharmaceutical companies, 40 diagnostic laboratories and research centres and two radio therapy facilities.

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[33] HEFU, draft National Health Accounts, 2003/4-2005/6. There are some problems with this survey, but the declining trend in OOP since the previous NHA estimate seems plausible.

[34] National Living Standards Survey, 2003-4

5.2 Role of the Private for profit Sector

Apart from private pharmacies, the private for-profit sector is primarily involved in medical education and tertiary care in urban areas, catering to the better off. The sector now produces almost 90 per cent of medical doctors (MBBS) in Nepal, and a similar share of staff nurses. The private health sector in 2005-6 had two thirds of hospital beds, 13,400 compared to 6,796 government hospital beds. It also operates three times more health laboratories (1,000) than Government (277) (DoHS, 2008). By reducing the need for Nepalis to go abroad for medical education or for specialist care, the sector is estimated to save Nepal more than NRs. 500 million per year in foreign exchange (Rijal, 2008). The sector also contributes through taxes and employs around 20,000 people in private health facilities (Rijal, 2008). Regulation of the sector has been minimal, and there are big differences in the quality of the services offered and the prices charged for similar services (RECPHEC, 2005). Utilisation of private-sector facilities is very low, especially medical colleges where students need patients to learn from treating patients.

Nepal has also developed a private pharmaceutical industry that meets around 32 percent of total domestic consumption and is worth NRs. 9,719.3 million. There are sixteen companies with WHO-GMP certification for drug production. Almost all domestic drugs are produced by the private sector.

Another important part of the for-profit sector is private contractors delivering directly funded projects and programmes on behalf of EDPs. Some I/NGOs and UN agencies are involved in similar relationships, which are forms of public-private partnership that by-pass Government systems, though the contractors may work closely with public sector institutions.

5.3 Role of the not-for profit non-state sector

Non-profit service providers started with Mission hospitals, and more recently organisations such as Paropakar Sangha, Red Cross, Cancer Relief Society, Family Planning Association, Leprosy, Tuberculosis Association, Nepal Netrajyoti Sangh, Nepal Disabled Association and several other organizations and networks. Their coverage is limited and a large section of the population is unaware of them. Large I/NGOs have played an expanded role in recent years, often operating with local partners and drawing funding from official development agencies.

Non-state actors like Non Governmental Organizations (NGOs), International NGOs, civil society and community-based organizations have been more involved in public health activities, including advocacy for health rights and raising awareness on prevention of diseases. Some philanthropic organizations are involved in rehabilitation relating to disability. For example, the Leprosy Association and others are working on rehabilitating leprosy patients, and others work with the disabled and conflict victims. Not-for profit organisations have also opened and operated a few hospitals including community managed hospitals/clinics. Non-state entities are also involved in response to disease outbreaks and emergencies, and in supporting national campaigns and running surgical camps and outreach

clinics. NGOs run a wide range of community-based projects and programmes with health or nutrition content.

5.4 Contribution of Non-state sector to NHSP Goals

The non-state sector has contributed in meeting the goals of NHSP-I in almost all areas, notably: immunisation, tuberculosis control, expanding contraceptive use, controlling HIV/AIDS, and WASH promotion.

Although immunisation services are provided mainly through government facilities, for-profit private-sector and NGO clinics are also providing services. The private sector provides immunisation services mainly in urban areas through hospital clinics, nursing homes and NGOs. The Government supplies vaccines, related logistics, and technical assistance, including monitoring and supervision to ensure uniform, quality service.

NGOs provide 44 percent of male and female Voluntary Surgical Contraception (VSC), with MSI accounting for 96 percent of the total. The private sector is also involved in social marketing of contraceptives.

Formal contractual relationships with non-state organisations to deliver services have mainly been financed by EDPs outside Government budget procedures, although they work closely in support of Government programmes. There are a number of more formal partnerships between Government and non-state providers, although these have not developed to the extent envisaged when NHSP-1 was approved. The partnerships include the following:

a) Partnerships with NGOs in delivering health services at district and sub-district level—Lamjung Community Hospital (contracting-out model of PPP), and Bayalpata hospital, Achham.
b) Partnership with district-level local governments and local communities (Jiri District Hospital)
c) Partnership with private hospitals and medical colleges in prevention and treatment of uterine prolapse

5.5 Key issues in Government policy towards the non-state sector

5.5.1 Unclear government policy on partnership

While health indicators have shown impressive improvements in the recent decades, serious issues remain with respect to the quality and efficiency of services and the equity of access. The Health Sector Strategy, 2003 indicates that the role of the Public Sector would "change from one primarily of a service provider to that predominantly of a policy maker, financier, and regulator." Increased PPP was one of the eight main outputs of NHSP-1. The intention was to achieve increased efficiency and effectiveness through more competition and performance-based contracts.

Although there are forms of PPP in place across many parts of the health system, Government funding has so far continued to be used overwhelmingly to finance Government service provision. However, there is a need to clarify the policy. PPP will continue to have a role to play, but this needs to be pursued where the approach is likely to be cost effective, not as an end in itself. PPP contracts need clear performance standards and monitoring, which requires capacity within Government. Future policy needs to be built on a better understanding of the past experiences of PPP and its different modalities practiced in Nepal.

5.5.2 Quality assurance and coordination

Non-state efforts are currently not well documented or monitored. There is a lack of routine monitoring by the regulatory institutions with transparent enforcement of agreed standards of care. A regulatory framework was drafted in 2002, but it did not take any effective shape due to limited attention given in this aspect of governance. One inhibiting factor is the resource implications of effective regulation; another is the need for consistency of approach in a situation where there is a similar lack of enforcement of consistent standards within Government health facilities.

There are no regular channels to coordinate with non-state actors, document their activities, monitor their performance and guide them towards complementing Government policy. Government recognises the importance of maintaining the independence of non-state actors, but more frequent contact is needed in order to identify and exploit opportunities for mutually beneficial cooperation.

5.5.3 Community initiatives in health service delivery

There is a growing movement by community and charity organizations for establishing, managing and sustaining community hospitals at the neighbourhood level. The Ministry has been providing some ad hoc financial support to these community health institutions, but there is need to establish a clear policy and supportive mechanism.

There are benefits in so far as such hospitals will be strongly owned and accountable to the communities that built them, and some of the costs of building new facilities are taken away from the Government budget. However, the experience of other countries is that the communities with the drive and the resources to establish a community facility are often the better off communities and sometimes already have better access to health facilities than poorer and more remote communities. Government therefore needs to develop criteria for deciding whether and in what form it will provide additional financial support to such initiatives, based on a demonstrable need to provide improved facilities to an underserved population.

5.5.4 Limitations of for-profit private sector

The private-sector facilities represent an under-utilised resource and the Ministry will look for opportunities to work in partnership with the private sector to improve their contribution

to achieving the goals of NHSP-2. It is necessary, however, to be realistic and to ensure that PPP represents value for money. The private for-profit facilities are mainly intended to generate a financial return for their owners. They can and do perform a useful social role, but existing facilities are mostly in the wrong place from the point of view of serving the poor, and offer types of curative care that cannot at present be afforded by the Government budget.

5.6 Strategic Direction

In summary, the following will represent the strategic direction on partnerships:

- ***Clear policy and strategy formulation*** involving the private sector (for-profit and not-for-profit): A comprehensive policy is needed on the non-state sector's contribution to health service delivery. The policy needs to clearly spell out the strategies for
  Mainstreaming of non-state sector so that their efforts can be complementary to those of Government, without compromising their independence
  Creating a supportive environment
  Assigning roles and responsibility
  Ensuring accountability, transparency, and regular monitoring
  Ensuring corporate social responsibility
  Promoting inclusiveness
  Regularized participation of non-state actors in the policy making body as well as an implementation coordination mechanism for the health sector.
- ***Quality assurance*****:** Capacity to regulate is currently lacking, and there are dangers of uneven treatment of public and non-state providers. The focus of regulation may therefore initially be on accreditation of non-state providers to receive public funds, either for referrals financially supported by Government, or through participation in schemes such as uterine prolapse repair or the safe motherhood programme. Government will let the market set prices, to avoid price regulation driving down quality and discouraging future investment. However, it will use its market power to ensure that services procured by Government from non-state actors are procured at prices that give good value for money.
- ***Scaling up of successful practices***: There is significant experience of different types of partnership arrangements in Nepal health sector. These successful partnership arrangements will be documented in more case studies, to capture the lessons of successful and less successful experiences. Successful approaches will be considered for adoption and scaling up during the NHSP-2.
- ***Encourage private sector to establish and expand the specialized credible services to rural areas***: Since the specialized services are limited in rural areas, Government will develop an enabling environment for the private sector to expand to rural areas using partnership approaches and make the services accessible and affordable to the poor. This expansion will be increasingly feasible as the output of medical graduates floods the market for their services in urban areas, and as the competition for patients in under-utilised private hospitals forces medical colleges to find novel ways to provide sufficient patients for teaching and clinical practice. The model currently used by BHKIHS in their teaching districts will be further strengthened as a partnership model and will be scaled up partnering with all private medical colleges and other private hospitals. This model

will be used as a key strategy to strengthen the service quality of district hospitals and referral system.

- Further expand and strengthen recently established multi-sectoral *PPP Policy Forum as a platform for policy dialogue* and use their inputs for the promotion of partnerships.
- Establish focal unit within the Ministry to provide institutional home to coordinate with non-state organizations and promote state—non-state partnerships.

5.7 External Development Partners (EDPs)

All of Nepal's major external development partners working in the health sector are signatories of the 'Paris Declaration' on aid effectiveness and of the subsequent 'Accra agenda for action.' Table 5.1 summarises the commitments set out in these two documents.

Table 5.1: International commitments

PARIS DECLARATION
Ownership - Developing countries set their own strategies, improve their institutions and tackle corruption.
Alignment - Donors align behind these objectives and use local systems .
Harmonisation - Donors coordinate, simp lify procedures and share information to avoid duplication.
Results - Developing countries and donors shift focus to development results and results get measured.
Mutual Accountability - Donors and partners are accountable for development results.
THE ACCRA AGENDA FOR ACTION (AAA)
Predictability – donors will provide 3 -5 year forward information on their planned aid to partner countries.
Country systems – partner country systems will be used to deliver aid as the first option, rather than donor syst ems.
Conditionality – donors will switch from reliance on prescriptive conditions about how and when aid money is spent to conditions based on the developing country's own development objectives.
Untying –relax restrictions that prevent countries buying the goods and services they need from whomever and wherever they can get the best quality at the lowest price.

5.7.1 Ownership - Developing countries set their own strategies, improve their institutions and tackle corruption.

There is strong national ownership of the health strategy. The basic orientation has remained consistent through conflict and through changes of administration. It has increasingly focussed limited Government resources on essential services, and is succeeding in achieving remarkable rates of improvement in reducing mortality and narrowing inequality in the sector. There is a clear track record and future strategy for improving institutional effectiveness and improving accountability.

5.7.2 Harmonisation and Alignment

A major objective of the Paris and Accra agreements is to focus all external assistance on common objectives and to deliver it through harmonised approaches aligned with those of Government. Increased use of Government's own systems is not an end in itself, but is intended to be a route towards improving aid effectiveness, improving coordination and reducing costs by gradually replacing the multiplicity of EDP systems for planning, budgeting, implementing, reporting and accounting for aid with a single set of procedures that all partners use. Achieving the potential benefits of increased harmonisation and

alignment depends on ensuring that the common procedures are efficient and effective, and are seen to be so.

During NHSP-1, considerable progress was made in improving the effectiveness of Government procedures in the health sector:

- Budget implementation has steadily improved, with increased focus on overcoming bottlenecks through approaches including more realistic budgets, earlier fund release, and more delegation. The improvement has been reflected in a higher volume of services being delivered partly made possible by the improved availability of essential supplies and operating budgets.
- A more integrated approach to district health services. From 2004-5, the separate district level projects for FP/MCH, control of diarrheal disease (CDD) and ARI, nutrition, EPI, construction and supervision have been merged into a single integrated district development programme. Before the merger of the projects and the integration of supervision and reporting, each of the 75 districts had to maintain separate accounts on each project and a total of 13,500 reports were required each year. The merger of programme and budget heads saved time and resources. Efforts are ongoing to further reduce the number of budget headings, and hence the transactions costs. The integration has been deeper than a simple change in reporting. The merger of CDD and ARI into the IMCI has resulted in a successful, cost effective, and integrated approach for child health care.

Development partners have begun to respond by working in alignment with Government procedures. In 2005, the Government and EDPs in the health sector signed a joint statement of intent in health, envisaging joint planning, joint programming, and joint performance reviews. Since that time, there have been 9 joint reviews. There are two each year. One in December is mainly backward looking, reviewing performance in the previous year, but also aims to inform the coming budget and annual plan preparation by providing indications of future funding for the coming budget year. A second review, normally in May, focuses more on discussion of the annual work plan and budget for the coming year.

Although non-pool EDPs still retain separate organizational arrangements for managing their aid, the establishment of the pooled fund within the Ministry permitted the abolition of the Project Implementation Unit that had been used for the Population and Family Health Project, and that had had a separate project chief, accountants, administrators and monitoring officers. Under NHSP-1, each reform output was implemented by the responsible Division/Centre and all outputs were coordinated by a Coordinator, Health Sector Reform Unit. This approach internalized the reforms and saved costs. During NHSP-2, it will be further developed, as DfID plan to bring their support to safe motherhood within the pool funding arrangements.

Although there has been progress, the pool fund still represents less than half of EDP reported expenditure in the health sector. Even the pool fund imposes procurement and financial management requirements beyond Government systems. Non-pool EDPs make little use of GON systems. SWAp management arrangements have become one more set of meetings without replacing parallel EDP procedures for planning, budgeting, implementing,

monitoring and accounting for their support. EDP support continues to be driven to a large extent by the policies and preferences of the individual agencies. EDPs support the Government's health strategy in a general sense, but the initiative on what will be supported tends to come from the EDP rather than responding to where the financing gaps are within the existing strategy.

5.7.3 Results Focus

The Paris agreement calls for Developing countries and donors to shift focus to development results, and to ensure that results get measured. The Accra agreement goes further, calling for donors to switch from reliance on prescriptive conditions about how and when aid money is spent to conditions based on the developing country's own development objectives.

The common results framework provides an approved agenda of future actions, and has become more realistic and better attuned to the Ministry's capacity since the MTR.

There has been a strong emphasis on evidence-based policy, using both international experience and local pilots. A succession of carefully conducted surveys has largely confirmed the accuracy of HMIS data and has also revealed remarkable progress in reducing under-5 and maternal mortality, while narrowing inequality.

- Under NHSP-2, the Ministry will reduce the emphasis on ad hoc surveys, institutionalising the collection of the information needed to track progress. Local micro-planning and supportive supervision will pay increased attention to using local data to improve local planning.

The strong record of achievement within the sector should provide a basis for a stronger partnership based on mutual trust, with less need for EDPs to impose conditions other than joint commitment to achieving the objectives set out in the results matrix.

5.7.4 Mutual Accountability

Improved EDP accountability is badly needed, particularly with respect to following through on their indications of future aid levels, and ensuring that aid finances the approved health strategy. The Accra commitment to increased predictability calls for EDPs to ***provide 3-5 year forward information on their planned aid to partner countries.*** This has not happened. EDPs supporting the health sector in Nepal have only committed to provide indications for the following financial year by end of March, just three months before the budget year starts, and too late to inform budget preparation. The indications that have been provided have proved unrealistic, and EDP spending has fallen far short of amounts allocated in the budget, indicating a lack of predictability even in the short term. Actual EDP expenditure in the budget year in 2007-8 was only 58% of expected EDP funding. Expenditure of pool funds as a percentage of commitments has increased considerably from 72% in 2004/05 to 86% in 2006/07 but then fell back to 64 % in 2007/08. Expenditure by non-pool EDPs remains at little more than half of the level assumed in the budget, increasing from 44% in 2004/05 to 53% in 2007/08.

The low reported spending of non-pool aid reflects a number of problems: differences between Government and EDP financial years for commitment purposes, differences in timing between funds being transferred to the Ministry and actually being spent, disbursement optimism in EDP indications. It may also to an unknown extent reflect problems in getting expenditure reporting from EDPs in a form that can be reflected in public accounts. The problem is not only the shortfall in spending relative to budget assumptions, but also in some cases donors spending on projects that they have identified rather than filling financing gaps within the NHSP. EDP projects are always negotiated with and agreed to by the Government, but Ministry agreeing to receive what the EDPs offer is not the same as Government and EDPs working together to ensure that a common strategy is developed and fully financed.

5.7.5 Untying Procurement

A significant share of bilateral non-pool fund assistance continues to be tied to procurement in the home country of the development partner, particularly TA expenditure. There is little that development partners can do about their national policies on tying, but the costs of tying are further increased when expenditure is tied both to procurement from the EDP's country, and to the specific goods and services to be procured. Nepal would obtain better value from tied aid if it could use it more flexibly to purchase goods and services that are needed for implementing NHSP-2, and which the development partner is able to supply cost-effectively.

5.7.6 Action Plan

During NHSP-2, the Ministry wishes to see faster progress on the aid effectiveness agenda. Progress will be sought in the following areas:

- **Increased direction from the Ministry** on where EDPs that are not providing pool funding should focus their support. The aim will be to ensure that the programmes identified in this NHSP-2 document are fully financed before entertaining any donor proposals for expenditure beyond the implementation plan. EDPs are strong advocates for policy positions adopted by their agencies, but with a very tight resource envelope, the Ministry needs to be cautious in taking on new commitments that will inevitably entail additional recurrent costs eventually falling to the Ministry.
- As far as is practical, **EDPs will be asked to align their own planning and approval cycles** with the Government budget cycle. It is recognized that this will present some difficulties for those EDPs operating in different financial years, but it is equally or more difficult for the Ministry to adjust budgets to accommodate commitments that have not been planned for in the national budget.
- **Reducing the transaction costs** of dealing with development partners. Excluding the NGOs, there are 14 donors supporting NHSP, but the two major pool donors plus USAID account for 80% of EDP spending, while the six smallest donors each account for less than 1% of aid to the sector. Although the Ministry is grateful for all of the support it receives, it has limited capacity to deal with numerous uncoordinated development partner missions, reporting requirements, requests for meetings and information, and expectations to be consulted and have policies and plans adjusted in the light of

comments made. A major aim of the SWAp was to reduce the transaction cost burden of dealing with the EDPs, but this has yet to happen to a significant extent. A major effort will therefore be made to encourage EDPs to limit the burdens they place on the Ministry by acting more in line with SWAp principles: relying more on the SWAp planning and monitoring processes without imposing additional bilateral requirements, limiting the bilateral contacts that are required by more joint missions or co-financing or "silent partner" arrangements.

- A particular effort will be made to **improve the coordination of technical assistance** (TA), with a more formal requirement that TA missions and terms of reference be agreed to by the Ministry before they are fielded, and with the development of an annual TA plan as an adjunct to the AWPB and an agreed outcome of the JAR. All TA proposals should be undertaken on behalf of the SWAp partnership, even if they are in practice financed by one or more of the development partners. Some flexibility will need to be retained, but the key point is to ensure that all TA responds to an acknowledged need identified by the Ministry, putting an end to the situation where TA can be commissioned by EDPs based on passive Ministry acceptance or (in some cases) without the Ministry's prior knowledge or approval.
- A **strengthened SWAp management capacity**. DAC guidance recognizes the need for an effective secretariat to support sector wide management. The health sector reform unit in the Ministry is responsible for managing the SWAp relationship, but has limited staff, and is also responsible for coordinating and reporting on a complex reform agenda.
- **A more balanced partnership**, with a stronger focus on EDP performance assessment as well as reviewing Government performance in implementing NHSP-2. Some preliminary steps have been made to introduce EDP reporting, but these have so far been limited to EDP self reporting. The Ministry will discuss with the EDPs how to bring into play an equally rigorous and independent assessment of EDP performance, in order to focus attention on how to accelerate progress towards meeting the aid effectiveness commitments.
- Recognising that EDPs are reluctant to provide medium-term indications of support, and that even annual figures indicated by EDPs have proved unreliable, **the Ministry will develop financing assumptions based on adjusting budget year indications** to take account of past under-performance, while basing medium term forecasts on informal discussion of reasonable assumptions for the major EDPs. Experience in other countries is that EDPs who are reluctant to provide written indications of likely spending in advance of formal commitment, may nevertheless be able and willing to help in developing reasonable assumptions on the likely level and nature of their support, and the up-side and down-side risks, provided they are not quoted in a way that identifies the donor commitment data are so unreliable as to be of little value in estimating the future resource envelope.

5.8 Inter-Sectoral Coordination and Collaboration

5.8.1 Current Context and Issues

There are many factors outside the health system that influence people's health. The Ministry therefore needs to work with other sector ministries to ensure that health-related issues are tackled in areas such as water and sanitation, rural infrastructure, nutrition- and governance-

related health issues. In the Nepal Health Sector Strategy, the Ministry committed to coordinate this multi-sectoral intervention and the ministry also established the focal point for implementation.

There are a number of other coordination mechanisms led by other sector Ministries and operating at the policy level, but they are not very effective at programme level.

5.8.2 Strategies and Actions

The Ministry will lead in areas of its comparative advance and will enhance inter-sectoral coordination and collaboration. Each year, activities will be identified and incorporated in the Annual Work Plan and Budget (AWPB) and implemented accordingly.

Coordination and collaboration and potential partners are summarised in the table:

Table 5.2: Key areas for inter-sectoral coordination and collaboration

Area	Importance	Ministry's Role	Partners
WASH	Main causes of child death are WASH-related diseases Meeting the MDGs requires the support of other sectors and the Ministry will take the lead on hygiene promotion and ensure that multi-sectoral programme are designed involving key partners and effective intersectoral co-ordination and collaboration takes place. A multi-sectoral approach will be adapted to both health and non-health interventions that promote access to and utilisation of improved WASH services. For this purpose, effective mechanisms for inter-sectoral coordination and collaboration will be established	Promote improved hygiene practice, coordinate with investments in WASH, and establish water quality surveillance system (regulatory function)	Social welfare council, I/NGOs, MOWR, MPPW, community-level user groups, and local Government
Food and nutrition	Malnutrition high and major cause of death and of poor cognitive and physical development	Link CBNP and BCC to food security, local nutritious foods, food fortification, social protection for malnourished mothers and children	Agriculture, WFP, Education, MOLD, Industry (food fortification), UNICEF, WHO, FAO, USAID
Rural infrastructure and housing	Reduce journey times and costs for accessing services	Coordinate road and health investments	DOLIDAR, physical planning ministry, local governments
Education and information	Attitudes and behaviour of coming generation are key to health goals	Health in the curriculum, in BCC by other Ministries; school health programmes	Ministries of education and communication, NGOs
Waste management	Health hazards	Safe medical waste disposal	MOLD, local government
Alternative fuels and cooking stove designs	Reduce ARI	Advocacy	MOST
Regulation and legislation on accidents, occupational hazards, smoking and alcohol	Significant and growing	Advocate enforcement of belts, helmets, speed limits etc, work safety, controls or tax measures to reduce smoking and excessive drinking	Department of Roads, traffic police, Ministry of industry

Water and Sanitation

WASH associated diseases including skin diseases, ARI and diarrhoeal diseases are the top three leading preventable diseases reported in the country and WASH-related diseases remain the leading causes of child deaths. Due to poor access people, especially children, women, and excluded, are exposed to contaminated water, inadequate sanitation facilities, smoke and dust, and mosquitoes bites. This is a problem that imposes a sustained and heavy disease burden on the health system. And with the recognition of the environment's contribution to malnutrition, there is an urgent need to broaden the spectrum of interventions beyond the health sector.

The MDG Goal 7b is to ensure access to water and sanitation. The target is to halve, by 2015, the proportion of people without sustainable access to drinking water and sanitation.

Table 5.3: MDG indicators related to water and sanitation

MDG Indicators	1990	1995	2000	2005	2015
Improved water source (% with sustainable access)	46	70	73	82	73
Improved sanitation (% with sustainable access)	6	22	30	46	53

The Nepal government recognises the importance of rapidly improving poor water and sanitation conditions and of meeting the MDG goals and target. The Ministry is the lead agency with respect to promoting health and hygiene. Hygiene and sanitation promotion will be effectively mainstreamed with the adoption of a key performance indicator for behaviour change on improved hygiene practices. In partnership with other related agencies the Ministry will start a water quality surveillance system as per the water quality protocol adopted by the Government.

The Ministry will coordinate with partners involved in the sector to ensure that investments in WASH are accompanied by appropriate health education, working with communities to reinforce the importance of using and maintaining WASH infrastructure and of maintaining good hygiene and sanitation practices.

Nutrition

In developing a more effective multi-sector response to nutrition, the Ministry will work closely with the Ministry of Agriculture on food security and promotion of nutritious local foods, with the Ministry of Industry on food fortification, and with UN agencies and collaborative partners involved in social protection in developing sustainable approaches for supporting malnourished pregnant women and young children.

Infrastructure

Opportunities for bringing health services closer to the population depend on developing and rehabilitating transport infrastructure as well as building health facilities. This requires coordinated planning of infrastructure development at local level.

Education and Information

There are pressures to ensure that the school curriculum does not become overloaded with content, but schools present an unrivalled opportunity to inculcate attitudes and behaviours in the next generation which will support improved nutrition and health across the whole range of NHS-2 outputs. The Ministry will also conduct school health programmes, including supporting de-worming for this older age group. With regard to information, the Ministry has an interest in advocating that appropriate health-related messages are included in the BCC work of other departments.

Waste Management

The Ministry will implement the medical waste management action plan and will develop specific standards on HCWM and for the disposal of various categories of health care waste such as needles, mercury, infectious waste, liquid waste etc. The Ministry and Department of Health Services will develop the required capacity and institutional arrangements, including additional human resources, to implement and monitor compliance with the standards.

Alternative fuels and cooking stoves

The Ministry will work with Ministry of Education and other partners to promote use of cleaner fuels for cooking such as biogas and improved cooking stoves to improve ventilation in the cooking area.

Legislation, regulation and taxation measures

Enforcement of measures to ensure the use of seat belts and helmets would significantly reduce the health impact of road traffic accidents. The Ministry will also collaborate with other ministries and nongovernment agencies to take steps in preventing the harmful effects of occupational hazards particularly in urban areas where large numbers of people are being exposed every day. Smoking and excessive drinking can be discouraged by a combination of regulation and tax measures.

Climate change

The Ministry will establish a knowledge network with academia and practitioners on climate change and a public health response team for climate change.

6. Structure, Systems, Institutions and Governance

6.1 Sector Organization, Management and Governance

According to the Work Procedure Manual of the Government of Nepal, 2007 (revised 2009), the Ministry is responsible for delivering preventive, curative, promotional and rehabilitative health care services and other health system related functions such as policy and planning, human resource development and mobilisation, financing and financial management, and monitoring and evaluation. It has six Divisions: Administration Division, Policy, Planning and International Cooperation Division, Curative Services Division, Human Resources and Financial Management Division, Public Health Administration and Monitoring and Evaluation Division, and Population Division. There are five autonomous bodies established by law for education, research and service delivery purposes. In addition to these, there are four professional councils to provide accreditation to health-related schools/ training centres and to regulate care providers. The Policy Planning and International Cooperation Division (PPICD) has undertaken policy formulation and the overall planning and programming of the health sector. A Health Sector Reform Unit and a Health Economics and Financing Unit (HEFU) have been created within the PPICD to support the reform process. At present there is a Health Sector Development Partnerships Forum to promote dialogue in policy matters and harmonise efforts between the Ministry and External Development Partners (EDPs), and align plans and programmes. A Public-Private Partnerships Forum and Health Sector Decentralisation Policy Forum have also been created to harmonise the efforts of various sectors and foster coordination and collaboration between public and private sectors, and among development ministries. In addition to these forums, a Health Financing Forum has been established to provide support to HEFU and share evidence to inform policy formulation and implementation.

There are three Departments under the Ministry. They are Department of Health Services (DoHS), Ayurved (DoA) and Drug Administration (DDA). At the DoHS, the Director General (DG) is the organisational head with all programme management division/units working under the DG. The recent reorganisation includes the Management Division with infrastructure, planning, quality of care and management information system as part of the Division. The Family Health Division is responsible for reproductive health care, including safe motherhood and neonatal health, family planning and Female Community Health Volunteers (FCHVs). The Child Health Division covers nutrition, IMCI, and EPI. The other Divisions are Epidemiology Disease Control, Leprosy Control, and Logistics Management. There are five centres with a degree of autonomy in personnel and financial management: National Health Training Centre (NHTC), National Health Education, Information and Communication Centre (NHEICC), National Tuberculosis Control Centre (NTC), National Centre for AIDS and STD Control (NCASC) and National Public Health Laboratory (NPHL). The NHTC coordinates all training programmes of the respective Divisions and implements training by sharing common inputs and reducing the travelling time of care providers. Similarly, all IEC/BCC-related activities are coordinated by NHIECC to avoid

duplication. Both centres collaborate with the private sector to implement their programmes. These centres support the delivery of EHCS and work in close coordination with the respective Divisions.

The DoHS and other departments are responsible for formulating programmes as per policy and plans, implementation, use of appropriated financial resources and accountability, monitoring and evaluation, and mobilising the staff at implementation level. DDA is the regulatory authority for assuring the quality and regulating the import, export, production, sale and distribution of drugs. Department of Auyurveda offer Aurvedic care to the people and also implement health promotion such as Yoga.

At the regional level, which is directly under the Ministry, the Regional Directors are responsible for technical backstopping as well as programme supervision. However, their role would more likely be promoted in the context of federalism. At the regional level, there are regional and zonal hospitals (15), which have been given decentralised authority through the formation of boards. In addition, there are Regional Training Centres (RTC), laboratories, TB centres (in some) and medical stores at the regional level.

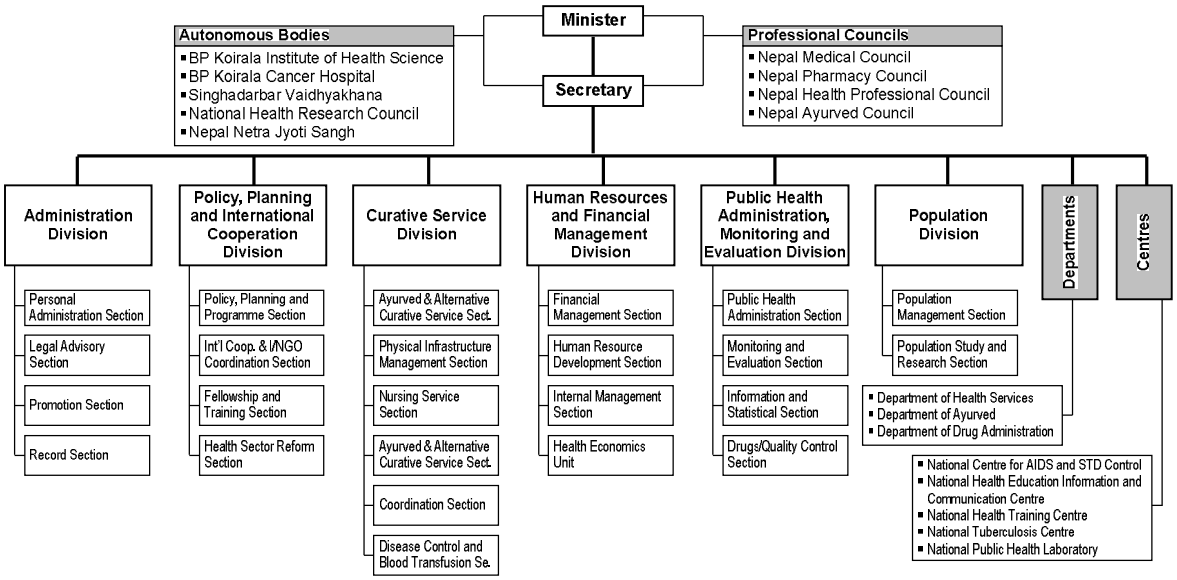
At the district level, there are District/ Public Health Offices to implement EHCS packages. The offices monitor activities and outputs of PHCCs, health and sub-health posts. Within the Ministry, the structure varies between districts. Sixty-one districts are managed by the District Health Office with support of the District Public Health Office, whereas the remaining 14 are managed solely by the District Public Health Office.

The next level of health care is provided by 206 Primary Health Care Centres. There are 676 health posts (HPs) and 3,134 sub-health posts (SHPs) in the country. A sub-health post is established at each VDC and is the first institutional contact point for basic health services. SHPs monitor the activities of FCHVs as well as community-based activities by PHC outreach clinics and EPI clinics. The health post offers the same package of essential health care services plus birthing centres in the respective VDC and monitors the activities of the SHPs in their geographical area as well.

The Government has abolished user fees for EHCS at SHPs/HPs and PHCCs for all nationwide, provides EHCS free of charge at district hospitals for targeted groups and 40 free essential drugs for all, so demand for health care at district hospitals has also increased considerably. Population size has increased by 34% in the last 18 years but the capacity of health facilities has remained same. Therefore, health facilities will be upgraded to satisfy demand. The upgrading of health and sub-health posts was initiated in 2008-9 and each following year 529 SHPs will be upgraded to HPs, totalling about 1,000 by 2009/10. All remaining SHPs will be gradually upgraded to HPs during NHSP-2. Upgrading of PHCCs to community/rural hospitals was initiated in 2008 and 5 PHCCs were upgraded to 15-bed rural hospitals to provide inpatient services. Selected PHCCs will be upgraded to rural hospitals. In addition to these upgrades, the bed size of selected district hospitals will be upgraded from 15- 25 to 25-50 beds.

The Nutrition Section in the Child Health Division has only two permanent staff to manage the National Nutrition Programme. For inter-ministry and inter-sectoral policy and planning and collaboration a guiding body is required to act as the apex nutrition architecture with a role to periodically monitor the effectiveness of inter-ministry and inter-sectoral nutrition programmes. Therefore, advocacy and sensitisation efforts will be initiated by the Ministry to establish an apex nutrition body either at the Prime Minister's office or at the National Planning Commission.

Figure 6.1: Organization Chart of Ministry of Health and Population



6.1.1 Transitional Management in the Federal Context

Currently, the State Restructuring Committee of the Constituent Assembly (CA), in its preliminary draft report, has recommended three tiers of government—federal (union), provincial and local. In addition there are two additional divisions of power, namely concurrent and autonomous. Although the content (including federalism) of the constitution is still being elaborated by the Constituent Assembly (CA), there is a strong need to anticipate and prepare for the time after the constitution is ratified. The future allocation of responsibilities between levels could imply significant changes to the financing, organization, and management of health services.

Federalism and its implication on the health sector

New constitutional provisions will require re-definition of roles, responsibilities, powers and structures of the Ministry and its departments and Regional Directorates, and a remodelling of roles throughout the health system. The intention is to bring power and service provision nearer to the people or to the lowest level of government.

In the health sector of Nepal, the Ministry need to prepare for transitioning the health system. Managing health systems under a federal structure requires serious dialogue and continuous

consultation with stakeholders as it will have serious implications for the existing institutional framework, referral system, research and training, human resource management, and delivery of health service at different levels. Lessons from current decentralization and restructuring-related initiatives will need to be redefined in the context of federalism.

Recently, the Ministry decided to prepare a plan for a smooth transition and it has been integrated in this document as an integral part. This plan needs to be implemented with the restructuring process.

6.2 Free Essential Health Care

Under NHSP-1 free essential health care services were initially targeted to the poor and excluded but later EHCS became free of charge for all at district facilities, except district hospitals where free EHCS continued to be targeted but 40 essential drugs were free to all. Abolishing user fees for EHCS is intended to eliminate financial barriers at service delivery sites and thereby improve access to and utilisation of EHCS by the poor and excluded at district facilities. Efforts to target subsidies to those least able to pay have had only limited success in exempting the poor and excluded from charges, and have consequently had only limited impact on reducing their reluctance to seek care for fear of cost. There are also questions as to whether those who can pay necessarily should pay, especially if the bills are met by selling assets and reducing future household income.

Although the arguments for free essential health care are strong, fee revenue accounts for a quarter of district hospital revenue, and carries fewer restrictions on how it is used than does Government funding. It pays for staff incentives and for the salaries of locally recruited staff, both of which would be more difficult to support from Government funding without requiring changes to existing regulations. User fees also supplement inadequate Government budgets for drugs, medical supplies, and facility maintenance. Extending the scope of free services therefore carries significant consequences for the ability of the hospitals to provide services. The Ministry will therefore need to allocate the necessary additional budget and develop an efficient means for replacing the flexible financing previously available from user fees.

This matter needs to be taken forward in conjunction with the reforms to increase hospital autonomy, linking decentralisation of authority and more flexible block-grant budgets to clearer expectations in regard to performance standards and service delivery targets that hospitals should achieve. The movement towards hospital autonomy has in recent years been stalled by the repeal of the Development Board Act and new legislation will be needed to re-constitute hospital management committees.

6.3 Human Resources for Health

6.3.1 Current challenges

A competent, motivated health workforce forms the core of a high-quality, effective and efficient health system. Nepal's health policy and strategy documents over the past several

decades repeatedly identify issues regarding the deployment and retention of health sector staff as a major problem facing Nepal. The health sector constitutes about one-fourth of total personnel of the public sector.

The human resource development strategic plan of 2003 needs to be revisited in the context of the health-related MDGs, free health care, health system development, and the above mentioned transition. The new projection of human resources by categories and sub categories is imperative to support EHCS and beyond EHCS service delivery.

The market has supplied sufficient human resources for health. However, there is still a shortage of critical human resources for service delivery. For example, 7,000 trained SBAs are needed but the current supply is only 1,000, 90 MDGPs are needed but only 34 are available and there is a chronic shortage of other clinical and non-clinical human resources: anaesthetists, psychiatrists, radiologists, radiographers, anaesthesia assistants, physiotherapist/physiotherapy assistant, optometric technician/ophthalmic assistant, and dental assistants. In addition, there is a shortage of human resources related to health systems management—procurement specialists, health legislation experts, epidemiologists, health economists and health governance experts.

An inequitable distribution of human resources remains a problem. Out of a national stock of 8,118 medical doctors, 1,062 have been working in sanctioned government posts and about 300 have been working in government posts under the Ministry's scholarship programme. Two-thirds are in the Kathmandu valley or in other cities. There also appears to be a sufficient national stock of medical doctors in some of the key specialities related to the health MDGs. For example, the Medical Council in March 2009 registered 182 specialists in obstetrics and gynaecology, and 139 paediatricians. The problem is one of poor distribution of doctors and specialists nationwide.

The retention of medical doctors and nurses remains a major concern. There is a lack of evidence on the average length of stay of care providers. Health facility surveys showed that only 64-80 percent of posted medical doctors were available at the time of the surveys. Availability of nurses was 68-81 percent and for paramedics, 81-92 percent.[35] The situation is worse in the most remote districts.

Productivity has remained a challenge. Paramedics' clinical consultations per day are as low as 6 at HPs and SHPs (HMIS, 2006/07), which is low even when considering their involvement in both preventive and curative services. Daily output per physician varies between the ecological regions. On average, a physician located in the Terai provided daily medical consultations to 18 outpatients and 3 inpatients in district hospitals, nearly twice as many as physicians located in the mountain districts. Productivity in the Hill region is in between the Terai and Mountain regions. At the referral hospitals on any given day, a doctor averaged only 10 outpatient consultations and 3 inpatient consultations. The highest productivity of 13 outpatient and 6 inpatient consultations was observed in Bheri Zonal

[35] RTI International (December 2009). *Assessing Implementati on of Nepal's Free Health Care Policy: Third Trimester Health Facility Survey Report* . Research Triangle Park, NC, USA.

Hospital. The lowest productivity was observed in Janakpur hospital followed by Bhaktapur hospital (Ministry of Health and Population, 2005: Hospital Productivity Analysis). Factors not entirely in the control of the staff, such as the availability of drugs, affect patient demand and productivity. However, the figures at the time of the survey were low and demonstrate that there was capacity to significantly increase the number of patients seen, as began in 2006-7, without increasing staff numbers.

The existing skills mix revealed that only 4 percent of total health care providers are doctors, 12 percent nurses, excluding ANMs, 47 percent paramedics, 0.92 percent public health officers, and 3.1 percent traditional health care providers (HuRIC, 2008). There is currently a high number of unskilled support staff (28% of the total workforce), which poses a challenge to the health system to reduce the volume of unskilled and semi-skilled labour as a percentage of the total workforce (Ministry, 2004).

Nepal also faces serious challenges to providing safe delivery services nationwide. Only 18% of deliveries took place in health facilities in 2006. The managers of the government safe motherhood programme recognize that the current government health workforce is inadequate to achieve desired levels of utilisation. A study was conducted in 2008 to determine the extent and causes of health workforce problems affecting the provision of safe delivery services by the Government and recommend strategies to alleviate them.[36] The root cause of safe delivery staffing shortages in the government facilities was not lack of trained staff but the inability of the Government to attract and retain them. Specialist doctors, however, were inadequate. District hospitals particularly lacked doctors with caesarean-section skills and had a poor capability in anaesthetics. They also lacked nurses. Higher-level hospitals had acute shortages of obstetricians/gynaecologists and anaesthesia staff. Poor career prospects and lack of sanctioned posts were serious demotivators for retaining general practice specialist doctors (MDGPs) in district hospitals. Anaesthesia assistants were not clear on the conditions under which they were allowed to provide anaesthesia. Limited staff housing, few opportunities for continuing education, and poor communications were demotivating factors for all rural health workers. Students in training were reluctant to consider government employment for these reasons.

The study concluded that tackling the identified human-resource problems requires a multi-pronged approach. Promotional opportunities and career-ladders must be considered before developing new training curricula and courses. A team approach should be used for posting staff to district hospitals to ensure a complete caesarean-section team. Pre-service and in-service training are required to improve skill levels. A legal framework for anaesthesia assistants should be established.

There is very low participation of Dalits and other highly excluded groups in the health workforce at both policy and service delivery levels. Increasing their participation remains a challenge.

The supply of health care personnel is as follows:

[36] RTI International, 2009. *Human Resource Strategy Options for Safe Delivery* . Research Triangle Park, NC, USA.

Table 6.1: Human resources for health

Position	Sanctioned	Filled	Vacant	% of filled positions	Share %
Medical doctor	1,062	816	246	76.84	4.34
Nursing staffs including ANMs	5,935	5,307	628	89.42	24.25
Paramedics	10,642	9212	1,430	86.56	43.48
Other	6,838	6,394	444	93.51	27.94
Total	24,477	21,729	2,748	88.77	100.00

Source: Annual report, DoHS, 2007/08

The population of Nepal has increased by 35% between 1991 and 2008, while the number of health workers has increased only by 3.4%. The aging population will also increase during the NHSP-2 period. Thus, it will be difficult to meet the demand unless the existing workforce is significantly increased.

Eliminating communicable diseases remains an unfinished agenda and non-communicable diseases now represent half the burden of disease because of changing life styles and environmental changes. New emerging diseases, H_1N_1, avian flu, etc., will require more epidemiologists and public health experts.

After abolishing user fees for EHCS, it was expected that demand for health care would increase considerably—40 percent for outpatients and 21 percent for inpatients in a "medium demand scenario" (NHRC 2009). Health facility surveys show that the poor and excluded are more likely to use EHCS proportionate to their populations than before. It is expected that demand will increase further due to programmes that will be implemented during NHSP-2.

There is a trend of people migrating from rural to urban areas, urban areas to the capital city, and capital city to abroad, and it has an adverse effect on the deployment and retention of human resources, especially doctors. Despite the need for additional care providers there are limitations. The Government would like to reduce the public workforce, including the health sector. There is a cap on the availability of funds for human resource development (8-10 percent of total salary), and monitoring of human resources remains limited.

Purchasing services and regulating the private sector will require procurement specialists, health legislation experts, health economists, and health governance experts.

6.3.2 Developing human resources for health

A scientific and robust projection of human resources for the coming 5 years is needed to develop/update strategic planning for human resources for health. Projection and strategic planning will include public and private sectors, supply, demand, and maintenance. Measures will be spelled out for internal mobility, career advancement, and optimum use of staff.

To meet the most **c**ritical service delivery related human resource requirements identified for NHSP-2, about 7,000 SBAs, 56 MDGPs, 44 anaesthetists, 56 psychiatrists, 55 radiologists, 20 physiotherapists, 70 physiotherapy assistants, 100 radiographers, and 62 assistant anaesthetists should be produced and deployed (HuRIC, 2008). A total of 27 health system related staff will be trained and deployed: 7 procurement specialists, 3 health legislation experts, 7 epidemiologists, 7 health economists, and 3 health governance experts. The

Ministry will coordinate with medical schools/academia and training centres for the production and supply of these critical human resources.

Quality of care largely depends on the quality of providers. Upgrading and updating the skills of providers will be done to enhance the quality of care. Gradually all MCHWs will be upgraded to ANMs by providing the necessary training and developing skills, and there are vacant positions for over 1,200 VHWs that will be upgraded to AHWs. Skills of care providers and support staff at health and sub-health posts, PHCCs and district hospitals will be updated through in-service refreshing training, coaching and onsite support. Care providers will receive refresher training once in the plan period.

Performance-based and retention-based payment systems will be introduced to the service delivery system. Three incentive packages for care providers will be further developed and piloted during NHSP-2 (incentive packages to retain doctors, nurses and technicians were developed during NHSP-1). Operations research will be used to observe the effects of incentives on performance and retention of care providers in the remote areas. The schemes will be replicated and scaled-up to other geographical areas based on the results.

Regular monitoring, supervision, facilitation, onsite support and technical backup contribute to increase the efficiency of human resources in service delivery, as does de-concentration and delegation of authority of case and resource management. An approach of posting a team rather than focusing on posting physicians will be adopted to ensure the skills mix is in place to enhance the efficiency in service delivery.

The present human resource information system (HuRIS) is not up-to-date and is believed to contain only three-fourths of the total personnel. Capacity building of HuRIS for maintaining up-to-date and reliable information is imperative to managing human resources during NHSP-2. HuRIS will be strengthened through training, equipping and networking with other information systems for retrieving, analyzing, disseminating and using information. HuRIS will be made compatible with the personnel information system (PIS) of the Ministry of General Administration and appropriate linkages will be established between the PIS and HuRIS. Regular monitoring of human resources for health will be done through HuRIS. Direct access will be given to the Secretaries, Director General, Directors, Joint Secretaries and Regional Directors to promote the use of human resource information. A human resource management coordination committee will be created to coordinate the activities of Human Resources and Financial Management Division, Personnel Administration Division, and National Health Training Centre.

Creating new positions for health care providers is a lengthy process. To meet urgent needs for health care providers, obstetricians, gynaecologists, MDGPs, medical officers, nurses and ANMs have been temporarily contracted. A provision for multi-year contracts for services of critical health care providers (obstetricians, gynaecologists, paediatricians, physiotherapists/physiotherapy assistant, MDGPs, Nurses, and ANMs, and other diagnostic support services) will be made to ensure their services for a longer period and avoid the

disruption of services. Procedures and operational guidelines will be developed to purchase the services of these and other care providers for longer period.

The process of including Dalits and other excluded groups in the health care workforce will be initiated during NHSP-2. An additional ANM from Dalit or another excluded group will be provided to HPs in underserved areas as *Rahat (welfare workers)* and trained. A total of 1,000 ANMs will be provided as Rahat (200 per year) during the planned period.

Similarly, vacant or additional positions for FCHVs will be selected from Dalits and other excluded groups and trained.

At present only 4.2 percent of the total health force are medical doctors and only 12 percent are nurses, nearly half (47%) are paramedics and almost one-third (28%) are support staff. This skills mix hardly allows for delivering quality health care. Therefore, skills must be further developed among existing human resources wherever possible and vacant positions of unskilled staff should be upgraded to semi-skilled. Provision also will be made to integrate vertical programme supervisors (FP, EPI, TB/Leprosy, disease control, etc.) as public health supervisors and provide training to increase their effectiveness and reduce the cost.

As mentioned in Section 6.1, all remaining SHPs will be gradually upgraded to HPs during NHSP-2. Posts for a Health Assistant (HA) and an ANM will be added in HPs. Thus, the numbers of HAs and ANMs will be increased to over 3,100 each. The position of MCHW will be strengthened by additional training and orientation and upgraded to ANM.

As mentioned in the section 6.1, the number of rural hospitals will more likely increase at sub-district level due to increasing demand for rural hospitals. An additional doctor, 3 nurses, and support staff are needed to run a community hospital “24/7.”

Female Community Health Volunteer (FCHV) programme

The major role of the 50,000 female community health volunteers (FCHV) is to promote health and healthy behaviour for the promotion of safe motherhood, child health, family planning, and other basic health services with the support of health personnel from the SHPs, HPs and PHCCs. In addition to motivation and health education, the FCHVs supply pills and distribute condoms, oral rehydration salts, Vitamin A capsules, and provide iron tablets to pregnant women. They have also been trained to diagnose and treat a number of major causes of child and maternal death, and to identify when cases should be referred to a health facility. According to the 2006 Nepal DHS, they provided 20 percent of the treatment for diarrhoea and 10 percent of treatment for ARI, with an 88 percent success rate, and the proportion of cases treated directly by FCHVs will increase because community-based IMCI has expanded to all districts. The FCHVs have made a major contribution to the achievements of the Nepal health sector in reducing under-five and maternal mortality, and increasing the use of family planning.

FCHVs are provided 18 days initial training, plus five days of refresher training every five years. VHWs/MCHWs are to conduct monthly supervision visits of all FCHVs in their respective catchment areas, to re-supply essential commodities and to provide advice and

feedback and collect service reports. A review meeting with all FCHVs in the VDC is held every four months. On average, FCHVs work about five hours per week, and three quarters say they would be willing to increase the time they spend.

The training and support system works well in most districts, but there is currently a backlog of training of FCHVs. This relates mainly to the training of those FCHVs appointed to replace those who left through attrition. The commodities distributed by FCHVs are supplied to them by their VHW supervisor, who is meant to keep 45-days supply on hand. The 2006 DHS reported that problems in the supply of commodities meant that FCHVs were unable to treat 20 percent of children brought to them with diarrhoea. Part of the problem has been that the supply of commodities, such as ORS packets, is adequate for the intended purpose of treating children, but FCHVs also face demands to provide them to adults.

The success of the FCHV programme has resulted in more responsibilities being given to FCHVs. This trend raises the issue of how to continue to motivate what remains a cadre of volunteers. It is arguable that it is the commitment to voluntary service to the community that makes the FCHVs so effective, and that the same level of results would not be achieved if delivered by an equivalent force of poorly paid public employees. Training and recognition for the importance of their work are strong motivating forces for many. There is a balance to be struck between compensating the women for the real financial and time costs that they incur in carrying out their duties, without losing the spirit of voluntary service to the community. FCHVs do receive a flat rate per diem for their participation in Vitamin A distribution, and are paid for their attendance at the two-day meetings each trimester and for participation in training. The community-based newborn care package proposes to pay a lump-sum to FCHVs based on their individual performance in delivering the newborn care services.

A further incentive introduced in 2008-9 is the establishment of a revolving fund at each VDC, which the FCHVs can use in order to support income generation activities. A survey of the use of the funds suggests that they are in general being effectively used to provide micro credit at varying interest rates, with little evidence of abuse. The initial capitalisation of NRs. 50,000 per VDC was increased to NRs. 60,000 in 2009-10.

In line with the comprehensive FCHV plan prepared in 2003, the current norm is for there to be a minimum of one FCHV in every ward, who is knowledgeable, trained, and well supported through capacity building, and supportive monitoring. One specific issue is the gradual phasing out of the village health worker cadre, traditionally responsible for first-line supervision of FCHVs, and their replacement with better qualified AHWs, who may however be less likely to be local to the area.

NHSP-2 will support the existing cadre of FCHVs and increase the number by 5,000 where the DDC/VDC or municipality demand it and circumstances merit it. During NHSP-2, the increase will focus on mountain and hill areas where population density is low and each FCHV reaches a smaller population, and on Terai wards where large populations would otherwise imply an excessive workload.

The FCHV approach is designed for rural areas. The 3 percent who are now located in urban areas reflect the creation of municipalities in locations that were rural when the FCHV positions were created. The FCHV approach is less suited to urban environments with a shifting and more ethnically diverse population, with more women engaged in earning income outside the home, and weaker community solidarity. For the 15 percent of the population that is urban, ward-level health workers paid by the municipality are supposed to provide community-based services. The Ministry provides technical backup. The extent to which municipalities provide effective services is highly variable and a more comprehensive approach will be developed during NHSP-2 in partnership with the Ministry of Local Development and with the municipalities (see Chapter 5). This activity will include reviewing whether there is scope for adapting aspects of the FCHV approach to working in an urban environment.

For those VDCs where the FCHVs are able to show that they are making good use of the existing revolving fund and want to increase it, and where FCHVs are meeting service delivery objectives, it is proposed to further increase the size of the revolving fund to NRs. 100,000.

During NHSP-2, budget provision will be made for clearing the backlog of training of newly appointed FCHVs and for a continuing programme to train replacements for those leaving as a result of attrition, as well as additional FCHV positions created to reflect unmet need. More use will also be made of distance education to provide FCHVs with opportunities to improve their skills.

6.3.3 Capacity strengthening of training institutions

The National Health Training Centre is functioning with minimum staff. Many senior level professional positions are vacant and there has been a lack of the necessary mix of skills. Similarly, at Regional Training Centres, the chief training officer positions are vacant. Senior professional level positions of an appropriate skill mix were proposed many years ago but have not been filled.

There are few districts with training facilities. However, many districts are conducting training without the necessary training infrastructure. Similarly, SBA training sites also are not adequate to produce the required number of SBAs. There is an issue for the MCHWs who cannot become ANMs because they lack SLC certification.

The national health training strategy of 2004 stipulated that the NHTC is the apex body for human resource training for all three departments of the Ministry—Department of Health Services, Department of Drug Administration and Department of Ayurveda—but it is yet to be implemented, although the scope of NHTC's training has broadened. NHTC need to collaborate with I/NGOs, NGOs and EDPs to harness resources and negotiate for funds. NHTC is also functioning as an international training centre by conducting a series of training on reproductive health and related training for participants from south and Southeast

Asia, and therefore must communicate and negotiate with training centres and other supporting partners in the region to sponsor international participants.

To address NHTC's current issues, NHSP-2 will undertake the following human resource initiatives:

Restructuring of National Health Training Centre

The Ministry will take actions to develop NHTC as an autonomous national health training centre to better enable the centre to design, develop, implement, monitor and evaluate national training programmes and conduct international training for participants from south and Southeast Asia meeting high professional standards with a minimum of bureaucratic hurdles.

In this regard, the Tourism Training Centre of the Ministry of Tourism is an excellent example of such an autonomous organization, as is the Local Development Training Academy, which is maintained as a separate entity, no longer under the Ministry of Local Development.

Training human resources

NHSP-2 will oversee arrangements for filling vacancies for senior-level position at NHTC and RHTCs with the right mix of skills. NHSP-2 will work urgently to fill all such gaps as soon as possible.

Integration of training programmes: Training plan/ delivery / monitoring/ evaluation

NHTC will address the training needs of all human resources within the three departments, and will assist in meeting training needs by conducting training or providing technical support. The Ministry will provide all necessary administrative and financial support. NHTC will work closely with Divisions and Centres to meet their training needs as addressed in NHSP-2. The Divisions and Centres will explore the possibility of integrating their training plans, delivery and monitoring to assure quality and minimize cost.

Intersectoral coordination

At the central Level a National Health Training Coordination Committee, chaired by the Secretary, should be formed with the participation of Division directors, Centre chiefs, and representatives from the National Administrative staff college, Local Development Training Academy, central-level hospitals, private-sector training institutions , CTEVT, Ministry of Education affiliated training institutes and with the NHTC Director as member secretary. This committee will promote intersectoral training coordination and cooperation. The NHTC, with support from the Ministry, will seek cost sharing for training health workers inside and outside Ministry organisations.

Capacity building at district level

A process will be initiated to decentralize training to the district level with funding from the Government to enable districts to plan and implement training independently based on their local needs to minimize the training burden at the central level. Decentralising training also will make training more relevant and timely for local health workers. It is expected that the national training programme will be planned and implemented at RHTCs and at districts to meet the needs of all Division and Centre programmes. Existing training and capacity building packages will be reviewed, revised, and used to support the Ministry's newly designed and piloted initiatives "Strengthening Local Health Governance."

Increasing SBA Training Sites

Additional SBA training sites will be established to meet the growing demand for SBA-assisted deliveries. The Ministry will arrange with the Ministry of Education and CTEVT training institutes to incorporate SBA skills in the curriculum of pre-service training for medical officers and nurses. Public-private partnerships will be established for physiotherapy training and other related skill development initiatives where the private sector has been most effective.

6.4 Physical Facilities, Investment and Maintenance (including role of non-state actors)

In the context of expanding coverage of EHCS to more equitably meet the needs of all citizens, particularly the needs of the poor and excluded groups, it is imperative that a well planned and functional health infrastructure in an enabling environment for delivering quality health services nationwide be in place. Therefore, delivering essential health care will entail substantial investments in new construction, and refurbishment and upgrading of existing facilities. At the same time, repair and maintenance of existing facilities will be made routine. The key areas of concern during NHSP-2 include the following:

- Strengthening, institutionalising and decentralising the existing Health Infrastructure Information System (HIIS).
- Developing standard designs and guidelines that help to increase quality, accountability and transparency.
- Ensure sufficient number of and appropriately located facilities.
- Implementing a predictable and timely financing budgeting and resource allocation mechanism.
- Ensuring repair and maintenance of existing facilities through more rational budgeting using HIIS.
- Promoting community participation and enhance local ownership of public facilities.

NHSP-2 will focus on categorising health facilities into four tiers and define their functions accordingly with the requisite minimum standards that need to be met. The starting points will be the establishment of a Physical Assets Management Unit under the Management Division of the DoHS and the strengthening, institutionalising and decentralising of the construction of local infrastructure following the HIIS. These actions will be followed by the following actions:

- Revisit government's policy to construct on donated lands only because experience has shown that many of the donated lands have not been suitable for health infrastructure and have incurred huge costs in development.
- Draft local infrastructure development guidelines (for construction and maintenance works at district level and below) together with Ministry of Local Development and Department of Local Infrastructure Development, Agriculture and Roads (DoLIDAR).
- Draft and implement standard construction guidelines and make DDC, D/PHO and District Technical Offices responsible for monitoring and supervision of technical works at district level and below.
- Make local bodies and local health facility management committees responsible for construction and maintenance of infrastructure at local level and promote community participation and ownership.
- Construct at locations most likely to increase access by the poor, vulnerable and marginalised to meet their health service needs.
- Develop upgrading criteria for sub-health posts, health posts, PHCCs, and district hospitals.
- Upgrade/construct PHCC facilities at an appropriate location able to serve a larger population than presently accommodated at a health post to standard with BEOC services.
- Add birthing centres at all HPs and PHCCs without.
- Construct CEOC units in all District Hospitals that currently are without.
- Establish new PHCCs in electoral constituencies which do not have PHCCs yet to make free service provision available and effective.
- Based on defined functions, develop standard designs for each construction type, specifications for building materials and finishes for all primary level health facilities (SHP, HP, PHCC and District Hospital).
- Develop and implement repair and maintenance guidelines and monitoring mechanism.
- Train technicians from DUDBC, DTO and DHO at the districts on the use of HIIS and develop a mechanism to update it regularly from the district.
- Enhance the capacity of engineers and architects at DUDBC and DIDO/DTO in the planning and implementation of Health Infrastructure.
- Adopt e-bidding for transparent tendering and make the tendering process more participatory and competitive.
- Ensure that sufficient budget is allocated to complete the ongoing projects with priority over new construction projects in order to accelerate the handover of completed buildings.
- Support planners and policy makers for appropriate resource allocation as per HSIS projection.
- Collaborate with non-state actors such as academia, technical professional societies/consulting firms and construction entrepreneurs in the development of standards and norms, including designing and imparting training courses for stakeholders.
- Organise training sessions for concerned construction entrepreneurs in health construction.

- Ensure that repair and maintenance of physical assets are carried out on an annualised and prioritised basis and, where possible and appropriate, avail of the services of non-state actors through outsourcing of such services.
- Work towards establishment of a "Maintenance Fund" for repair and maintenance, and development of a modality for its operation.
- Integrate HIIS (Health Infrastructure Information System) and PLAHAMS (equipment inventory) for improved management, planning and information management.
- Support planners and policy makers for appropriate resource allocation as per HIIS and PLAHMAS projection.

6.5 Financial Management

Some aspects of financial management have improved, reflected in higher spending as a share of the budget, and a gradual reduction in audit queries, though they remain too high. Nevertheless, there are still many unsolved financial management problems. On the Government's side, they include:

- Slow disbursement/release of funds/budget, exacerbated by an excessively complex budget structure with an unwieldy number of budget/program heads and activities, and with some duplication of programmes and activities, and frequent transfer/change of budget head/programme. Late approval of the budget and changes in heads can result in long delays while the Ministry re-programmes the budget at the beginning of the fiscal year.
- The slow start to the budget year and the imperative to improve budget utilisation results in a trend of spending a disproportionate share of the budget in the last trimester, with the rush to spend resulting in expenditure beyond the approved specific-programme activities, and a tendency of giving advances at the end of the fiscal year.
- The computerized accounting system is inadequate. The Ministry is dependent upon FCGO's FMIS. The lack of an integrated Ministry system makes it difficult to resolve differences in figures of physical and financial progress reports, and delays submission of reports.
- Weak inventory/store and assets management.
- A transitioning, top-down system of budget planning and a lack of programme accounting formats in the Integrated District Health Programme.
- Low priority for maintenance of medical equipment and hospital buildings.
- Transparency measures such as using and updating the website, citizen charter and documentation system have not been sufficiently prioritised.
- Poor compliance with financial accounting regulations (FAR), with staff rarely penalised for non-compliance, and low priority given to responding to audit queries and clearing audit irregularities.
- No separate rules/guidelines for non-state partners/NGO contracting (one reason for low utilisation of PPP arrangements).
- No uniformity of financial regulations in hospitals, no specific rules for programme implementation by Management Committees of facilities below district level, inadequate monitoring indicators and standard reporting formats.

The capacity and ability of the Ministry to address all of these issues continues to be handicapped by problems stemming from EDP procedures: different types of fund flow modalities, some of them off budget and off programme, the direct budget execution practice by some EDPs, weak forecasting of external assistance, weak harmonization among EDPs (separate reports and audit practices from donors).

Most of these problems are long-standing and were also identified in the Bottleneck Study (2006/07), annual review workshops, Independent Review (2007/08), annual financial audits and Performance Audits of (2007/08 and 2008/09).

The consequences of these problems include slow disbursement, lower than desirable efficiency and effectiveness in budget implementation, weak and delayed financial monitoring and evaluation, and a lack of financial discipline, exacerbated by incomplete financial regulations that are not consistently applied. The limited capacity in financial management and the weak financial control environment are both a cause and a consequence of the hesitancy of EDPs to support NHSP with predictable funding using Government systems.

6.5.1 Actions during NSHP-2

The issues are being addressed via an approved financial management improvement plan that started implementation in March 2008. After completing the first round FMIAP, improvements included introduction of a web-based financial management information system connected with FCGO's, introduction and use of a database application for preparing and analysing the annual work plan and budget, and some simplification of the structure of the budget by reducing the number of budget sub-heads from 51 to 35, which will increase flexibility of budget management. An independent review and performance audit was carried out and a bottleneck study leading to actions to address some of the causes of delay and low disbursement. Transparency is being strengthened, with the Ministry posting financial information and audit reports on the website, and formal accountability mechanisms are being supplemented and performance verified by increased use of measures to enhance accountability to users. For example, social audits, and posting of prominent information on the services available, the prices that will be charged, and the budgets for which staff are accountable.

The Ministry will continue to improve financial management by implementing the financial management actions specified in the GAAP. Specific actions identified in the GAAP build on the work begun during the first FMIAP, and include a focus on timely distribution of grants to health facilities; improvement in the financial management system at central district and facility level; improvement in procurement at central level and at district level; enhancing alternative assurance arrangements such as social audit and performance audit; implementation of transparency and disclosure measures; and capacity development supported by TA. A permanent Ministry working committee will be established to follow-up on the implementation of the improvements, including audit irregularities and recommendations.

As discussed in section 5.2, the Ministry will also pursue improvements in aid effectiveness with EDPs.

6.6 Procurement and Distribution

In addition to issues associated with human resources for health, the most discussed issue during Ministry reviews at all levels is supply of drugs, equipment, facilities and their quality or condition. Obviously, major contributing factors to quality health care delivery include supply of various commodities (medicines, instruments, equipment, furniture, and other supplies), physical infrastructure (peripheral facilities, hospitals, laboratories, etc.), and consulting services as part of capacity research and enhancement programme.

In order to correct procurement related anomalies that have existed for decades in the country and delayed the development process, the Government enacted a Public Procurement Act (PPA) in 2007 that addresses procurement of commodities, works and services. Ministry officials are in the process adjusting to its provisions. Under the Ministry, commodities are procured from the DoHS, RDHS and District (Public) Health Offices. Responsibilities of constructing physical facilities, including repair and maintenance works costing one million rupees and more, have been handed over to DUDBC. Ministry offices carry out procurements below that amount. In regards to services, major consultancies are procured from central level and hiring temporary staff is done locally.

Health commodities are distributed from the central store (and regional directorates) to the regional medical stores, and then to the district stores, which dispatch them to the service delivery points.

Delays: In the absence of preparatory work in place and absence of required levels of coordination amongst various Divisions and Sections, procurements are often delayed. Preparatory work includes planning and costing from the manufacturers and their agents. Delays occur due when decision making is avoided for a number of reasons, including a sense of insecurity on the part of managers.

Standards/Quality: The Ministry does not have defined standards for space, equipment and instruments to be used at health facilities. Once the Ministry has a specification bank explaining standards/qualities of commodities and instruments to be procured for each tier of health facility, procurement becomes simple and less time consuming. There is no ownership of construction projects or supervision from various tiers of the Ministry while construction work is in progress.

Capacity: Because PPA 2007 is new to Ministry staff at all levels, they are applying it gradually. Confident application will take some time. There have been efforts to orient and teach staff new skills. Both Ministry staff and bidders must learn and adapt to the new procurement protocols and procedures. Unless they embrace the spirit of the bid documents, procurements will fail and service delivery will suffer.

Pilferage: For reasons such as inadequate transparency in the process and lack of established norms and practices, procurement activities have lead to leakages and loss of Government resources. How much of this loss is due to ignorance or negligence and how much is done intentionally for personal benefit is difficult to estimate. However, leakage of information, absence of specifications defining standards of commodities or incomplete design and estimation in case of work performed, provide opportunities for pilferages.

Transparency: Allegations will not diminish unless a transparent complaints handling mechanism is established. Pre-bidding meetings to explain various aspects of the bid document and suggestions from bidders based on their experience are two ways to develop mutual confidence.

Price control/economy of scale: Quality and cost remain two issues which perhaps top the agenda for discussion in Ministry reviews. Current practice of procurement under the Ministry does not make it mandatory to carry out market surveys for the commodities. In absence of information, the budget estimates and procurement plan do not match the bidders' offer, which leads to cancellation of bid documents. Also merging of bids is not done due to inadequate coordination amongst the various programme Divisions and the Logistics Management Division. Repeated bids for almost the same items are expensive procedures. Also, there is less practice of multiyear procurements, which should be considered.

Management efficiency: Regular training and repeated practices are the two most respected elements to develop efficiency. However, there is frequent turnover of personnel under the Ministry, which does not allow developing proficiency. An enabling environment is important to accomplishing the expected result and the Ministry needs to consider this aspect seriously in procurement.

Interference: This is an unseen killer of any system and gossip suggests that it applies to the Ministry. Destroying a functional system, making favours to like minded people, keeping inefficient people in higher positions are few of the modes that open the gate to interference.

Distribution related issues stem from inadequate storage space, lack of sufficient numbers of vehicles for transport/supervision, and insufficient budget in the districts to transport and supply health commodities to the service delivery points compounded by the geographical and seasonal constraints.

6.6.1 Actions during NHSP-2

In order to procure quality goods, works and services timely, efficiently and cost effectively, a number of actions will be introduced or consolidated during the NHSP-2. An enabling environment for decision makers will be created to boost their confidence through transparency, capacity building and fostering harmonization with EDPs.

Procurement as a specialty: Recognising the provision made in Public Procurement Act 2007, the Ministry will establish a procurement capability at each level of health facility up to district level and update regularly. After some years all the districts will have trained

persons and the Ministry will be less likely to lose the capability once the specialty is recognized. In case transfer takes place, new staff will come with the same skill.

Preparatory work: There are few preparatory actions to be completed to streamline the procurement process. During NHSP-2, health facilities will be classified on the basis of a) type of services they provide, and b) their bed capacity. Once the classification and standardization of facilities is completed, it is easier to determine the equipment required, their quantity and level of sophistication. Classification will guide professionals developing specifications for instruments, equipment, and other commodities. As part of preparatory work, staff will be assigned to carry out market surveys on products and prices on a regular basis. A data bank will be created on products, new products coming in the market, agencies' prices (retail and wholesale) in the market and after sale services in case of instruments. This will help address the issue of making the right estimation for commodities.

Procurement plan concurrently with budget estimation: For some time, Divisions have been requested to develop procurement plans while estimating their budgets for the next fiscal year. However, Divisions have failed to comply. Therefore, the Ministry must require procurement plans from Divisions during budget planning. Adjustments can be made later. This practice will foster better coordination amongst the concerned Divisions and help make for timely procurement.

Transparent practices: To avoid the pitfalls of pilferages, leakages and collusions, the Ministry will introduce e-bidding process. Procurement related documents, specifications, instructions, including downloadable authenticated PDF tender documents, will be made available on the website to improve transparency and ensure privacy will be maintained. In order to capacitate the staff and bidders, appropriate orientation to the bidders and coaching for the staff will be made available. A mechanism of pre-bid consultation will be regularized and a mechanism for managing complaints will be devised.

Quality Assurance: A system will be developed for quality assurance for all goods and commodities procured.

Multi-year procurement: In order to make the process further transparent and ensure quality, the procurement process will be made rigorous by introducing a quality control mechanism, including WHO GMP certified producers. Present capacity of the DDA needs to be enhanced and the LMD needs to have capacity to conduct mobile lab tests on-site to ensure quality. PPP with private-sector laboratories will be promoted to strengthen the testing of health commodities and drugs. Efficiency will be gained through multi-year contracts and introducing the concept of central bidding and local purchasing.

The practice of central bidding and local purchasing (CBLP) for essential drugs, recently initiated to address disparities in price, quality and quantity of medicines procured by the districts will be further developed, expanded, and improved together with building their capacity to shoulder the responsibility of procurement in regard to quality and the requisite quantity. Similarly, the practice of multi-year contracts will be made well entrenched in order to ensure timely procurement of medical supplies, as well as lessen the burden of time and

effort involved in recurrent bidding processes every fiscal year for procuring the same type of commodities and drugs. Storage and distributive capacity of central, regional and district medical stores will be enhanced through the allocation of additional national and donor resources.

Capacity Development: Gradual plan of action will be developed and implemented for capacity development at the district level for management of district level procurement.

State—non-state mix: An efficient public-private mix for supply and delivery will be created for improving access to essential medicines.

6.7 Governance and Accountability

A number of governance and accountability (G&A) issues has been included in the previous sections under human resource, financial management, procurement and distribution in particular. This section addresses the key issues, strategies, actions, and mechanisms that are not included in other sections of the document.

It has been increasingly realized that putting a system in place and injecting resources for health may not achieve their intended results and impact without giving proper attention to health governance and accountability issues. Health systems contain three basic categories of actors: state, providers, and clients or citizens as emerging partners, often called beneficiaries. Health governance addresses the rules that determine the roles and responsibilities of each of these three categories of actors, and the relationships and interactions among them with clear accountability mechanisms.

There are a number of national and sectoral governance related policies and acts in Nepal, which are listed below.

Table 6.2: List of Existing National and Sectoral Governance Related Acts a nd Regulations

S.N.	Acts/Regulations
1	Nepal Medical Council Act, 2020
2	Nepal Medical Council Regulations, 2024
3	Drug Act, 2035
4	Drug Registration Regulation, 2038
5	Drug Investigation and Supe rvision Regulation, 2040
6	Drug Production Code of Conduct, 2041
7	Civil Service Act, 2049
8	Drug Standard Regulation, 2043
9	Ayurveda Medicine Council Act, 2045
10	Civil Service Regulations, 2064
11	Nepal Nursing Council Act, 2052
12	Nepal Health Service Act, 2053
13	Nepal Health Professional Council Act, 2053
14	Nepal Health Service Regulation, 2055
15	Nepal Health Professional Council Regulation, 2056
16	Nepal Pharmacy Council Act, 2057
17	Good Governance (Arrangement and Operation) Act, 2064
18	The Prevention of Corruption Act, 2 059
19	Commission for the Investigation of Abuse of Authority (Second Amendment) Act, 2059
20	Commission for the Investigation of Abuse of Authority Rules, 2059
21	The Public Procurement Act, 2063
22	The Public Procurement Regulation, 2064
23	Financial Procedure Act , 2055
24	Financial Procedure Regulations, 2055
25	Travel Expenses Regulations, 2064
26	Financial Act, 2066 (to be issued by the parliament in every Fiscal Year)

6.7.1 Current Context and Issues

As decentralisation takes on a high profile in overall governance reform and Nepal's national development initiatives, the NHSP-1 recognized decentralisation of health services as one of the overarching sector reform strategies and a key approach to achieving the MDGs.

The Interim Constitution of Nepal, 2007, which represents the spirit of Jana Andolan II and the road map toward sustaining peace in Nepal, shows clear commitment of the state towards a more decentralised system of governance, and its second amendment further paved the way towards state restructuring through federalism. In principle, as federalism becomes a more decentralised system, it needs timely and rigorous preparation by the state apparatus, the Ministry and related authorities. The Interim Constitution guarantees basic health as a fundamental human right of the citizens of Nepal and the recently shared draft report of CA Committees further elaborated the existing provisions and prepared specific provisions to be included in the new constitution. These constitutional provisions created a ground for the next phase of health sector reform in Nepal and decentralised governance underlies it.

It is widely recognized in the health sector that decentralised health management helps to improve health service delivery with increased level of downward accountability, community ownership and wider coverage giving better access to local people, especially the poor and excluded groups. The broad objective underlying decentralisation is to bring government

closer to the people with the view to empower them and to make service delivery more effective, efficient and equitable.

The Local Self-Governance Act (LSGA), 1999, has given authority to the local bodies (Village Development Committees (VDCs), municipalities, and District Development Committees (DDCs)) to operate and manage health institutions at local level. However, due to absence of elected officials in these institutions since mid-July 2002, implementation of the Act has remained ineffective. The following are the key issues related to decentralisation and local governance in the health sector of Nepal.

Weak community participation and local health governance

Past experiences in the health sector of Nepal and other sectors have shown that devolution of authority and resources from the top down does not work effectively. Therefore, there is a need to focus on empowered community participation, local leadership, stakeholder's participation with a local governance perspective following the "subsidiarity principles."

Currently, decision making power lies largely at the central level, whereas community and other local stakeholders' participation remain weak. Power and authority at the central level has resulted in a less transparent system, weak local ownership, and weak linkages with other sectors at district level and below.

Centralized planning and budgeting practices, and weak planning linkages

Planning, budgeting and management capacity at district level and below is weak and not well coordinated with the central level. There is a clear recognition that the weakness is a critical constraint to achieving better health outcomes among target populations. There is a need of initiating bottom-up planning and balancing bottom-up (which does not exist at present) and top-down planning with strengthened planning linkages.

Weak downward accountability and local ownership

Over the years, the Ministry handed over 1,433 local health institutions in 29 districts to local health management committees. The Ministry also prepared operational guidelines to for managing health facilities at local levels and provided orientation to key officials of local management committees. However, it was done in a very ad hoc manner without much preparation. Handing over of health facilities on a piecemeal basis in absence of clear vision, policy, and plan invited a number of management problems and critical challenges in health service delivery at the local level. This arrangement did not change the decision making power structure and accountability mechanisms. Upward accountability remained as usual. Therefore, the health system was not able to hear the voice of the people in a meaningful manner.

There are mechanisms lacking in the health sector of Nepal whereby local service providers answer on how they exercise their powers and duties, act on criticisms or requirements made of them and accept at least a share of the responsibility for failure, incompetence or deceit. Without active community participation in health planning and service delivery at local level,

downward accountability is questionable and local ownership is a challenge. One pertinent governance issue in this regard is how to make central, sub-national and local governments able to hear the voice of ordinary people, and make these institutions accountable to them.

Transparency and fiduciary risk

The Ministry has been criticized for not being transparent enough both at its policy and operational levels. In the context of its vast institutional network down to the community level, the ministry has more than 340 cost centres and it has been quite difficult to track the details of financial transactions and monitor irregularities. Additional efforts are needed to improve transparency in the policy process, in service provision, and in financial transactions to improve accountability to the people and reduce fiduciary risks. Some of these fiduciary issues are system-wide, beyond the scope of the Ministry itself.

6.7.2 Actions during NHSP-2

Accountability and local ownership

Recent evidence in the health sector shows that community-based health programmes can be more effective in providing equitable access and equal use among castes and ethnicities in comparison to institutional-based programmes.

The Ministry initiated community oriented health services in late 1980s with the provision of FCHVs and other participatory health programmes, which promoted community participation and strengthened social mobilization. However, many vertical programmes are still being implemented in isolation with few expectations. Without meaningful community participation and social mobilization, local leadership, and accountability to the client could not be established and local ownership is in question.

There is a need of a mechanism that establishes a functional downward accountability mechanism and helps develop local ownership. Involving local stakeholders in health planning and management through a participatory planning process and organizing regular social and public auditing can help strengthen accountability at the local level.

Role of local government in primary health care

Local governments are familiar with local circumstances and local health needs and they can better mobilise local stakeholders for common benefits. In the near future, there is a need to delineate clear functional assignments with proper financial backup for different levels of health governance according to the subsidiarity and stewardship principles in the context of a federal structure.

Building capacity of local health management committees and health workers

Capacity building of local government units and local health management committees to better manage health service at local level is an important task ahead. They need to be empowered with flexible grants to help address local health needs and develop their

functional capacity. Currently, the National Health Training Centre took initiatives, developed flexible training and capacity building modules and started strengthening management capacity of local health management committees. It lead to positive impact in realizing effective health service delivery and managing health at local level. It will be further strengthened, collaborated and expanded in the plan period.

Strengthening local health governance

In the health sector, various programmes inject large amounts of earmarked funding targeting specific diseases from the central level. Currently, there is very limited provision that gives opportunity to address local health issues and the linkage between local and central level planning is limited. Health governance issues threaten local ownership, weaken downward accountability, and undermine the effective utilisation of funds and challenge sustainability. In addition, lack of transparency and participation, limited access to health services by poor and excluded groups, the need for incentives to promote utilisation of services, and limited engagement of citizens in health affairs are pertinent health governance issues that contribute to low levels of system effectiveness.

In this context, the Ministry recently designed and approved a pilot programme "Strengthening of Local Health Governance Programme" to be piloted in 3-5 districts in the near future. It will help solidify the Ministry's decentralisation and local health governance efforts and will provide evidence for lobbying and making policy more coherent and conducive, and help to establish appropriate levels of health governance in the context of state restructuring in the federal context. It includes provisions of providing formula-based health grants to district and below, increased role of local government units and other innovative approaches. It is built on the success stories and lessons learned over last 2 decades of decentralised health management. It is expected that the programme will help enhancing capacity and strengthening collaboration among local-level institutions (local governments, local health institutions among other stakeholders) in managing health services effectively, efficiently and equitably. It will also ensure strengthened downward accountability and local ownership in providing health services.

Based on the experiences, pilot districts will be further expanded in the plan period.

Voice and accountability

The Ministry has also started discussing policy issues using different policy forums (for example, Health Sector Decentralisation Policy Forum and others) as platforms. However, there is still a need to review policies in the changed political context and using evidence as a basis for improvements.

The Ministry is strengthening both the demand and supply side of health sector management in recent years. However, there is a need for engaging citizens and communities actively and holding the service provider accountable to local people. There is also a need to initiate an open policy process where stakeholders' views are valued. For this purpose, civil society organizations need to be involved in the health planning and policy processes, including Joint

Annual Reviews. Regular organization of public hearings at different levels of health governance will also help strengthen voice and accountability. Such arrangements will be made during the plan period.

Removing cultural and financial barriers to health services

The Ministry has introduced a number of policies and strategies to increase access to and use of health services by poor and excluded groups. One significant milestone is the recently approved GESI Strategy and newly established unit at the Ministry. It is expected that the special attention given to women and children, Dalits, Adibasi Janajatis, Muslims, Madhesis, and other disadvantaged groups will further reduce cultural and financial barriers to health services (Annex 1, Objective 2).

Intersectoral collaboration

There are many factors outside the health system that influence and determine people's health, such as poverty, education, infrastructure, and the broader social and political environment. Because they are open to influence from outside, health systems are known as open systems. Nepal's health sector needs to work with other sectors to tackle with WASH, nutrition and governance-related health issues. There is a need to establish a mechanism for effective coordination and collaboration with other sectors. A functional multi-sectoral mechanism will be established in consultation with stakeholders and the Ministry.

Documenting and sharing best practices

Recently, the Ministry initiated documenting local innovations, learning and best practices of local health management committees, and developing case studies to document their experiences. It will provide insight on local realities and policy inputs for future policy improvements and it will be continued during the NHSP-2.

Strengthening transparency and reducing fiduciary risks

The Ministry has been working to improve transparency and reduce EDPs' fiduciary risks over the last few years and significant improvements have been achieved in reducing the proportion of irregularities, increasing absorptive capacity, expediting release of funds, strengthening financial reporting, among others. The Ministry will continue its efforts to improve transparency and reduce fiduciary risks. The Ministry will ensure regular and timely public disclosure activities through the Ministry website, radio/TV, newspapers, performance auditing, and annual progress report among other activities. At the operational level, regular public hearing, social and public auditing mechanisms will be introduced to strengthen performance and transparency. These mechanisms will be made mandatory and implemented nationwide in the NHSP-2 period.

6.7.3 Governance and Accountability Action Plan (GAAP)

The Ministry has already designed and implemented a number of initiatives to improve governance and accountability at different levels. These initiatives include successful implementation of Financial Management Improvement Action Plan (2007-2008), Governance and Accountability Action Plan (2007-2009), introduction of central bidding and local purchasing schemes (2009/2010) to reduce the fiduciary risks and improve availability and quality of drugs and medical supplies at service delivery points. These plans were implemented successfully and brought positive impact.

The Ministry together with its key EDPs prepared a GAAP (Annex 2), which will be implemented during NHSP-2. It will be regularly monitored and updated annual during the Joint Annual Review (JAR). Other activities related to governance and accountability will be designed and included in the AWPB.

6.8 Strategies and Institutional Arrangement for GESI

Gender equality and social inclusion (GESI) need to be mainstreamed during NHSP-2, and the Government has prioritized the integration of GESI in its policies, programmes and plans to make health services accessible to and used by all. Although disparities accessing and using EHCS between the poor and excluded and wealthier and advantaged have been significantly reduced, financial and cultural barriers remain that will not be overcome unless NHSP-2 programmes and services directly address the lingering gender and caste/ethnicity issues.

The Ministry developed in 2009 a GESI strategy for the poor and excluded to receive services and ensure health as a fundamental right, and to implement programmes and services that address barriers to access and utilisation. The strategy has been fully adopted based on the framework below. (See the detailed strategy framework in Annex 3 or see the *Health Sector Gender Equality and Social Inclusion Strategy*, Government of Nepal, Ministry of Health and Population, 2009, for further information.)

- Objective 1: Develop policies, strategies, plans and programmes that create a favourable environment for integrating (mainstreaming) GESI in Nepal's health sector.
  Strategy 1: Ensure inclusion of GESI in the development of policies, strategies, and plans, setting standards and budgeting, and advocate for use of such policies, standards and budget provisioning at the central level.
  Strategy 2: Prioritize GESI in planning, programming, budgeting, monitoring and evaluation at local levels (DDC, DHO, DPHO and VDC) to ensure services are accessible and available to the poor and excluded castes and ethnic groups.
  Strategy 3: Institutionalise the GESI unit/desk at the Ministry, establish and institutionalise at the DOHS and divisions of the DOHS, regional directorates, and DHO/DPHO, and Social Service Units for GESI at central, regional, sub-regional, and zonal hospitals.

- Objective 2: Enhance the capacity of service providers and ensure equal access and equitable use of health services by the poor and excluded castes and ethnic groups in regard to a rights-based approach.
  - Strategy 4: Enhance the capacity of service providers to deliver essential health care services equitably to the poor and excluded castes and ethnic groups and make service providers responsible and accountable.
  - Strategy 5: Address GESI-related barriers by properly identifying target groups, ensuring remote communities are reached, and emphasizing programmes to reduce morbidity and mortality among the poor and excluded.
  - Strategy 6: Enhance or modify services to be sensitive to GESI, and ensure equal access and deliver services without regard to financial or social status of users.
- Objective 3: Improve health seeking behaviour of the poor and excluded castes and ethnic groups in regard to a rights-based approach.
  - Strategy 7: Develop and implement Information Education and Communication (IEC) programmes to improve health seeking behaviour of the poor and excluded groups.
  - Strategy 8: Empower the target groups to demand their rights and realise their responsibility.

The expanded BCC programme will raise public awareness on health warning signs, effective care seeking and service availability with a special focus on the poor and excluded. It will promote a gender-sensitive, inclusive, rights-based, empowering approach to care seeking, targeting influential community members and those who influence attitudes and access to resources within the household and the community.

Improve physical access to health facilities. New health facilities will be built in underserved areas to improve physical access and a more extensive referral system.

As coverage increases, the major programmes and interventions described in Chapter 4 will target their future efforts on reaching communities and groups that are currently making little use of services, or are being missed by promotional and preventive interventions. To increase their coverage, studies and surveys will be carried out to determine the key constraints inhibiting utilisation by the poor and excluded. Results may require action to address cost and physical barriers to access, but may also lead to changes in the way information is communicated or services are delivered, or changes in the attitudes and behaviours of service providers.

Staff will be oriented on GESI principles and practices, and local accountability mechanisms (see section 6.6) will be strengthened, including mechanisms in which the poor and excluded are represented. Mechanisms also will be developed to engage civil society organizations and the private sector for demand creation and improve service delivery.

Ensure that the collection of data and analysis on disparities in utilisation and the reasons for them are collected and used to inform policy and planning. Capture the service provider voice to better understand barriers limiting change for use in policy development. This analysis can be done through the existing review mechanisms, but will need to be pro-actively encouraged by the Ministry and DOHS managers.

Various institutional mechanisms and structures have been created by the Government over the years to address gender and inclusion issues from central to regional and zonal levels. A GESI strategy for the Ministry has been prepared and recently approved. However, there is the need of developing policies, and a work plan for mainstreaming GESI, to increase capacity of service providers and increase the access of the poor and excluded and increase health service seeking behaviours.

The Ministry has taken initiative and established a GESI unit. The unit is mandated to support policy planning and programming (including AWPB), commission policy and operational research and studies on social inclusion and prepare a plan of action to implement the recommendations and conduct equity analysis on access to and utilisation of EHCS and health outcomes. It is also tasked to prepare a framework for monitoring equity and inclusion. This will be done in coordination with different health-related information systems (HMIS, HuRIC, FMIS, LMIS, HIIMS), and will involve developing monitoring indicators and tools on social inclusion, and facilitating data collection, processing and analysis based on the social inclusion indicators. In addition, the unit will build the capacity of stakeholders, design and disseminate GESI messages, explore internal and external resources for social inclusion, and coordinate as necessary.

Guidelines have been prepared to establish social service units in central, regional and zonal hospitals. These units will be staffed by 2-3 persons (depending on patient load) per hospital. The unit is expected to assist the poor and excluded to access services, make recommendations regarding free treatment or partial payment, and coordinate with different departments in the hospitals.

The Ministry has initiated the process of analyzing annual planning and budgeting from a gender and poverty perspective through the new *e*-AWPB

Building on the above, the Ministry will:

- Strengthen Gender Responsive Budget Planning.
- Accelerate the process of establishing social service units in central, regional and zonal hospitals.
- Develop indicators on GESI for analysis, monitoring and evaluation at each level and link with HMIS. Review HSIS (pilot tested) to determine adequacy of desegregation for analysis on health service utilisation by poor and excluded and update if necessary.
- Further strengthen GESI unit at the Ministry and roll-out to district level based on national GESI strategy. Draft clear role and responsibilities of different departments and sections in the Ministry and regional directorate, D/PHO and health facility.
- Prepare additional guidelines to implement GESI's mandate from central to local level.
- Design and dispense identity cards (to understand type and extent of exclusion).
- Review and revise the existing HFMC guidelines to make more inclusive.
- Strengthen HFMC with the delegation of more authority for better management of health facility to provide quality health services.
- Train health workers to employ a GESI perspective.

A startling finding from the MMMS 2009 is that suicide is now the number one cause of death in women of reproductive age. One hypothesis is that it is related to the lack of power that women have over their own lives, and more specifically to high levels of gender-based violence. Many of the problems lie outside the direct responsibility of the health sector, but there is a case for raising awareness of health workers of mental health problems, including recognition of mental health as an important element of safe motherhood, and introducing it into care and counselling in both ANC and PNC. On the broader issues of suicide and possibly linked issues of gender discrimination and violence, a policy will be developed in consultation with other sectors. Training is needed on appropriate handling of cases of domestic violence.

7. Research, Monitoring and Evaluation

7.1 Current Monitoring System

The Ministry relies routinely on its Health Management Information System (HMIS) to report regular service delivery utilisation and estimate coverage of services. There are monthly reviews at HP or PHCC level, which is reported to the district level. The district completes a similar monthly review and report that is sent to the region and central offices. The region conducts reviews by trimester and the central office reviews annually. The DoHS compiles the data from districts and produces an annual report. Reviews at different levels are based on HMIS data.

Joint Annual Reviews are conducted between the Ministry, EDPs and other major stakeholders. The reviews focus on planning and budgeting, performance based on macro-level indicators and the Ministry's achievements. A planning JAR is usually conducted in June and a review JAR in December. An aide memoire follows each.

There have been other major sources of information in the health sector during NHSP-1, the Population Census, Demographic Health Survey, Nepal Living Standard Survey, trimester health facility surveys and annual household survey on free care, and a maternal mortality and morbidity study, to name a few. Government reporting on services is regular, nationwide and quite accurate, except for underreporting by central level hospitals. Reporting by non-state actors in the health sector is not routine or comprehensive.

The HMIS, as the Ministry's principal monitoring system, reports on utilisation of child health services, family health, disease control, and curative care. It also reports on supporting programmes, such as training, IEC, financial and logistics management and laboratory services to support policy development and planning and budgeting. It disaggregates patient data by age and gender and was recently revised to disaggregate by target groups at district hospitals and caste or ethnicity. Revisions will also lead to tracking the contributions from private and community (including NGO) health institutions. Further improvements and integration with other information systems is planned. However, caution must be exercised so as not to overburden providers or overtax a system that has performed very well during NHSP-1. Special surveys of health facilities and household surveys will always be needed to supplement the HMIS' routine facility-based data. Household surveys provide valuable information on non-users as well as users, thereby informing programme managers, policy makers and EDPs about health seeking behaviour and barriers to access and use.

7.2 Constraints and Challenges of Current Monitoring System

The current monitoring system of the Ministry produces a range and level of detail of information that is without compare in the region, but systems and surveys are not well coordinated, and therefore their use by managers, policy makers and EDP is unnecessarily limited. Use of routine data at local and district levels is minimal because the focus is on

aggregation for the central Government and surveys are often conducted to suit special interests rather than serve the SWAp. During NHSP-1, it proved difficult to evaluate achievement of targets because representative statistics were not always available for indicators of the results framework. In addition, it was proposed to merge national reviews held by the DoHS with the JAR reviews during NHSP-1 but they remain separate to date.

The HMIS needs to be more effectively used as a monitoring tool for local governments and districts and not only as a record keeping and reporting system of the DoHS. When the Government decentralises authority to provinces and districts, the use of disaggregated data to plan and budget will become even more important. The wealth of data collected by the HMIS could and should be more regularly made available and used for management at all levels of the system.

Currently, the HMIS is not directly linked to financial, human resource, or logistic management information. Although there are advantages to integrating these systems, it should not come at the expense of damaging the accuracy of the HMIS' monthly data. The other systems are not functioning nearly as well as the HMIS.

Considerable improvement has been made during NHSP-1 in using programme data and budgets for annual planning but efforts to fully develop the process as performance based must continue. Combining the JAR with the DoHS annual reviews would help to strengthen linkages between plans, budgets, implementation and achievements each year.

7.3 Actions during NHSP-2

A monitoring and evaluation plan will be developed and implemented on regular basis as a part of annual programme implementation. Regular supervision should be carried out by the Ministry to solve problems identified by monitoring and evaluation activities and build district and local capacity with technical assistance supported by EDPs. Training curricula, guidelines and manuals will be developed to support monitoring and evaluation activities conducted by levels of government below the federal level to help ensure uniformity and quality.

The Ministry's monitoring of its programme's, including monitoring of free care at service delivery sites, should be reviewed to ensure data will be collected and analysed to measure progress as characterised by NHSP-2's results framework. Agreements should be reached with EDPs that support monitoring and evaluation and survey research in the health sector regarding the data to be collected, design and methods of collection, and timing such that reports are synchronised with NHSP-2's beginning, midterm and end. Monitoring and evaluation activities should be decentralised and designed in the future to strengthen the capacity of levels of government below federal to analyse and use information for planning and budgeting, and achieving their targets.

HSIS pilot results should be reviewed in light of NHSP-2 strategies and implementation plans and revised accordingly to ensure accurate data and analysis will be available to measure progress achieving the health-related MDGs and outcomes, and targets for

objectives 1, 2 and 3. When designing monitoring and evaluation activities, attention must be paid to collecting data that allow for analysis by target groups, wealth, and caste or ethnicity because the second objective of NHSP-2 is to reduce cultural and economic barriers to accessing health care services and harmful cultural practices in partnership with non-state actors. Household surveys will continue to be essential to measuring health seeking behaviours and barriers to access Government and non-state facilities. Non-state health facilities can also be included in scheduled surveys or surveillance of Government health facilities, including exit interviews, in coordination with household surveys.

Health facility surveys will continue to be conducted to collect data on utilisation by patient characteristics to report on their satisfaction and on the availability of care providers and essential drugs, preparedness of facilities to provide EHCS, implementation of incentive programmes, and allocation of funds. These surveys are currently undertaken each trimester. In the future, they should be conducted less frequently in coordination with complementary household surveys.

Annual household surveys should continue to be conducted to monitor health seeking behaviour of women aged 15-49 by wealth quintile, different castes or ethnicities, education, etc. to assess financial and non-financial barriers to essential health care, use of services and incentives, and reduction in out-of-pocket costs for health care. Consideration will be given to whether special maternal mortality and morbidity surveys will be needed to complement scheduled national Demographic and Health Surveys because maternal deaths are rare and difficult to capture in broader cross-sectional surveys.

Annual social audits will be made mandatory at each health institution. Health Facility Management Committees will assume responsibility for auditing their institutions' performance. Twenty-five percent of district facilities are expected to have conducted social audits before the end of NHSP-2.

7.3.1 Policy Research

There continues to be a need for policy research and special studies to support routine monitoring and evaluation and inform the development of policies and programmes based on evidence. A particular weakness of the current monitoring system is the lack of integration of data and analysis of physical progress with economic and financial analysis, although progress has been made during NHSP-1. At present, there is considerable dependence on TA and on ad hoc studies financed by EDPs. NHSP-2 will focus more on building institutional capacity at different levels of government.

Institutionalising NHA and public expenditure review

The Health Economics and Financing Unit of the Ministry will regularly update the National Health Accounts database and Public Expenditure Review, and produce reports that promote the use of the information to inform planning and budgeting. They will also input budget and expenditure analysis into the preparation of Ministry budget proposals to the Ministry of Finance, with a particular role in supporting the preparation of the MTEF.

Conducting economic analysis

Economic analysis is particularly important in focusing resources where they can have the biggest impact in achieving health goals and targets, and in reviewing trends in the value for money obtained from existing patterns of spending. Equity analysis, marginal budget analysis, productivity analysis, cost analysis, cost effectiveness analysis, and demand analysis in the context of free care will be conducted to generate evidence that informs policy makers and programme managers. Updated unit costs will be needed during NHSP-2.

Strengthening Health Economics and Financing Unit (HEFU), Ministry

To build permanent capacity for economic analysis in support of policy, the HEFU will be strengthened by providing additional skilled staff, training, materials, and networking capability. Linkages to other organisations that can provide support will be made.

8. Health Financing

8.1 Rationale for Government Role

Before discussing how NHSP-IP 2 costs will be financed, it is important to briefly revisit the rationale for public-sector funding within the overall funding of a sector in which the private-sector role remains significant.

Government financing of essential health care services has gradually expanded beyond free provision of family planning and maternal and child health services to include a broader range of preventive and curative services free-of-charge or highly subsidised. The abolition of user fees at peripheral facilities in districts has lead to a big increase in demand and a narrowing of inequity in utilisation of services. Further planned expansion to district hospitals of universal care free of charge should lead to additional increases in utilisation by the poor and excluded.

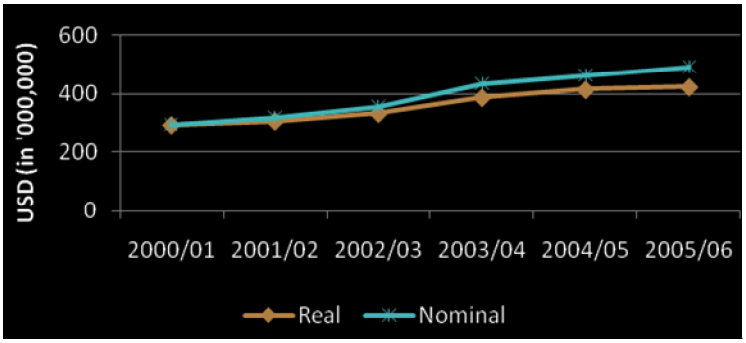
Although there is a strong rationale for the modest extension of free-to-user services proposed under NHSP-2, the Ministry recognises that it will face increasingly difficult choices as to which curative services it chooses to finance, and how limited budget funds will be allocated. It is already the case that 80% of outpatient contacts are for non-communicable diseases (NCDs) and injuries. The expanded prevention effort proposed under NHSP-2 should help to slow the growth in the burden of NCDs, but will not prevent continued growth in demand for curative services of an increasingly complex and expensive nature. As described in Chapter 4, Government already provides some financial support for some types of tertiary care and for those facing catastrophic health costs. Demand on the limited funding available will inevitably increase and will raise difficult choices as to how to provide a degree of social protection to those facing catastrophic illness, while ensuring that increased spending on expensive curative care is not at the cost of less than adequate funding of the core programmes that have delivered the substantial improvements in health outcomes of recent years. The Ministry will need to continue developing partnerships with non-state actors with other resources to expand curative services.

8.2 Challenges to health financing

Expenditure in health remains low at 5.3 percent of GDP in 2006. The per-capita health expenditure stood at USD 18.09 compared to USD 65 in Bhutan, USD 44 in Sri Lanka, USD 29 in India and USD 19 in Afghanistan (WHO 2008). The composition of total health expenditure is 44 percent public expenditure, whereas the remaining 56 percent is from private sources. The share of Government stands at 24 percent (USD 4.28) of the total health expenditure and external partners contribute the remaining 21 percent (USD 3.75). More than 55 percent (USD 9.00) of the total health expenditure is financed through out of pocket expenditure by households at the time of service. (*Shrestha, BR, Gnawali DP, Subedi GR (2006). Nepal National Health Accounts, (Second Round) 2003/04 –2005/06, GoN/ Ministry of Health and Population, Kathmandu.)*

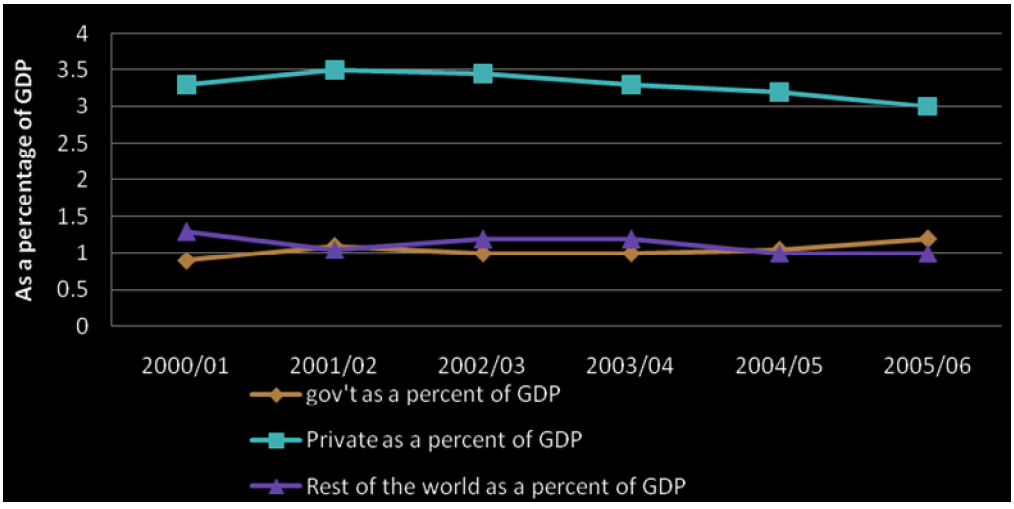
Of the Government sources, more than 93 percent is from general tax revenues and the balance is contributed by local and central governments. Although the level of the total health expenditure is low, the trend in the past few years has been encouraging. Total health expenditure has increased from USD 16.69 in 2003/04 to USD 19 in 2005/06 in nominal terms. It also has increased in real terms, albeit at a lower rate (Figure 8.1). It also has slightly increased as a percentage of GDP. While the share of private spending was falling, that of the Government was increasing steadily (Figure 8.2).

Figure 8.1: Trends in Total Expenditure on Health



Although constrained, the Government has demonstrated its commitment to increase availability and access to health services to the poor and marginalized groups. Over the past three years, the budget allocation to the Ministry has increased from 6 percent of the national budget in 2005/06 to 7.15 percent in 2007/08, and is proposed at over 7% in 2010-11. The Ministry is able to spend more than 84% percent of its budget. More than 70 percent of the budget is allocated for the package of essential health care services (EHCS) containing cost-effective interventions. The budget share of EHCS will be at least 75 percent throughout the NHSP-2. Such a shift away from secondary and tertiary care to EHCS will support expansion of cost-effective services to the poor and excluded.

Figure 8.2: Health Expenditure as a Percentage of GDP



8.3 Responding to the challenges

With nearly half of public health spending financed by EDPs, sustainability is a major concern. During NHSP-2, a health financing strategy will be developed to inform future strategic choices about how best to meet the growth in demand for an ever more complex range of health services.

The experience of other countries that have succeeded in achieving close to universal coverage suggests that a mixed approach may be needed. It is difficult to make insurance-based options work for low-income populations without excluding the poor. In principle, they can be exempted from payment, but the costs of accurately identifying and exempting the relatively large share of the population that finds it difficult to pay is high relative to the revenue that can be collected, and causes resentment by those who can pay. There have been attempts under NHSP-1 to introduce forms of pre-payment such as revolving drug schemes, which also have benefits to service quality by reducing stock-outs and generating financing surpluses for spending on other health costs. These schemes have mostly been successful in improving utilisation by scheme members, but coverage has been relatively low, especially by the poor. The extension of free services reduces the incentive to join these schemes and makes their future role and financial viability unclear.

For the rural population, tax-based financing of EHCS is therefore likely to remain the basis of the system for the foreseeable future. The extension of free services will increase reliance on tax-based funding of district hospitals, which previously collected one quarter of their revenues from users. This has potentially negative consequences for quality of services unless Government can replace the lost revenues from user charges with block grant funding that is equally timely and flexible to use.

To reduce pressure on the tax base, user fees will continue to be charged to better-off patients for secondary and tertiary care that is not included in the definition of EHCS. The cost recovery modality will be developed. Exemption criteria will be developed for poor clients/patients, and grants to facilities will be provided on the basis of the outputs they provide to patients qualifying for free or subsidised treatment. To minimise any financial disincentive to facilities granting exemptions, exemptions will be funded by advances to facilities that are replenished based on submission of physical and financial reporting.

Public expenditure on health needs to address inequalities in access to and utilisation of health care as mentioned earlier. The practice has been to allocate the budget based on the distribution of facilities. Such resource allocation approaches tend to maintain the inequalities. For example, while household expenditure in health in the Hill region is more than three fold that of the Mountain region, the public expenditure barely compensates for such differences. A gradual move away from such a practice towards allocating budget on the basis of population, accessibility, and cost of delivering health services will improve equity in access to and use of health services. The AWPB process will be one of the instruments to continuously monitor the Government's effort to reduce inequality. The

introduction of new programmes and interventions will be assessed based on their contribution to reduce inequality.

In order to address both allocative efficiency and equity and to reduce the distortions that can arise through discretionary allocation of resources, the Ministry will move towards a formula-based approach to resource allocation. This approach will adjust per-capita allocations to reflect the higher costs of delivering services in Hill and Mountain regions, the disease burden, and the relative poverty of the population.

There will be scope for continued growth of private insurance-based options for the urban formal sector population, which will help to reduce the pressure of demand from the better off for services funded from taxation. It will be important to ensure that formal insurance schemes with mainly better-off recipients recover all of their costs and are not implicitly receiving subsidised access to public-sector facilities.

For the vast majority who are unable to afford insurance premiums either directly or funded by their employer, Government will need to continue to find some means to ration access to Government funding of catastrophic health costs. The Government have piloted community health insurance schemes for both checking catastrophic spending and other health expenditure. It may be feasible to find other approaches such as microcredit to smooth the burden of unexpected health costs. A social protection scheme will be piloted to cover the formal sector not covered by any other benefit schemes. The scheme will be evaluated and scaled up if promising. It may also be feasible to build on existing schemes for free beds for the poor in private hospitals and medical schools.

8.4 Financial Resource Envelope

There is considerable uncertainty over the future resources available for public expenditure on health. This section sets out three possible scenarios for the future growth in the resources available, a ‘low case,’ a ‘middle case,’ and a ‘high case.’ Section 8.5 will then draw out the implications of the available resources for the sequencing of future health sector development, including both the scaling up of existing interventions and the introduction of new ones. Decisions on introducing and scaling up interventions will in practice be made in the context of annual budget discussions, with a three-year perspective provided by the Medium-Term Expenditure Framework approved by the Ministry of Finance (MOF).

The degree of uncertainty surrounding future support by the EDPs is also a concern. Clear medium-term indications of future support from the major EDPs would be especially helpful in reducing uncertainties and enabling the Ministry to make decisions. With the information currently available, and subject to the usual uncertainties surrounding future policy in a democracy, this plan sets out current thinking on how the Ministry will react to different levels of financial resource availability.

All three scenarios adopt the 2010-11 budget ceiling for health that was proposed by the MOF in February 2010, but they make different assumptions about absorption and about future growth in resources.

8.4.1 'Low Case' Scenario

Table 8.1 reveals the 'low case' scenario. It assumes GDP growth of 4.5% per annum, no change in the share of GDP used to finance public expenditure, no change in the share of domestic resources allocated to the health sector, but an increase in absorption (the share of the budget that is actually spent) to 90%. Based on these assumptions, Government financing of the health sector would increase by 6.8% per annum in real terms compared to 2009-10. The Government financing alone based on these assumptions would permit growth of per-capita public expenditure on health of NRs. 75, just under US$ 1, between 2008-9 and 2014-15.

It is much more difficult to predict the trend in aid to the health sector. Some 58% of total EDP spending during NHSP-1 took place in the final two years, reflecting catch-up from earlier low expenditure. These two years may reflect unusually large disbursements and may not be sustained. That would seem to be the implication of the existing indications of support to the pooled fund, which imply annual pool fund expenditure at about 70% of the level in real terms that was achieved in the last two years of NHSP-1. The low case scenario assumes real ODA support to the health sector growing by just 0.5% per annum, with some recovery in real EDP spending after an initial dip in 2010-11. Assuming that the share of public expenditure in GDP returns to about 23% after the big increase proposed for 2010-11, these assumptions imply that the health share of the budget would decline from 7.1% proposed by the MOF for 2010-11 to 6.5% in 2014-15. On these pessimistic assumptions, real public expenditure on health grows by 3.9% per annum, and per-capita spending increases by NRs. 45 (US$ 0.60) at 2009-10 prices. The share financed from Nepali sources would increase from 51% to 58%.

Table 8.1: Low Case Financing Scenario

NRs. 2009-10 Prices

Description	Budget 2009/10	MOF Proposed Budget Ceiling Feb 2010					
		2010/11	2011/12	2012/13	2013/14	2014/15	Average annual growth
GON spending on NHSP, NRs. (billion)	9.05	10.62	11.05	11.55	12.07	12.61	6.8%
EDP spending on NHSP NRs. (billion)	8.79	7.74	8.05	8.33	8.63	8.98	0.5%
Total public expenditure for health NRs. (billion)	17.84	18.36	19.10	9.88	20.70	21.59	3.9%
Spending per capita, NRs.	633	632	643	654	665	678	
Spending per capita, US$	8.3	8.3	8.5	8.6	8.8	8.9	
Domestic share in total health financing	50.8%	57.8%	57.9%	58.1%	58.3%	58.4%	
Assumptions							
GDP growth		4.5%	4.5%	4.5%	4.5%	4.5%	
Public expenditure share of GDP	22.2%	23.7%	23.0%	23.0%	23.0%	23.0%	
Health share of budget		7.1%	6.9%	6.8%	6.6%	6.5%	-
Revenue plus domestic financing share of GDP		18.1%	18.0%	18.0%	18.0%	18.0%	
Health share of domestic revenues plus finance	4.4%	4.4%	4.4%	4.4%	4.4%	4.4%	
Absorption: share of health budget actually disbursed		81.1%	85.0%	87.0%	88.5%	90.0%	

8.4.2 'Middle Case' Scenario

In the 'middle case' scenario, GDP growth is slightly higher, based on the October 2009 IMF forecast for Nepal, and it assumes that the share of public expenditure in GDP is maintained at the level proposed for 2010-11. The main change, however, is that we assume continued real growth in EDP disbursements for the health sector, averaging 9.5% per annum relative to the 2009-10 budget. This growth in aid disbursements still represents a significant slowing relative to the 25% per annum growth in real aid expenditure achieved in NHSP-1. This scenario results in a per-capita increase in public expenditure on health of about NRs. 217 (US$ 2.80) relative to the 2009-10 budget. As a result of the faster growth in aid financing, the domestic share of health financing would fall marginally to about 49%.

Table 8.2: Middle Case Financing Scenario

NRs. 2009-10 Prices

Description	Budget 2009/10	MOF Proposed Budget Ceiling Feb 2010					
		2010/11	2011/12	2012/13	2013/14	2014/15	Average annual growth
GON spending on NHSP, NRs. (billion)	9.05	10.62	11.20	11.79	12.44	13.12	7.7%
EDP spending on NHSP, NRs. (billion)	8.79	8.79	9.84	11.02	12.34	13.82	9.5%
Total public expenditure for health, NRs. (billion)	17.84	19.41	21.04	22.81	24.78	26.95	8.6%
Spending per capita, NRs.	633	668	708	750	797	847	
Spending per capita, US $	8.3	8.8	9.3	9.9	10.5	11.1	
Domestic share in total health financing	50.8%	54.7%	53.2%	51.7%	50.2%	48.7%	
Assumptions							
GDP growth		4.5%	5.0%	5.3%	5.5%	5.5%	
Public expenditure share of GDP	22.2%	23.7%	24.0%	24.0%	24.0%	24.0%	
Health share of budget		7.1	6.8	6.9	7.0	7.1	
Revenue plus domestic financing share of GDP		18.1	18.2	18.2	18.2	18.2	
Health share of domestic revenues plus finance	4.4%	4.4%	4.4%	4.4%	4.4%	4.4%	
Absorption: share of health budget actually disbursed		85.7%	91.0%	92.5%	93.8%	95.0%	

8.4.3 'High Case' Scenario

Table 8.3 sets out a more optimistic high growth of resources scenario. GDP growth accelerates to reach 7% per annum by the end of NHSP-2, there is an increase in taxation relative to GDP, and the share of domestic revenues devoted to the health sector increases to 6%. This scenario generates an increase in domestic financing of public health expenditure of 16% per annum. We also assume that EDP spending increases by 17% per annum. Although rapid, this increase is less than the 25% per annum actually achieved during NHSP-1. The consequence of these assumptions would be that the real level of per-capita spending on the health sector would nearly double to reach NRs. 1,212 (US$ 15.94) by 2014-15.

Table 8.3: High Case Financing Scenario

NRs . 2009-10 Prices

Description	Budget 2009/10	MOF Proposed Budget Ceiling Feb 2010					
		2010/11	2011/12	2012/13	2013/14	2014/15	Average annual growth
GON spending on NHSP, NRs. (billion)	9.05	11.51	12.33	14.31	16.60	19.23	16.3%
EDP spending on NHSP, NRs. (billion)	8.79	9.32	11.18	13.42	16.11	19.33	17.1%
Total public expenditure for health, NRs. (billion)	17.84	20.83	23.51	27.73	32.70	38.56	16.7%
Spending per capita, NRs	633	717	791	912	1051	1212	
Spending per capita, US $	8.33	9.43	10.41	12.00	13.83	15.94	
Domestic share in total health financing	50.7%	55.3%	52.4%	51.6%	50.8%	49.9%	
Assumptions							
GDP growth		5.00%	5.50%	6.00%	6.50%	7.00%	
Public expenditure share of GDP	22.20%	23.63%	24.00%	24.20%	24.40%	24.60%	
Health share of budget	6.24%	7.08%	7.40%	8.10%	8.85%	9.57%	
Revenue plus domestic financing share of GDP		17.99%	18.00%	18.20%	18.40%	18.60%	
Health share of domestic revenues plus finance	4.73%	4.73%	4.80%	5.20%	5.60%	6.00%	
Absorption: share of health budget actually disbursed		92.00%	92.75%	93.50%	94.00%	95.00%	

8.5 Summary of Financing Scenarios

Domestic financing of the budget will increase by between $1 and $4 per head on these three scenarios, but there is far greater uncertainty with respect to external financing, where the range of uncertainty is between a small decline and an increase of nearly $9 per capita.

NHSP-2 Costs and Resource Allocation

NHSP-2 is planned as a continuation of the reform agenda that has brought about the remarkable achievements of NHSP-1 in reducing under-five, infant and maternal mortality. It is estimated that NHSP-1 saved 96,000 deaths and nearly 3.2 million disability-adjusted life years (DALYs) at a cost of $144 per DALY saved.[37] If the targets of NHSP-2 are broadly achieved by public health spending in line with the middle case scenario, this achievement would be broadly maintained, saving a further 45,000 deaths and nearly 1.5 million DALYs at a cost of $147 (all costs at 2009-10 prices) (Table 8.4). This scenario is highly cost-effective. The Commission on Macroeconomics and Health stated that a disability adjusted life year gained is worth in purely economic terms at least the annual GNI per head, and considered that it could plausibly be worth three times this amount. Other writers dispute this statement, but all plausible estimates of the economic and social value of life in Nepal would suggest that expenditure of around half of the GNI per head in order to save one DALY, as implied by our analysis, represents an extremely good investment. The estimated benefits are also plausible. Annex 4 reviews the major interventions based on global estimates of the cost

[37] Although we use the DALY methodology, the discounting of future health benefits, and the lower weighting given to the lives of the very young and the very old, have been criticised. See Report of the Commission on macroeconomics and Health: A critique, D Banerji, International Jo urnal of Health Services, 2002.

per DALY that have been published in peer reviewed journals. The interventions that Nepal is concentrating on have been assessed as capable of saving lives at a cost per DALY that is in most cases less than $50, and in all cases is within the threshold of cost-effectiveness.

Table 8.4: Cost per Death and per DALY saved: NHSP-1 Achievement and NHSP-2 Assumptions

Description	NHSP-IP 1 FY2004-5 to 2009-10 (Baseline 2003-4)	NHSP-IP 2 2010-11 to 2014-15 (Baseline 2009-10)
Deaths if no change in baseline rates:		
Under-5	323,910	190,566
Maternal	14,847	8,081
TB	41,959	12,946
TOTAL	380,715	211,594
Estimated/targeted deaths	Estimated actual	Targets
Under-5	242,978	148,907
Maternal	11,412	5,854
TB	30,198	11,610
TOTAL	284,588	166,372
Saved deaths (total)	96,127	45,222
Saved DALYs[38]	3.172 million	1.493 million
Additional DALYs saved from filariasis elimination		348,000
Total DALYs saved	3.172 million	1.841 million
Incremental expenditure, 2009-10 prices	$458 million	$271 million
Cost per DALY saved, 2009-10 prices, not discounted	$144	$147

There is no detailed, costed 'blueprint,' but the plan will continue to aim for the largest sustained impact on mortality and morbidity with the funds that are available. Interventions of proven worth will be scaled up, constraints to the utilisation of services by the poor and excluded, and by women will be addressed, and new initiatives will be gradually introduced as funds permit based on evidence of their effectiveness derived from international and local research and from carefully evaluated pilots. Issues of efficiency and effectiveness will receive increased attention, to ensure that maximum health benefits will be achieved with public-sector funds that are available for the health sector.

Table 8.5 presents crude estimates of the additional costs of the major initiatives that will be prioritised during NHSP-2 (the Annex 5 provides details of the assumptions and sources used). Although crude, they serve to illustrate what might be possible to finance under the different financing scenarios.

Under the 'high case' scenario, the increased resources of about $8.30 would enable all of the proposed programmes to be financed, including the addition of a comprehensive nutrition programme, significant improvements in incentives for doctors, nurses and other providers, and expansion of programmes beyond EHCS in proportion to maintain EHCS at about 80% of total Ministry spending. However, all of the financing assumptions underlying this projection are optimistic.

[38] WHO estimate one child death equals 33 DALY, one adult death equals 36, because early and late life years are controversially weighted as less valuable than years of active economic life. We have conservatively valued all lives saved as worth 33 DALYs.

Under the 'middle case' scenario, increased resources of about $2.80 per head would not permit all of the proposed programmes to be implemented. However, it would be possible to accommodate the scaling up of EHCS, the extension of free care, including the costs of meeting the resulting increase in inpatient and outpatient demand, proposed scaling up of community-based newborn care and nutrition services, the expansion of immunisation to include new vaccines, improved reproductive health, including prevention and treatment of uterine prolapse and expansion of safe abortion services, implementing the programmes on neglected diseases (filariasis, hookworm and trachoma), and the proposed addition of modest mental and oral health programmes. To accommodate such expansion under this scenario, new nutrition programmes on the scale envisioned would not be feasible, there would be less scope for improving incentives to providers, and expenditure on services beyond EHCS would need to be capped at close to existing levels in real per-capita terms.

In the pessimistic 'low case' scenario, the Ministry will be unable to add anything to the scope of EHCS, but can more or less finance the costs of expanding and scaling up the original 10 elements of EHCS.

Table 8.5: NHSP-IP 2 Approximate Costs

NR Billions, 2009-10 prices

Cost category	Baseline Cost 2009-10	Projected Cost					Increase from baseline		
		2010-11	2011-12	2012-13	2013-14	2014-15	NRs. Bns	US$ per capita	US$ p.c. Cumulative
Existing 10 elements of EHCS	13.10	13.51	13.82	14.14	14.47	14.80	1.703	0.70	0.70
Adding free care programme	1.02	1.08	1.26	1.48	1.74	2.04	1.02	0.42	1.13
Additions to EPI (pneumococcal etc.)	0.00	0.00	0.00	0.00	0.00	0.77	0.77	0.32	1.45
Scaling up C-B NCP	0.19	0.27	0.36	0.44	0.54	0.63	0.45	0.19	1.63
Piloting and scaling up mental health programme	0.00	0.01	0.02	0.03	0.04	0.05	0.05	0.02	1.65
Piloting and scaling up oral health programme	0.00	0.01	0.02	0.03	0.04	0.05	0.05	0.02	1.67
Research	0.00	0.20	0.21	0.23	0.25	0.28	0.28	0.11	1.79
Increased BCC budget	0.00	0.09	0.11	0.11	0.11	0.11	0.11	0.05	1.83
Safe abortion	0.00	0.02	0.03	0.05	0.06	0.08	0.08	0.03	1.86
Uterine Prolapse	0.00	0.23	0.29	0.39	0.59	0.78	0.78	0.32	2.19
Community-based nutrition	0.00	0.05	0.08	0.10	0.13	0.16	0.16	0.07	2.25
Neglected diseases	0.00	0.30	0.30	0.30	0.30	0.30	0.30	0.13	2.38
Incremental HR costs	0.00	0.30	0.63	1.00	1.40	1.84	1.84	0.76	3.14
Community- and centre-based rehabilitation severe malnutrition.	0.00	1.30	1.71	2.14	2.59	3.05	3.05	1.26	4.40
Cash transfers to malnourished pregnant and U5s	0.00	1.76	2.52	3.32	4.53	5.79	5.79	2.39	6.80
Total cost for expanded EHCS package	14.30	19.13	21.37	23.76	26.79	30.74	16.44	6.80	
Beyond EHCS (20%)	3.54	4.78	5.34	5.94	6.70	7.69	4.15	1.71	
Total public cost on health care	17.84	23.91	26.72	29.71	33.48	38.43	20.59	8.51	

8.6 Conclusions

This chapter presents rough estimates of possible growth of the resource envelope available for financing health expenditure, as well as the costs for the major priorities that will be implemented under NHSP-2. In the middle scenario, the Ministry would spend an additional $2.80 at 2009-10 prices and would be able to expand and scale up cost-effective health interventions that are capable of saving an additional 45,000 lives at a cost of $147 (at 2009-10 prices), a highly cost-effective option. All plausible estimates of the economic and social value of life in Nepal would suggest that expenditure of about half of the GNI per head to save one DALY, as implied by the analysis, represents an extremely good investment.

The share of total spending that is MDG-related during NHSP-2 averages about 80% under this scenario. The major obstacle to achieving all the MDGs and outcome targets is the limited funding for the expanded nutrition programme nationwide in this scenario. All programmes and services of the EHCS package of the past can continue to be scaled up or maintained, progress made towards planned disease elimination, and access to and use of EHCS can be increased by expanding universal free care to district hospitals. However, the quality of services will be affected by limited resources to deploy and retain health care personnel, especially in remote areas.

Medical safe abortion (1.3) and uterine prolapse (1.4) services can continue to be scaled up. Newborn care (2.4) and expanded nutrition (2.5) services can be piloted and scaled up but the limited resources available would curtail expansion and supplementary feeding in particular. Available funding should lead to achieving the MDGs and outcome targets of the results framework if programme services are delivered efficiently based on evidence that guides annual planning and budgeting. Reducing neonatal mortality—half of under-5 mortality—may continue to prove tricky, as will further reductions infant and under-five mortality if access to nutritional services is limited by failed, and somewhat costly, targeting efforts. Achieving the target for the “% of underweight children” may prove to be the most difficult to accomplish because of the funding limitations on expanding a comprehensive nutrition programme.

With the exception of planned expanded nutrition services, all other new programmes are expected to be implemented under the middle case scenario—NCD (4), oral (5) and eye (6) care, rehabilitating the disabled (7), and environmental health (8). These programmes have not been costed yet but are primarily promotion and prevention oriented and implemented with non-state partners so they are relatively less costly for the Government to implement. If midterm (2013) MDG and outcome targets are not achieved, funding can be diverted to programmes designed to achieve them at the expense of these new programmes. Services beyond EHCS would need to be capped at close to existing levels in real per capita terms.

Nepal is committed to continue concentrating resources on evidence-based interventions of known effectiveness. It needs confirmed support from EDPs to both secure the additional resources needed, and to enable it to plan with confidence.

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MORE REFERENCES NEED TO BE ADDED.

Annex 1: Result framework for NHSP-IP 2

MDG/Impact Indicator	Achievement					Baseline Year	Target			Means of Verification	Remarks/Assumptions/Risks
	1991	1996	2001	2006	2009[39]		2010-11	2013	2015		
Maternal Mortality Ratio	539	539	415	281	229[40]	250	250	192	134	DHS 2011 and 2016[41]	Needs innovative programs and resources at the community level, and high-quality services available to remote, underprivileged and underserved populations.
Total Fertility Rate	5.3	4.6	4.1	3.1	2.9[42]	3.0	3.0	2.75	2.5	DHS 2011 and 2016	Assumes a continuous linear decline
Adolescent Fertility Rate 15-19 years per 1000 women	NA	127	110	98	NA	98	NA	85	70	DHS 2011 and 2016	
CPR (modern methods)	24	26.0	35	44	45.1[43]	48	48	52	55	DHS 2011 and 2016	Assumes a continuous linear declin e; data source for verification--DHS 2011 and 2016. Year-round availability of FP commodities at service delivery sites. GoN budgets adequate each year to procure FP commodities.
Under-five Mortality Rate	158	118.3	91	61	50[44]	55	55	47	38	DHS 2011 and 2016	Assumes a continuous exponential decline; data source for verification--DHS 2011 and 2016.
Infant Mortality Rate	106	78.5	64	48	41[45]	44	44	38	32	DHS 2011 and 2016	Assumes a continuous exponential decline; data source for verification--DHS 2011 and 2016 .
Neonatal Mortality Rate		49.9	43	33	20[46]	30	30	23	16	DHS 2011 and 2016	More than half infant deaths are neonatal so a focus of the programme.
% of underweight children		49.2	48.3	38.6	39.7[47]	34	34	32	29	DHS 2011 and 2016	Weight-for-age < 2 SD.
HIV prevalence among pregnant women aged 15-24 years[48]	NA	NA	NA	NA	NA		Halt and reverse trend			TBD	HIV infection is currently concentrated among IDUs at 10% in 2007, MSMs at 4%, and among FSWs at 2%.
TB case detection and success rates (%)	NA	48 79	70 89	65 89	71[49] 88[50]	75 89	75 89	80 90	85 90	HMIS	MDG 6 target: Prevalence and death rates associated with tuberculosis. TB success rate was 88% in 2009. It should be at least maintained through 2015.
Malaria annual parasite incidence per 1,000	NA	0.54	0.40	0.28	NA		Halt and reverse trend			HMIS	MDG 6 target: Prevalence and death rates associated with malaria

[39] Achievements for 2009 should not be construed as trends. The sources are not necessarily nationally representative and the es timates may not be significantly different from 2006 estimates.

[40] Estimate from Suvedi, Bal Krish na, et al. Maternal Mortality and Morbidity Study 2008/2009: Summary of Preliminary Findings. Kathmandu, Nepal. Family Health Division, Department of Health Services, Ministry of Health and Population, Government of Nepal.

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[45] Family Planning, Maternal, Newborn and Child Health Situation in Rural Nepal…

[46] Family Planning, Maternal, Newborn and Child Health Situat ion in Rural Nepal…

[47] Family Planning, Maternal, Newborn and Child Health Situation in Rural Nepal…

[48] The Ministry recognizes the MDG 6 target of halting and reversing the trend of HIV prevalence among pregnant women aged 15 -24 years. However, a data sourc e is not yet available .

[49] 2008

[50] 2008

Specific objective 1: Increase access to and utilization of quality essential health care services						
Outcome Indicator	Baseline/ Year	Target			Means of Verification	Remarks/Assumptions/Risks
		2010/ 11	2013	2015		
% of children under 12 months of age immunized against DPT 3 (PENTA) and measles (or fully immunized per HMIS scale up) disaggregated by all wealth quintiles and castes/ethnicities	83% fully immunised 2006 and 89% in rural districts 2009 [51]	85%	85%	85%	HMIS and NDHS in 2011 and 2016	Percentage of fully immunised children should be above herd immunity regardless of wealth, caste or ethnicity.
Contraceptive prevalence rate (modern methods) (disaggregated by method, age, caste/ethnicity, wealth and region)	44% (2006) 45.1 (2009) rural	45%	52%	55%	HMIS and NDHS in 2011 and 2016	55.5% for women 15-49 living with husbands; 22.5% if husbands away (2009) rural
% of women who took iron tablets or syrup during the pregnancy of their last birth	59.3% (2006) and 81.3% in rural (2009)	82%	86%	90%	NDHS in 2011 and 2016	
% of deliveries by SBAs - disaggregated by all wealth quintiles and castes/ethnicities	18.7% in 2006 and 25% in 2008/9 (28.8% NFHP 2009 survey)		40%	60%	HMIS and NDHS in 2011 and 2016	Interventions targeted to poorest and excluded necessary to reduce disparities.
% of institutional deliveries - disaggregated by all wealth quintiles and castes/ethnicities	18% (2006)	27%	35%	40%	NDHS in 2011 and 2016	Wide disparities persist for ANC between wealth quintiles and castes/ethnicities.
% of EOC met need	31% (2008/09)		43%	49%	HMIS and NDHS in 2011 and 2016	HMIS
% of Caesarean Section rate	2.7% (2006), 3.6% (2008/09)	4.0%	4.3%	4.5%	HMIS	HMIS 2008/09 report from 26 districts.
Obstetric case fatality rate		<1%	<1%	<1%	HMIS	
% knowledge of safe abortion sites	19% (2006)		35%	50%	Annual household surveys	97,378 women received safe abortions in 2007/08 at 202 listed sites.
% knowledge of safe abortion legalisation	50% (2006)		60%	75%	Annual household surveys	
Abortion complications	14% (2009)	14%	10%	7%		
% of women 15-49 with comprehensive knowledge about AIDS	19.9% (2006)	24%	32%	40%	NDHS 2011 and 2016	
% of children with symptoms of ARI treated with antibiotic	25.1% (2006), 29.2% (2009) rural	30%	40%	50%	NDHS 2011 and 2016	
% of underweight children under five years of age	38.6% (2006) 39.7% (2009)	39%	34%	29%	NDHS 2011 and 2016	45.5% stunted (ht-for-age < 2 SD) will also be reported by NDHS
% of low birth weight (or small) babies	33% (2006)	32%	27%	25%	NDHS 2011 and 2016	
% of children exclusively breastfed in the first 6 months	30.6% age 4-5 months (2006) 24.8% (2009) rural	35%	48%	60%	NDHS 2011 and 2016	
% of pregnant women attending at least one antenatal consultation during first trimester OR at least 4 visits during pregnancy	27.7% (2006) 35.2% (2008)	45%	65%	80%	HMIS and NDHS 2011 and 2016	
% vitamin A coverage maintained for children aged 6-59 months	90% (2009)	90%	90%	90%	HMIS	Consistently almost universal.
% of diarrhoea cases among under-5 children treated with zinc (and ORS)	67.6% ORS+zinc (2007/08) 45.6% ORS; 6.6% zinc (2009) rural	7%	25%	40%	NDHS 2011 and 2016	Combined reporting in HMIS (2007/08). NDHS reports treatment with ORS and zinc separately.
% coverage of IDU, MSM, and FSW populations with prevention services increased from 76%, 54%, and 65% in 2009 to 80%, 60% and 70% respectively	76% IDU 54% MSM 65% FSW (2009)	76% 54% 65%		80% IDU 60% MSM 70% FSW	UNAIDS supported surveys	
% of households with soap and water at a hand washing station inside or within 10 paces of latrines	N/A	13%	37%	53%	MICS, NDHS 2011 and 2016	This indicator is now accepted globally as the most feasible proxy indicator to measure hand washing practices by observation

[51] All targets are national but evidence from 2009 survey of 40 rural districts is not.

Specific objective 2: Reduce cultural and economic barriers to accessing health care services and harmful cultural practices in partnership with non-state actors						
Outcome Indicators	Baseline/Year	Target			Means of Verification	Remarks/Assumptions/Risks
		2010/11	2013	2015		
Contraceptive prevalence rate (modern methods) for the poor (lowest and second wealth quintiles) and excluded castes	Poor: 35.5% Dalit: 44% Janajati: 47% Muslim: 17%	Poor: 43% Dalit: 52% Janajati: 55% Muslim: 25%	Poor: 46% Dalit: 55% Janajati: 58% Muslim: 28%	Poor: 49% Dalit: 58% Janajati: 61% Muslim: 31%	NDHS in 2011 and 2016 and HMIS for poor	
% of women who took iron tablets or syrup during the pregnancy of their last birth for women who are poor (lowest and second wealth quintiles) and excluded caste (Dalit)	44.9% in 2006 and 76.7% in rural districts in 2009; and 78% for Hill Dalits and 90% for Terai Dalits in 2009 rural districts	Poor: 77% Dalit: 82%	Poor: 81% Dalit: 85%	Poor: 85% Dalit: 88%	NDHS in 2011 and 2016 and HMIS for poor	
% of deliveries by SBAs for lowest and second wealth quintiles by 2015 and excluded caste (Dalits)	Poor: 7.5% Dalit:11% Janajati: 14% Muslim: 13% Other terai/madhesi: 13%	Poor: 20.3% Dalit: 23% Janajati: 25% Muslim: 24% Other terai/madhesi: 24%	Poor: 25.3% Dalit: 27% Janajati: 30% Muslim: 29% Other terai/madhesi: 29%	Poor:30% Dalit: 32% Janajati: 35% Muslim: 34% Other terai/madhesi: 34%	NDHS in 2011 and 2016 and HMIS for poor	
Utilisation of essential health care services (outpatient, inpatient, especially deliveries, and emergency) by targeted groups, and disadvantaged castes and ethnicities at least proportionate to their populations by 2015	62% for targeted 2 lowest quintiles in 2006 (and 57% in rural districts in 2009) as % of highest; 14%, 17.1% and 16.7% for Dalits using OPC, IPC and emergency (2008). 16.7% of population in sample districts	90%	90%	90%	HMIS	90% of highest quintile or 90% of population proportion. Targeted groups: based on Children < 5 for whom treatment sought for fever. Dalits: selected MCH services at district health facilities. District health facility surveys report Dalits using services proportionate to their population.
% of clients satisfied with their health care at district facilities among targeted groups, and disadvantaged castes and ethnicities by 2015	68.4% (2008) based on availability of range of services	68%	74%	80%	Annual district health facility surveys	
% use of available community-based emergency funds by the poor, and socially excluded groups (District with Equity and Access Programme)		19% in EAP districts	30%	50%	Annual district health facility surveys	
# of cases recorded and treated related to gender-based violence in health facilities	Treatment provided but no recording available	Systems and training materials developed and piloted in 3 districts	Pilot evaluated and system rolled out in 20 districts	Scaled up intervention nationwide	Annual district health facility surveys	

Specific objective 3: To improve health systems to achieve universal coverage of essential health care services						
Outcome Indicators	Baseline/Year	Target			Means of Verification	Remarks/Assumptions/Risks
		2010/11	2013	2015		
Availability of post-abortion family planning services in facilities increased	50% in 2006	NA	60%	80%	HMIS	
% of hospitals that have at least 2 ob/gyns, 2 anaesthesiologists, 10 staff nurses and blood service, including Voluntary Sterilization Care (VSC)		NA	60%	80%	HMIS, HuRIS and programme surveys	
% of PHCCs that provide BEOC, including SA C and at least 5 FP methods	1 BEOC site; 46 under construction; 15 planned next year (2007/08)	23%	50%	70%	HMIS and programme surveys	HMIS annual report 2007/08.
% of health posts that operate 24/7, including delivery services and at least 5FP methods		45%	60%	70%	HMIS	
Zinc supplementation for treatment of diarrhoea cases available at district facilities					HMIS	
At least 90% of households with at least 1 long lasting insecticide treated bed net per 2 residents in all high-risk districts and areas by 2 015	95% in 13 high-risk districts to be extended to areas in additional 18 districts		90%	90%	Programme surveys	Programme is expanding to new high-risk areas in 18 new districts. Nets effective for 2 years.
At least 80% of children under 5 years who slept under a long lasting insecticide treated bed net the previous night	61.2% in 13 high-risk districts	70%	80%	80%	Programme surveys	The target for 2015 set by MoHP is 90%, which is the same as for 1 net per 2 residents in HHs. 80% is more realistic for use by <5 children.
At least 86% of the MoHP budget is spent by 2015	70.16%, 75.74%, 80.61% and 81.37% from FY 2004/05 to 2007/08	83%	84.5%	86%	e-AWPB	Reported by e-AWPB.
At least 75% of the MoHP budget has been allocated to EHCS by 2015	72.1% in FY 2008/09 and 75.4% in FY 2009/10	75%	75%	75%	e-AWPB	EHCS budget should be maintained at 75%
% of filled posts at PHCCs and district hospitals by doctors and staff nurses	89% at HPs and SHPs and 82% at DHs and PHCCs (2008-09)	85%	88%	90%	Annual district health facility surveys	Reported by latest trimester district health facility survey.
One health facility per 3,000-5,000 population: 1 HP (with 2 SBAs) per 5,000 population; PHCC (with 4 SBAs) per 50,000 population; and 1 district hospital bed per 5,000 population		NA		Nationwide	HMIS, Administrative record	New policy
% of sub-health posts that have sufficient space per MoHP standard (need baseline)				80%	TBD	
% of district facilities will have no stock outs of tracer drugs/commodities for more than one month pe r year by 2015	Up to 76.7% stock outs for more than a week in 2009	70%	80%	90%	Annual district health facility surveys	Delayed budget approval caused massive stock outs at district facilities in 2009.
Number of additional Female Community Health Volunteer s (FCHVs) will have been recruited and deployed in the mountain region and remote districts	48,514 (2007/08)	50,000	52,000	53,514	HMIS and HuRIS	5,000 additional FCHVs by 2015 plus 2,000 replaced (attrition)
% of actions identified in the governance and accountability action plan have been implemented		90%	90%	90%		
% of district facilities will have been subjected to social audits	None to date	0%	15%	25%	Annual district health facility surveys	
A comprehensive health care finance strategy will be app roved by 2012					MoHP and MoF approval	
5,000 SBAs by 2012 and an additional 7,000 by 2015		1,134	8,000	12,000	HMIS and HuRIS	

Annex 2: Governance and Accountability Action Plan

Key Objectives	Key Activities	Responsible Agencies	Key Indicators	Reporting Frequency/ Timeframe	Expected Results
1. SECTOR GOVERNANCE /ENABLING ENVIRONMEN T					
1.1 Move towards output-based budgeting by revising AWPB through MTEF	• Output-based budgeting to start from FY2010/11 • Pooled funding partners to provi de indicative commitments by January 31 of each year	MoHP, NPC, MoF	• Output based budget prepared from FY2010/11	Every trimester with IPR	Budget allocated based on results and posted on MoHP website.
1.2 Implementation of transparency and disclosure measur es[52]	• Ensure regular and timely public disclosure activities through MoHP and DoHS website ensuring regular updates, radio/TV, newspapers & HFMCs of program budgets, contracts, procurement and activities • Report on disclosure procedures implemented in the ann ual progress report	MoHP, DoHS, DHO	• There is sufficient flow of information at the local level to stakeholders on budgets available and used, activities planned and undertaken. • Coverage of public disclosure systems and instruments used • Website is active	Continuous	All information related to NHSPII implementation is kept in the public domain by adhering to the Right to Information Act
2. STAKEHOLDER					
2.1 Ensuring periodic Performance Audit	• Identification of key aspects to be covered in the Performance Audit of the NHSPII Implementation Plan by MoHP/DoHS with close coordination with the pooled partners and OAG • Timely advance discussions on how the performance audit can supplement regular ongoing process • Public and social audits to feed into performance audits	MoHP	Identification of key issues in relations to performance of districts and thematic areas against the programs' overall goals and objectives	Two performance audits during implementation period (on an average one audit in every two years)	Results are independently evaluated and corrective actions taken for any reported deficiencies

[52] At the central level the following information will be put in the DoHS website: (a) consolidated procurement plan; (b) complaint m echanism including for procurement; (c) information on actions taken on complaints made; (d) trimester implementation progress reports; (e) expressions of interest, bid documents, request for proposals and contract awards; (f) a nnual work plan and budget; (g) annual audited financial statements; (h) program implementation manual; (i) implementation directives; (j) HMIS and annual reports; (k) fund release information with budget heads, amounts and dates; an d (l) target and actual status of key performance i ndicators.
At the district level the following information will be disclosed through newspapers and public notice boards, wand wherever possible through websi tes. And through radio and FM: (a) list of public health activities; (b) list of health facilities performing BOEC and COEC; (c) annual work plan and budget; (d) permanent health workforce positions; (e) number of health fac ilities on direct grant; (f) fund release information with budget head, amounts and dates by health facilities; (g) complaint mech anism; and (h) information on action on complaints.
At the health facility level the following information will be disclosed through public notice boards, through radio and FM and social mobilisers in appro priate language: (a) grants received from governme nt and other sources with amount and date; (b) social and financial audit reports; (c) list of free essential medicines and services with amount disbur sed; (d) current trends of diseases and public heath interventions; (e) complaint mechanism; (f) informat ion on action on complaints; and (g) information on available workforce.

Key Objectives	Key Activities	Responsible Agencies	Key Indicators	Reporting Frequency/ Timeframe	Expected Results
3. IMPLEMENTATION CA PACITY/INSTITUTIONAL CAPACITY					
3.1 Ensuring adequate capacity development of institutions and human resources strengthening to effectively implement NHSP2 implementation plan	• Annual work plans and budgets to incorporate capacity development initiatives for different levels of staff • Adequate plans, budgets and activities to be provided for each year in line with the needs of key institution and bodies and staff at central, district and local levels	MoHP, DoHS, and all key institutions at central, regional, district and local levels engaged in health service delivery and quality	• Coverage of key activities, in line with the sequence of NHSPII planned implemen tation, in the key institutions of health and other multi - sectoral bodies foreseen for NHSPII e.g. nutrition and HIV/AIDS	Periodically from February to June during AWPB consultations	Commitment for capacity development demonstrated by including in the AWPB and implementing the plan
3.2 Ensuring adequate number and diversity of health workforce as per norms set by MoHP	• AWPB preparation and approvals • AWPB to incorporate institutional development program • Implementation of phase 1 of health facility block grants in underserved districts • Implementation of Remote Area Allowance (pending Cabinet approval) • Conduct Organization and Management survey • Implementation of deployment and retention plan • Implement strategies for recruitment of local staff and to increase di versity in health workforce	RHDs, DoHS, DHO and HFMC	• Information on short supply/surplus of health workforce by health facilities and/or district health offices; and on underserved communities • Diversity of staff increased	Periodically from February to June during AWPB consultations	The evaluation of the facility block grants with the purpose of improving the human resources base in phase 1 districts
3.3 Redeployment of health workforce	• Identification of number of health workforce to be redeployed within VD C/municipality and district • Transfer of health workers from health facilities with surplus health workers to facilities with short supply	MoHP, DoHS, DHO	• Percent of health facilities with a surplus vs. percentage with a deficit	Once a year	More equally di stributed workforce with relevant language skills as far as possible
3.4 Improving quality of health services	• Establish a system for review of quality health services by January 31, 2011 • Improvement and expansion of physical infrastructure (HP/SHPs and st rengthening district hospitals)	MoHP, DoHS, DHO, RHDs	• Annual review of quality of drugs, equipment and facilities and social audits are conducted • Number of facilities meeting adequate standards	Annually	Quality of drugs, equipment and health facilities as sessed Number of health facilities meeting adequate standards increased
3.5 Strengthening quality assurance and M&E	• Scale up disaggregated data collection system through HMIS • Link other sectors in HMIS e.g. with vital registration • Quarterly publication o f health statistics and analysis • Update & prepare new guidelines & protocols for PHC system • Carry out annual facility surveys	MoHP, DoHS	• Disaggregated data and analysis is available. • HMIS report is published quarterly. • Facility survey conducted annually	Annually/ quarterly	Quality assurance system in place, data for monitoring of social inclusion available

Key Objectives	Key Activities	Responsible Agencies	Key Indicators	Reporting Frequency/ Timeframe	Expected Results
4. FINANCIAL MANAGEM ENT					
4.1 Adequate and timely financial management at central, district and health facility level	• Timely preparation and submission of trimesterly FM reports covering all program activities and all districts • Establish a computerized system for accounting and reporting at MoHP and DHOs with networking facilities between them	MoHP, DoHS, DHO	• Trimesterly reports of adequate quality and coverage submitted for smooth disbursement of funds to the program • Explore use of an integrated computerized system to link physical and financial progress	FMRs on trimester basis Annual consolidated FMR	Reports submitted within the stipulated timeframe Financial statements of NHSPII prepared through the FMIS DHOs networked with DoHS and MoHP for the MIS
4.2 Timely fund release to health facilities	• Provide adequate and timely support to districts to submit AWPB • Put in place a clear system of norms and procedures for appraisal of plans and approvals of budgets • Fix deadlines for key budget decisions e.g. list of health facilities selected for new activities and block grants by the DoHS and DHO to be included in AWPB • Implement a fund-flow tracking system developed in software	MoHP, DoHS, DHOs	• Number of districts undertaking stakeholder consultations for plan preparation and budget approvals • Share of annual budget released in the first trimester by DoHS • Share of health facilities getting grants within one month after the beginning of FY • Implementation of fund flow tracking system • At least 85% absorption rate of committed funds for the health sector	November/ December JAR Thrice a year	Timely availability of funds at health facilities
4.3 Improve the quality of asset management	• Regular updating of inventory of all assets under its use by talking physical count and reconciling the result with records • Improve inventory software for non-consumable fixed assets and strengthen LIMS • Formulate policy for discarding obsolete equipment • Creation of a Physical Assets Management Unit (building and equipment) within management division in DoHS with adequate staffing • Introduction of Public-Private Partnerships in contracting out district level monitoring of the quality of procured drugs and medical equipments. • District Level capacity enhanced to comply with quality assurance of health care services • Providing adequate funds for maintenance in AWPB	LMD/DoHS	Updated asset inventory report submitted on an annual basis during the JAR Staff position created/reallocated and filled Verification of amount line budget item in AWPB	Annual	Up –to-date record of assets PAM unit created Local capacity to manage PPP contracts increased
4.4 Update Financial Regulations for Hospitals and for Management Committees	• Update Financial Regulations for Hospitals • Update Financial Regulations for Management Committees	MoHP DoHS	• Acceptable Financial Regulations prepared for Hospitals and Management Committees	By December 2010	Transparent financial regulations for hospitals and management committees

Key Objectives	Key Activities	Responsible Agencies	Key Indicators	Reporting Frequency/ Timeframe	Expected Results
4.5 Operating Procedure made transparent for Non-state Partners/NGOs	• Prepare Act/Regulations for Non-state Partners/NGOs	MoHP DoHS	• A separate working modality developed for Non-state Partners/NGOs involved in the health sector.	By December 2011	Transparent procedure available for the engagement of Non-state Partners and NGOs
4.6 Adequate Funds ensured for operation and maintenance of medical equipments and hospital buildings	• Include at least 2% of budget for Operation and Maintenance (O&M) in the annual work program and budget for operations and maintenance of medical equipments and hospital buildings • Monitor the O&M expenditures	MoHP, MoF, Pooled Partners	• At least 2% of budget is ensured for O&M in the budget.	Annual Review during joint reviews	Adequate funds ensured for O&M
4.7 Taking prompt action on audit irregularities	• Form an audit irregularities clearance committee • Reduce the irregularities to less than 20% every year.	MoHP	• Audit irregularities reduced to less than 20 percent. • Action Plan developed and implemented to rectify the weaknesses observed by the audits	Annual Review during joint reviews	Financial discipline in the sector improved
5. PROCUREMENT					
5.1 Procurement at central and district level	• Prepare consolidated annual procurement plans • Training for strengthening procurement capacity at central and district levels • Engage procurement support for NHSPII implementation • Revise procurement policy and guidelines for MoHP • Revise logistics management policy and guidelines • A sound Quality Assurance (QA) System including pre- and post-shipment is in place at centre and at district level to monitor the quality of procured drugs • Local capacity is enhanced at District Level to comply with QA	DoHS/LMD	• Standards and procedures in place for procurement best practices • Districts reporting difficulties in procurement • Monitoring reports on procurement • Training conducted on procurement at least once a year for all DHOs and cost centres • QA is applied as a standard operating procedure at the centre as well as district level	Annual procurement plan Reports on procurement undertaken every trimester Annual	Good procurement practices in place
5.2 Timely availability of drugs, equipment and supplies	• Adopt multi-year framework contracting for essential drugs, commodities and equipment by August 31, 2010 • Consolidated (including goods, works, services for the whole ministry regardless of financing source) annual procurement plan made available to all interested parties at cost price six months before the beginning of the fiscal year on the website • Amend Drug Act and give Nepal Drug Research Lab independent status. • Introduce e-procurement	MoHP, DoHS/LMD	• Percentage of health facilities with tracer drug stock out	November/ December Joint Review Once a year	Essential Drugs distributed in timely manner and made available two weeks prior to the start of the FY E-procurement in use

Key Objectives	Key Activities	Responsible Agencies	Key Indicators	Reporting Frequency/ Timeframe	Expected Results
6. ENVIRONMENT					
6.1 Ensuring continued access to EHCS for all people in the face of emergencies, crisis & conflict situation	• Develop guidelines for immediate response and possible activities to deal with women & children and the poor affected by conflict • Provision of annual contingency plans and budgets for districts incorporating RH and GBV issues • Ensure that all health facilities have and implement a waste management plan	MoHP, DoHS, and Coordination with other departments dealing with emergencies and peace building	• Emergency contingency plan and initiatives to dealt with women and children in conflict situations	November/ December Joint Review Once a year	Timely response to deal with women and children affected by crisis
6.2 Promoting clean/solar energy	• Replacing kerosene energy with solar energy	DoHS, HFMC	• Number of health facilities with cleaner and safer energy sources	November/ December Joint Review	Clean energy and a safer working environment
7. SOCIAL/EQUITY ACCESS AND INCLUSION					
7.1 Advancing the social inclusion of all citizens and ensuring government is more accountable	• Updating social audit guidelines and their distribution to all stakeholders • Provision of training and budget for undertaking social audits as per the guidelines • Capacity building of local HFMCs on GESI application • Capacity building of GESI units at all levels • Dissemination and use of community scorecard for social audit information • Translation of GESI strategy into a set of activities with clear accountability for results.	MoHP, DoHS, RHD, DHO, HFMC	• Districts and health facilities undertaking social audits as per the guidelines and their link to the next year planning cycle • Share/number of health facilities completing social audit by trimester by district • Random sample review of social audit reports and field verification • HMIS, independent surveys and social audits provide intermediate evidence of improved outcomes for women and excluded groups • 2011 and 2016 DHS registers improvements in health, nutrition and family planning outcomes for women and excluded groups	Review the progress every trimester and describe in the implementation progress report	Increased transparency in decision -making and accountability for the use of resources and the achievement of results in health sector
7.2 Health Facility Management Committees (HFMC) are established and effective	• Facilitation at the local level to ensure that representative HFMCs are formed in all health facilities and oriented in the roles, responsibilities and right they hold for health services. • Annual progress reports to include information on the existence and functioning of the HFMCs • Recruitment of local health personnel through HFMC	MoHP, DoHS, DHO	• Number/share of health facilities with duly formed HFMCs by district	November/ December Joint Review Once a year Every trimester	

Annex 3: Strategy Table/Strategic Framework

Strategy	Working policy
OBJECTIVE 1: DEVELOP POLICIES, STRATEGIES , PLANS AND PROGRAMM ES THAT CREATE A FAV OURABLE ENVIRONMENT FOR INTEGRATING (MAI NSTREAMING) GESI IN NEPAL'S HEALTH SECTO R.	
Strategy 1. Ensure inclusion of GESI in the development of policies, strategies, plans, setting standards, and budgeting, and advocate for use o f such policies, standards and budget provisioning at the central level.	
Review the existing policy, law and guidelines to make th em GESI inclusive.	• Analyze and revise existing health policy, regulations and guidelines to make them GESI inclusive and responsive, and ensure the policy will not be gender discriminatory. • Advocate for health as a fundamental human right in the upcoming constitution. • Include the standards for integration of GESI in second NHSP -IP (2011-2015). • Develop regular policy feedback mechanism for GESI policy improvements. • Improve health monitoring for GESI by revising the information system (HMIS) and reporting o n a timely basis. • Review existing health facilities and recommend expansion of appropriate health facilities to locations where target groups a re concentrated in large numbers and underserved.
Make necessary policy provisions to include GESI related issu es in plans, programmes, and budgeting.	• Develop policy for identification of poor, vulnerable and marginalized castes and ethnic groups. • Develop implementation guidelines in relation to the policy and ensure implementation. • Develop and apply policy measu res to adopt a favourable environment promoting GESI, such as a quota or priority system for recruiting, training and promoti ng staff and FCHVs from the marginalized castes and ethnicities. • Make policy provisions for poor, vulnerable and marginalized caste s and ethnic groups to receive free secondary and tertiary health care services. • Make policy provision for compulsory social auditing to make health services inclusive, transparent and accountable. • Include GESI in programmes and activities in e -AWPB of M oHP as necessary. • Advocate to the MoF and NPC for regular budget provisioning of GESI in AWPB (annual work planning and budgeting) process. • Make a policy provision for the development of health cooperatives to expand access to health services by the poor, venerable, and marginalized castes and ethnic groups. • Make a policy provision for Health Insurance to increase the target groups' (poor, vulnerable and marginalized castes and eth nic groups) access to health services. • Make a policy for partnering with the media to inform the public about government health care messages and free services, targeting the poor, vulnerable and margin alized populations.
Strategy 2: Prioritize GESI in planning, programming, budgeting, monitoring and evaluation at local levels (DDC, DHO, DPHO and VDC) to ensure services are accessible and available to the poor, vulnerable and marginalized castes and ethnic groups.	
Create an environment whereby programme planners, managers and directors will include issues related to GESI in maki ng plans, programme, budget, monitoring and evaluation.	• Address GESI issues in plans, programmes and budgets to attain MDGs and NHSP targets. • Further develop indicators for GESI as necessary, disaggregate the HMIS, monitor and report performance of target groups, and improve services accordingly. • Define roles and responsibilities for monitoring and evaluating performance of target groups. • Develop mechanisms/ processes to review GESI disaggregated information and its progress in four monthly semi -annual and annual meetings.
Include GESI related issues in programme implementation by health service providers.	• Operationalise guidelines to facilitate access and utilization of health services by the poor, vulnerable and marginalized ca stes and ethnic groups. • Ensure that the work of every health institutions includes GESI.

Strategy	Working policy
Coordination and participation among concerned organizations for GESI.	• Coordinate with MLD, MoF and NPC for making policy provisions to allocate more percentage of the budget for GESI in DDC, VDC and municipalities. • Coordinate and implement with DDCs, VDCs, and municipalities, to attract their social development budgets in the health secto r to serve the poor and disadvantaged groups and advocate at policy level. • Continue implementing existing p rogramme of handover of health facilities at local level, make the health facility management committee inclusive, such that the marginalized castes and ethnic groups are represented proportionate to their populations, develop its management capacity, an d make it more GESI responsive. • Coordinate with district - and village -level NGOs working in health sector and partner with them to conduct programmes to increase access by the target groups to he alth services. • Coordinate with ministries, I/NGOs and local bod ies to integrate GESI in their programmes. • Create trust and good environment between health care providers and communities through regular meetings and other interactio ns. • Develop policy provisions to make local bodies responsible to develop participatory plans based on the needs and demands of the target groups, implement and monitor. • Transferring knowledge, skills, resources and materials to local bodies to continue to meet the needs of the target groups.
Strategy 3: Establish and institutionalize GESI unit/desk at the MOHP, DOHS and divisions of the DOHS, regional directorates, and DHO/DPHO, and Social Service Units for GESI at central, regional, sub -regional, and zonal hospitals.	
a) Establish social service units (SSU) in hospitals.	• Establish and ope rationalise Social Service Units in central, regional, sub -regional, zonal, and district hospitals to facilitate access to EHCS and secondary and tertiary health care services by the poor, vulnerable and marginalized castes and ethnic groups.
b) Establis h GESI Unit/Desk at different levels of health sector.	• Establish GESI unit or contact point (desk) within MoHP, each division of the Department of Health Services (DoHS), each regi onal directorate of the five development regions, and District Public Healt h Offices, and ensure internalization of GESI.
OBJECTIVE 2: ENHANCE THE CAPACITY OF SERV ICE PROVIDERS AND EN SURE EQUITABLE ACCES S AND USE OF HEALTH SERVICES BY THE POOR , VULNERABLE AND MAR GINALIZED CASTES AND ETHNIC GROUPS WITHIN A RIGH TS-BASED APPROACH.	
Strategy 4: Enhance the capacity of the service providers to deliver essential health care service to poor, vulnerable, margi nalized castes and ethnic groups in an equitable manner and make service providers responsible and accountable.	
Improve service d elivery mechanism by service providers for the poor, vulnerable and marginalized caste and ethnic groups.	• Sensitize health sector health workers, SSU and GESI focal point staff at all levels, FCHVs, and local -level health facility management committees thr ough orientation, training and counselling services on gender equality and social inclusion. • Implement behaviour change training programmes for the health workers, FCHVs and local health management committees to bring changes on their behaviour and attitude, and improve services. • Orient, train and strengthen capacity of FCHV and NGOs on health services to provide proper information to poor, vulnerable a nd marginalized caste and ethnic groups. • Include GESI content in the health sector education and training curricula.
Strategy 5: Address GESI -related barriers by properly identifying target groups, ensuring remote communities are reached, and emphasizing programmes t o reduce morbidity and mortality of the poor, vulnerable and marginalized castes and ethnic gr oups.	
Increase access of the target groups to universal and targeted free care programmes.	• Develop criteria to identify poor, vulnerable and marginalized castes and ethnic groups and provide them with "Free Health Ch eck-up Card" for secondary - and tertiary-level health care services and referrals. • Ensure equitable and meaningful participation of target groups and women in health management committees. • Ensure meaningful participation of the poor, vulnerable, marginalized castes and ethnic groups in social audits of health services to make health programmes people oriented.
To increase the use of Mother and Child Health and Free delivery services by the target group.	i) Develop special programmes for poor, vulnerable and marginalized caste and ethnic grou ps (women and child) to avail them to MCH services and free deliveries. • Give special attention and emphasis to safer motherhood and maternal and child health programs to increase use of neonatal an d postnatal care services, and institutional deliveries, nu trition and childhood immunization to decrease maternal mortality, neonatal, infant and under -5 mortality. • Mobilize and train/strengthen Female Community Health Volunteers (FCHVs) and NGOs to increase access to services by these tar get groups. • Provide oth er kinds of assistance, such as awareness raising, IEC/BCC programmes and outreach services (village clinic) to pregnant wome n to encourage and assist in institutional deliveries and ensure the use of trained health workers for home delivery.

Strategy	Working policy
	ii) Protect women from discrimination, which limits women from poor, vulnerable and marginalized castes' and ethnic groups' access to and use of health care services, especially institutional deliveries. • Collaborate with women's CBOs /NGOs and other health developmen t groups in the health sector to decrease gender and social discrimination in the family and in society. • Conduct community and family counselling on gender -based violence that affects women's health (physical abuse during menstruation, delivery, schooling , work place, etc.) and social violence that affects the mental and physical health of men and women. • Regularize attendance of female health workers to increase utilization of maternal health services at facilities, especially by women from poor, vulnerabl e and marginalized castes and ethnic groups.
Conduct context specific analysis of current issues in the health sector and design and implement specific interventions for specific poor, vulnerable and marginalized caste and ethnic groups and areas (Regiona l and/or District).	i) Give emphasis to service expansion in geographically inaccessible/remote regions. • Conduct mapping of the areas and increase outreach and mobile health camps and community health clinic programmes for the poo r, vulnerable and margin alized castes and ethnic groups. • While establishing new health and sub -health posts, build a consensus in the community to select a site most appropriate for the poor, vulnerable and marginalized castes' and ethnic groups' access and use.
	ii) Expand se rvices in low HDI districts. • Focus on community and outreach programmes to increase access to and use of EHCS in the 35 low HDI districts. • Ensure programmes at less populated areas that will make the target groups feel health as their fundamental rights .
	iii) Make provision for regional programmes to address unmet health issues and needs among marginalized groups, such as Dali ts, slum dwellers, homeless, IDPs, Muslims and third gender. • Make provision for special programmes, such as publicity campaigns, outreach services, counselling services and orientations to free care to increase access of the target groups to health care services. • Conduct special activities to reach Dalits by providing incentives for using EHCS, and mobilizing FCHVs to provide infor mation and encourage their use of services. • Implement special programmes such as providing a monetary incentive to those using EHCS, thus ensuring the Dalits, for exampl e, access health services; mobilize FCHVs to provide target groups with more service in formation and how to use such services.
Strategy 6: Enhance or modify services to be sensitive to GESI and ensure access is equitable and services are delivered unif ormly without regard to social status.	
Give emphasis to special activities to provide adequate and quality services.	• Ensure the presence of female health workers (doctors) at all district facilities. • Make a provision for local language speaking staff at the service delivery site where there is a majority of local language s peakers. • Allow the district-level health organization to adopt district -specific GESI policy, if needed, based on future political and geographical structure and context. • Conduct social audits to make health programmes and health workers accountable to communities and to make practices transparent.
OBJECTIVE 3: IMPROVE HEALTH SEEKING BEHAV IOUR OF THE POOR, VU LNERABLE AND MARGINA LIZED CASTES AND ETH NIC GROUPS WITHIN A RIGHTS-BASED APPROACH.	
Strategy 7: Develop and implement Information Education and Communication (IEC) progra mmes to improve health seeking behaviour of the poor, vulnerable and marginalized groups.	
Develop and disseminate targeted IEC materials that will bring changes in behaviour of target groups.	• Prepare and distribute enough information and publicity mater ials (focused more on EHCS, and policies and programme related to the target groups) in audio visual, pictorial, etc. for all regions in appropriate local languages other than Nepali language. • Include the target groups' programme in publicity and communica tion materials of MoHP to increase poor, vulnerable and marginalized caste and ethnic groups' access to such materials. • Develop skills at the local level for producing information materials as needed, especially in remote areas.
Increase the use of approp riate media.	• Ensure all media allocate appropriate time for broadcasting health service news. • Emphasize use of effective media (FM radio, newsprint, door -to-door campaigns, hording boards, street drama, workshops, training, rallies, etc.) and in local lang uages. • Increase information communication among health institutions on GESI. • Include appropriate media programming for low HDI districts and districts with diverse language and in local language. • Conduct regular monitoring on quality of communication servi ces by concerned health department /institutions.

Strategy	Working policy
Strategy 8: Empower the target groups to demand their rights and conduct their roles while realising their responsibility.	
a) Increase the target groups' awareness of their health rights and of free healt h care services, and enhance their capacity to make the service providers accountable.	i) Empowerment. • Conduct activities for the target groups to make them aware of their rights and responsibilities; develop their capacity for taking leadership rol es. ii) Information, Education and Communication. • Conduct publicity campaigns to increase awareness and orientation on how to access and properly utilize health services, focu sing on the target groups and take into consideration appropriate place, t ools and time for such activity. • Create door-to-door consumer committees and orient them to conduct effective awareness and information dissemination to the target groups on national health policy and programmes, health rights, EHCS, free medicines, etc. • Develop and conduct orientation and awareness campaigns for change in health seeking behaviours. • Promote women's participation and conduct awareness programmes to orient them on equal treatment of both male and female chil dren from newborns to 5 -years old in regards to nutrition, health care and other health related important aspects. • Provide orientation on women's reproductive health rights.

Annex 4: Cost Effectiveness

Two reports from the Disease Control Priorities project, and a series of articles in the Lancet have laid out the evidence on the most cost-effective interventions for achieving the health-related MDGs. A more recent series on the 30th anniversary of Alma Ata also looked at what works in terms of health systems and policies.

The policies, the allocation of resources, and the specific health interventions that have been prioritised in Nepal reflect the international evidence on what works. The results achieved also reflect that among all low income countries, Nepal has achieved the 9th fastest reduction in under-5 mortality since 1990, despite political turmoil and conflict.[53]

At the system level, a review of the experience of the 30 best performing countries by Rohde, et al. found the following common factors.

- A national package of prioritised and phased primary health care that all stakeholders were committed to implementing. Nepal has had a long-term commitment to primary health care that has remained consistent through political changes, and has defined the essential health care services that Government will finance, gradually expanding their scope as financing permits, and based on evidence of efficacy.
- Consistent investment in primary health care. Government has steadily increased public expenditure on health, with a high and rising percentage of available funds spent on EHCS.
- Community-based health workers supervised by an effective local management system. The network of 50,000 unpaid female community health volunteers is acknowledged to work effectively and to be well supervised and supported.

Ekman, et al.[54] emphasise a number of other points that are reflected in NHSP-2.

- Prioritised vulnerable groups at district level, which is being done through an approach to micro-planning of service delivery, and through the concentration of new physical investments in areas with underserved populations.
- Promotion of actions in related sectors, as NHSP-2 proposes to do via enhanced arrangements for multi-sectoral collaboration.
- A comprehensive approach to human resources, from training to practice to incentives, including task shifting, something that Nepal has been flexible in adopting with expansion of tasks performed by FCHVs.
- Free care for mothers, newborns and children, as already practiced in Nepal.

Table 1 lists the main interventions that comprise the EHCS package together with global estimates of their cost per disability life year saved, and Nepal specific data on the contribution of the conditions to the total burden of disease, measured by the percentage of total DALYs lost.

[53] John Rohde et al, The Lancet, September 2008

[54] Ekman et al, The Lancet, September 2008

The rule of thumb proposed by the Commission on Macro-economics and Health is that an intervention can be considered cost-effective if it costs less than the per capita income of the country.[55] For Nepal, based on the World Bank Atlas methodology, this would imply a threshold cost per DALY saved of US$ 400.

Using the 'traffic light' system, Table 1 highlights in green the interventions within the existing EHCS package that fall within this threshold. Based on the global estimates, the existing EHCS services are highly cost effective. Without exception the global estimates are that they cost less than $400 per DALY saved, and most of them cost less than $100.

We do not have country-specific estimates for most of the interventions. Whether they are equally cost-effective in Nepal depends on the disease burden and on how effectively they are implemented. Cost-effectiveness within Nepal will be higher for interventions that address conditions that account for larger shares of the disease burden, but also depend on the effectiveness with which interventions are implemented. There are good reasons for believing that cost-effectiveness has been high.

Table 1 shows that the design of the EHCS in Nepal has focused on the most important health problems in terms of the burden of disease. Nepal has achieved rapid reduction in both under-five and maternal mortality, while public spending on health has only reached the modest level of $8 per capita, reflecting the poverty of the country. The mid-term review of NHSP-1 presented quantitative analysis to show that the reductions in mortality up to 2006 could be largely explained by the estimated impact of public health interventions.[56] The combination of low spending but rapid improvement in health outcomes that can be attributed to that spending suggests that the costs per DALY for most of the major interventions will have been towards the lower end of the estimated ranges.

These estimates of global cost-effectiveness vindicate the decisions on priorities that underlay NHSP-1, and the proposed approach to adding new elements in NHSP-2. Major programmes to date typically have costs per DALY of less than $50. They are addressing the major causes of under-five and maternal deaths: ARI, diarrhoea, neonatal causes, including low birth weight, asphyxia and infection. The addition of community-based care of the newborn and of community nutrition programmes appear potentially highly cost-effective, although the Ministry will start with pilots to assess what works best in local circumstances, especially in the area of community nutrition where there have been failures as well as successes. The expanded programmes on neglected tropical diseases that are endemic to Nepal are highly cost-effective and will have a significant impact in saving DALYs.

The success achieved in reducing deaths from communicable diseases means that non-communicable diseases and injuries now account for more than half of the disease burden– the WHO figures quoted in the table reflect the position in 2004, and probably understate the share that these diseases now represent. Some 80% of patients seeking outpatient care do so

[55] Report of the Commission on Macroeconomics and health, December 2001, WHO.

[56] Foster et al, M id term Review of NHSP

for non-communicable disease or injury.[57] Curative services up to and including district hospital level, including basic surgical interventions, have been assessed as highly cost-effective. Low utilisation of curative services in Nepal has in the past limited the cost effectiveness of curative care. The elimination of user fees for EHCS up to PHCC level and for targeted groups up to district hospital level resulted in a 35% increase in outpatient contacts in 2007-8 alone. During NHSP-2, further measures are proposed to address barriers to access and increase the quality of services, hence further increasing utilisation and cost-effectiveness. Services will be brought closer to the recipient, made more accountable to users, out-of-pocket costs will be further reduced with universal free EHCS at district hospital level, while problems of access to drugs and to providers will also be addressed. These measures will increase the quality and demand for curative care and also improve the reach of preventive and promotional services.

The proposal to address NCDs and mental health during NHSP-2 is a reflection of the changing burden of disease, but the Ministry rightly proposes to take a cautious approach, recognising the need to seek out those interventions that are cost-effective in Nepali conditions.

[57] MOHP DOHS Annual Report 2007 -8

Table 1: Cost-effectiveness of health interventions within the EHCS

Intervention	Status	Global estimates of cost per DALY saved in low-income and middle-income countries	Baseline Coverage	2015 Target	Burden of disease: % of total DALYs lost[58]
Family Health					
Promote care-seeking and ANC	Done via FCHVs, BCC, other contacts	Below $47[59]	ANC (results framework definition) 35% (2009)	80%	Maternal conditions 5.2%
Promotion and use of SBAs at birth	Training, incentives	Below $47 (Skilled maternal and immediate newborn care $19[60])	29%	60%	
Cord care and clean delivery	Home delivery is being made safer by free distribution and social marketing of clean delivery kits	Below $47	Used clean delivery kit 20%, new or boiled blade 64%		Neo-natal infection 4.1%
Primary prenatal and delivery care		$92-148[61]			Maternal conditions 5.2% Perinatal conditions 10.4%
Emergency obstetric care	BEOC and CEOC being expanded, demand barriers reduced	$15-$19 (mainly due to neonatal deaths saved)[62]; $39 emergency neonatal care	29% facility-based delivery EOC met need 31% (2006)	40% EOC met need 45%	
Availability of family planning methods	Commodities available free, FCHVs supply pills and distribute condoms, at least 5 methods from all facilities, VSC from DH level, micro-planning for low coverage	Below $47	CPR 45%	55%	
Child Health and Nutrition					
EPI		Less than $10 per DALY [63]	% with all basic vaccinations by age 12 months: 83% [64]	>85%	Childhood cluster diseases 2.1% (but would be far higher without EPI)
IMCI		$9-218 in South Asia	All 75 districts	All 75 districts, explore how to ensure urban coverage	Under 5s account for about 16% of deaths in 2009

[58] WHO estimates for Nepal in 2004, dated February 2009.

[59] Bhutta et al, 2008

[60] Darmstadt et al

[61] Disease control priorities project, 2006

[62] Darmstadt et al. DCC (2006) gives a still reasonable $255 per DALY for CEOC in South Asia

[63] Disease Control Priorities Project, 2006

[64] 2009 40 district survey, rural districts only

Intervention	Status	Global estimates of cost per DALY saved in low-income and middle-income countries	Baseline Coverage	2015 Target	Burden of disease: % of total DALYs lost[58]
Breast feeding advice and support	FCHVs, BCC, other contacts	$3-11[65]	53% exclusive for 6 months	60%	
Basic newborn care resuscitation	FCHV training as part of CB-NBC pilot	Below $47			Birth asphyxia and trauma 3.3%
Community based management of pneumonia	Part of CB-IMCI	$32-$42 depending on coverage	54% with ARI sought treatment, 29% received antibiotics	50% of children with pneumonia receive antibiotics	Respiratory infection 8.0%
Diarrhoea management (ORT plus zinc)	Part of CB-IMCI	Depends on price and level of diarrheal disease, likely to still be highly cost-effective in Nepal	35% taken to health provider, 54% received ORT or extra fluids, 6.6% zinc[66]		Diarrhoea 6.7%
Iron folate and micro-nutrient supplementation during pregnancy	Free, Via FCHVs	Below $47	63% (2007-8)		Iron deficiency anaemia 2.2%
Vit A supplementation for children		$6-12[67]	90%	Maintain	Close to zero – thanks to Vit A programme
Family care of LBW babies	Part of community-based newborn care pilot	$15-23			Pre-term and LBW 3.0%
Community nutrition programme	Pilot proposed for scaling up if successful	DCC says $200-$250, but depends on many contextual factors			
Community management of severe acute malnutrition	Pilot proposed for scaling up if successful	Below $47			Protein-energy malnutrition 2.0%
Communicable disease control					
TB DOTS	Substantial reductions in mortality already achieved	$5-32 per DALY averted; Multi Drug Resistant TB $70-450	Case detection 72%; treatment success rate 85%.	Detection 82%, cure 90%	TB 1.8% (was far higher before DOTS)

[65] Disease Control Priorities Project, 2006

[66] 2009 40 district survey, rural districts only

[67] Disease Control Priorities Project, 2006

Intervention	Status	Global estimates of cost per DALY saved in low-income and middle-income countries	Baseline Coverage	2015 Target	Burden of disease: % of total DALYs lost[58]
HIV prevention and treatment	PMTCT and ARV currently offered free of cost in selected facilities	Depends on risk or reaching general population, but peer-based education of high-risk groups $1-74; VCT $14-261, less in South Asia ($9-126); condom promotion $19-205; STI treatment $16-105; treatment of opportunistic infections $10-500; ARV $350-500[68]	PMTCT and ARV currently offered free of cost in selected facilities		HIV/AIDS 0.3% but with future risks; other STDs 0.9%
Neglected tropical diseases	New programme being introduced will focus on filariasis (elimination), hookworm and trachoma	Filariasis elimination $4-8; hookworm $2-9[69]			Filariasis 1.5%; trachoma 0.3%
New vaccines including Hib, pneumococcal and rotavirus	New vaccines added as resources permit, based on evidence. MBB analysis calculates very large U5M impact: -Hib.4.3%, pneumococcal 8.8%. Not clear if these are plausible.	Including Hib, pneumococcal and rotavirus, Bhutta et al place EPI in the $48-$1000 per DALY category. If MBB estimates of impact are close to correct, Nepal will be at the lower end.			
Curative Care					
District hospital	Cost-effectiveness depends on raising utilisation, for which free care policy plus HR policies, incentives and management and accountability changes will be important. During NHSP-2, the extension of free health care at DH level will therefore be pursued in coordination with hospital autonomy, aiming to ensure that free services are extended in a context in which they are replaced by block grant funding that is timely and flexible, and that is managed and accounted for by committees that are answerable to local authorities and to users of the services	$13-$104; surgery at DH $70-230 ($6-212 in South Asia)[70]			NCDs 38.7%; injuries 12.2%

[68] DCP, 2006

[69] DCP 2006

[70] Disease Control Priorities Project, 2006

Intervention	Status	Global estimates of cost per DALY saved in low-income and middle-income countries	Baseline Coverage	2015 Target	Burden of disease: % of total DALYs lost[58]
Cost-effectiveness (unclear)					
Protein-energy supplements or cash transfers for malnourished pregnant women and young children	NHSP-2 will consider pilots as part of multi-sector response to malnutrition	Impact potentially high, but Bhutta et al [71] assess cost per DALY in trials in low and middle income countries as more than $1000			All nutritional deficiencies 4.8%; protein-energy malnutrition 2.0%
NCD and injury prevention	BCC via multiple channels, aimed at encouraging better diet, more exercise, reduced smoking and alcohol consumption, and safer driving including wearing of seatbelts and helmets. MOHP will also advocate the implementation and enforcement of tobacco and alcohol controls and legal requirements to wear seatbelts and helmets.	Measures on tobacco pricing cost-effective (DALY $2-85); alcohol taxes $105-225, advertising bans $134-280[72] BCC and education may be, but a wide range in studies reviewed by Lancet article ($33-1432). Speeding penalties for RTIs $2-12 in South Asia.			NCDs 38.7%, plus injuries 12.2%. NCD far spread but major categories neuro-psychiatric 11%, cardio-vascular 9%, sense organ disease 5%,respiratory 3%, digestive 3%. Of injuries, road traffic 1.7%, violence to others excluding war 1.5%, self-inflicted 1.2%
Mental health	Before committing to major expansion of services in this area, one or more scalable pilots will be implemented. The initial approach will focus on giving basic mental health training to health workers in pilot districts, beginning to cover mental health issues in health education programmes, and to integrate mental health within PHC, following guidance issued by WHO.	Review of cost-effective treatments for mental disorders in low income countries found relatively high costs per DALY: Treating depression with older anti-depressants $478-1288; episodic psycho-social treatment $1537-1611. Treatment for bi-polar disease with mood stabilisers plus psycho-social treatment, cost $1545-$4928. Treating schizophrenia with ant-psychotic drugs plus psycho-social treatment, $1743-$4847[73]			Neuro-psychiatric conditions 11%, within which unipolar depressive disorders 4.4%, schizophrenia 1.0%, bipolar 0.8%, alcohol use disorders 0.9%
Referral for specialist care	A more consistent approach will be taken to developing a referral policy and system, and to financing the catastrophic costs of curative care.				

Sources:- Cost-effectiveness estimates mainly from Disease Control Priorities project, 2006; some estimates taken from Bhutta, et al, 2008; Darmstadt et al; Gaziano et al; Patel et al. Existing coverage and targets from NHSP-2 draft plan, mostly from the results framework. Burden of disease from WHO global estimates for 2004, published in 2009.

[71] Zulfiqar Bhutta et al, interventions to address maternal, neo-natal and child survival: what difference can integrated primary health care strategies make? The Lancet, 2008.

[72] Disease Control Priorities Project, 2006

[73] Treatment and prevention of mental disorders in low income and middle income countries, Lancet, 2007

Annex 5: Assumptions for Costing

Costs provided by RTI International, adjusted to constant 2009-10 prices, and the spreadsheet is available on request.

Existing Elements of EHCS

This is based on updating the 2004 estimates by Alban for price inflation to 2009-10 prices, and adjusting to the 2015 population and target coverage. Earlier RTI estimates for 2015 were based on unit costs for the whole EHCS package assuming 100% coverage in 2015, and (when adjusted to 2009-10 prices) yielded 2015 costs of US$194 million. These were checked against a component by component estimate based on target coverage of each component in 2015. This yielded a very similar 2015 cost of $200mn; the RTI figures were therefore used.

Adding Free Care programmes

Based on RTI estimates that used the study by Ensor et al, and includes expanded maternal, child, and curative services at district hospital level and below. Estimates have been adjusted to 2009-10 prices and assume broadly constant unit costs, offset by 30% efficiency savings in procurement as a result of central procurement-local purchasing. The forecasts allow for growth in OPD and referrals at 30-35 % p.a. See spreadsheet for details.

Additions to EPI

New vaccines were not costed in RTI's work. The figure for 2015 was taken from MBB analysis which estimated an additional cost of $0.32 per capita in 2015, mainly for adding pneumococcal immunisation to the current mix.

Scaling up community-based newborn care

Estimate by Prasai based on a rough unit cost from an international article by Borghi. Coverage reaches 75% of newborns in 2014-15.

Mental and oral health programmes

Costs from Prasai, mental health unit costs based on Lundh and Saxena, coverage reaches 70% of an assumed 14% of population affected. Oral health costs also based on Devi, assumes 15% affected population, expansion to 65% coverage, unit costs based on a Thai study and data.

Research

Figures are a 'guesstimate' in response to EHCS task group call for at least 1% of budget to research. Existing research budget already exceeds this figure if studies are included, these additional indicative costs are a little less than 1%.

BCC

A number of key promotional and preventive interventions will require a scaled-up effort on BCC, notably the new interventions on non-communicable diseases and injuries, nutrition, and newborn care. The table assumes that the BCC budget will be tripled in real terms.

Extending safe abortion services to disadvantaged populations in areas lacking access

Abortion in Nepal costs Rs800-1000 in Government facilities, NRs950-1350 in NGO facilities, and NRs1500-3000 in the private sector[74]. The estimate is based on a unit cost to the budget of NRs 1500 at 2009-10 prices, with the number of additional safe abortions carried out increasing by 10,000 per annum to reach an additional 50,000 p.a. by 2015 compared to the 2009-10 baseline. The table does not attempt to cost or quantify medical abortions using misoprostal, where unit costs may be less.

Uterine prolapse

Some 600,000 women are affected, of whom 200,000 need surgery, while the remainder may be able to treat or prevent the condition worsening by non-surgical interventions. The table assumes growth in numbers of surgical interventions from 12,000 per annum in 2010-11 to 40,000 in 2014-15, enabling 117,000 to be treated during NHSP-2 at a unit cost of NRs. 19,000.[75] A further 135,000 women are assumed to benefit from pessary ring insertion at a cost of NRs304. Support through mainly health education messages to others is not explicitly costed.

Community based Nutrition

The costs of nutrition interventions are based on work by the EHCS task team. Community based nutrition interventions are estimated to cost NRs 6000 per ward, and it is assumed that 75% of wards are covered by 2014-15.

Neglected Diseases

Assumed cost $20 million over 5 years, which covers additional costs of filariasis elimination plus hookworm and trachoma.

Incremental HR Costs

In addition to the new recruitment discussed in the HR section, a major effort will be undertaken to improve staff availability and incentives to serve and perform well in difficult locations. We have not attempted to cost and phase the various proposals with implications for the HR budget. However, we assume a 10% per annum increase in the real expenditure on HR salaries and allowances in order to leave room for the required programmes to be introduced.

[74] Asia Safe Abortion Partnership, www.asap -asia.url

[75] Unit cost estimates from Farkouh, 2008

Rehabilitation of severely malnourished

Following the work of the EHCS thematic group, rehabilitation of the acutely malnourished is assumed to be required for 13% of under five year olds. It costs NR 7900 at 2009-10 prices. This may be an over-estimate if community based rehabilitation is expanded and proves more cost-effective. Coverage is assumed to increase to 75% of those in need by 2015.

Nutrition- supplementary feeding or cash transfers

By far the most expensive proposal under the nutrition component, and for the NHSP-2 period as a whole, is the suggestion to commence large-scale food supplementation for malnourished children and pregnant mothers, either through direct feeding or some form of conditional grant scheme. The EHCS task-team estimated that nearly 40% of under fives would benefit from supplementary feeding, and that this would cost NRs30 per child per day. If 75% coverage were reached by 2015, it would cost NR12.7bn in that year, and be equivalent to over 70% of the 2009-10 health budget. On these assumptions, it is clearly unaffordable. However, a more modest scheme could be piloted, to explore what can be achieved with a more narrowly targeted subsidy, or with lower per capita provision. Additional resources will be needed even to pilot additional food for malnourished children, and a decision needs to be made as to whether the programme should fall under MOHP or under another Ministry. The costs included are roughly half the level assumed by the EHCS task team.

Beyond EHCS

EHCS is currently about 78% of public expenditure on health. The implication of the expanded scope of EHCS is that this proportion may modestly increase, to about 80%. We have allowed for non-EHCS costs of 20% of the total. Some investment in physical facilities is already included in unit cost figures for expanding EHCS services; other physical investments would need to be accommodated within the ‘beyond EHCS’ provision. Physical investment has historically been about 9% of the total budget.

Explicit additional costs for physical infrastructure investments are annualised for the free delivery services and for increased output from district hospitals. These costs are spread over the lifetime of the new buildings, and thus reflect a sustainable long-term annual cost rather than the (higher) financial cost incurred over the plan period. Additional costs for expanding the system to add new or upgraded HP/SHP and to improve or expand district hospitals in under-served areas are not included. For the moment, the assumption is that the physical investment programme will remain broadly unchanged as a share of the expanding budget, and competing priorities will be managed and phased to keep within that level. This is not an unreasonable assumption at this stage. The upgrading of SHP to HP is planned to continue at broadly the current level of 500 per annum, while the existing portfolio of projects will be prioritized and largely completed early in the plan period, leaving scope for accommodating new investment. The assumptions will be refined in the coming AWPB and in the next MTEF. As and when increased funds become available, the physical investment programme

could be accelerated, possibly with external support from EDPs with a preference for capital investment.

Programmes not explicitly costed

A number of other interventions are not yet explicitly costed. Most of them can be accommodated within the assumptions about the overall expansion in the HR and research budgets, or will be phased in within a physical investment programme that will continue at about the current level in real terms:-

- Medical waste management
- Environmental health
- Prevention of Disability
- Essential eye care
- Adolescent friendly services
- Expanded school health (assumed to be part of the cost of expanded OPD coverage)
- Action on gender-based violence
- Support to municipal MCH services
- Costs of strengthening facility management through accreditation and stronger users groups are assumed to be absorbed within the cost of expanded services

Annex 6: Contributions

CONTRIBUTORS NEED TO BE LISTED. (PROJECT DEVELOPMENT TEAM, STEERING COMMITTEE TEAM, DOCUMENT WRITING TEAM, THEMATIC TASK TEAMS).