

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

DHO	District Health Office
DPHO	District Public Health Office
EDPs	External Development Partners
EPI	Expanded Programme on Immunization
FP	Family Planning
GoN	Government of Nepal
HSRSP	Health Sector Reform Support Programme
MDGP	Medical Doctor - General Practice
MoHP	Ministry of Health and Population
NGO	Non Governmental Organization
PPP	Public Private Partnership
RTI	Research Triangle Institute
WB	The World Bank

Executive Summary

Background

A roadmap for the NHSP 2010-15 preparation process was prepared at a January 2009 workshop in Pokhara, attended by the two Secretaries, senior MOHP and DOHS staff, and EDPs. Thematic task teams were formed and prepared drafts that were submitted to the programme development team at the end of November 2009. A small technical working team was formed in December 2009, and produced a first draft in December-January, based on the inputs prepared by the thematic task teams.

Lessons of NHSP-IP 2004-10

Nepal has a two decade long experience of steady improvement in health outcomes and outputs (Table 1). Progress accelerated and was accompanied by significant improvements in equality of access during NHSP-IP 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. 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. A major concern is to sustain and build on a programme delivering excellent results.

NHSP 1 did not have a strong focus on gender and social exclusion issues in the initial design. These came into greater prominence during the implementation of NHSP-1 particularly with the extension of free services. NHSP 2 is designed to focus from the start on improving the health of the poor and marginalised.

Although the programme delivered improved health services, public expenditure on health continued to be based on central Government both financing and largely delivering services. MOHP did not implement the NHSP 1 vision of a health sector that would become more efficient and effective by decentralisation and by making more use of non-state providers to deliver services. NHSP 2 will re-consider how best to achieve improved efficiency and accountability in order to sustain Government and EDP support, and make the best use of limited resources.

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.

Problems that will need to be addressed in the next plan period include sustaining and expanding the existing essential health services package to those who have yet to benefit, beginning to address the continuing problem of very high levels of malnutrition, achieving further progress in reducing maternal and newborn deaths, 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.

Vision and Goals

The vision is to improve the health status of the Nepali population and provide equal opportunity for all to receive high quality and affordable health care services, thereby contributing to poverty alleviation. The Mission of MOHP is to promote the health of Nepali people:

- by facilitating access to and utilisation of essential health care and other health services,
- by emphasising services to women, children, and underprivileged, and
- by changing risky life styles and behaviours of most at-risk populations through behaviour change and communication interventions.

The Ministry believes in an approach to health planning and programming that provides equitable and quality health services that are rights-based, patient/client centred, culturally and conflict sensitive, gender sensitive, and socially inclusive.

The results framework at Annex 1 sets out how the vision will be achieved. It sets out the objectives, the strategy and actions to achieve them, the targets for those strategies and how they will be measured, and the target and indicator for the outcome or impact indicator to which they relate. Table 1 reproduces the outcome indicators with progress since 1991 and the targets to 2015, which where relevant are chosen to reflect the health MDG target.

Outcome indicator	Achievement					Target	
	1991	1996	2001	2006	2009 ¹	2010	2015
Maternal Mortality Ratio	538	539	415	281	229	250	134
Total Fertility Rate	5.3	4.6	4.1	3.1	2.9	3.0	2.6
Adolescent Fertility Rate (15-19 years)				19	1.1	1.2	1.5
CPR (modern methods)	24	26.0	35	44	45.1	48	65
Under-five Mortality Rate	158	118.3	91	61	50	55	38
Infant Mortality Rate	106	78.5	64	48	41	44	32
Neonatal Mortality Rate		49.9	43	33	20	30	18
% of underweight children		49.2	48.3	38.6	39.7	34	29
Spread of HIV/AIDS among population 15-24 years			0.29 ²	0.55 ³	0.49 ⁴	Halt and reverse trend	
TB incidence, prevalence and death rates (prevalence rate per 100,000)	460	1.3	310	280	138	Halt and reverse trend	
Malaria incidence and death rates (prevalence rate per 100,000)	196	1.4	52	25	1.5	Halt and reverse trend	

¹ 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 HIV/AIDS prevalence ages 15-49 (2000)

³ HIV/AIDS prevalence ages 15-49 (2005)

⁴ HIV/AIDS prevalence ages 15-49 (2007)

Main Programmes

NHSP envisages that significant additional effort will be required over the next five years in the following areas:

Safe Motherhood: There will be a further increase in the coverage of the safe motherhood programme. Community services via female community health volunteers (FCHV) will be scaled up. This will lead to further demand creation for institutional delivery, which will require that facilities have adequate budget provision to enable them to respond. Access to BEOC/CEOC facilities will continue to be extended, with 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 (7000) 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 CB-IMCI at scale and maintaining and further strengthening immunisation coverage remain of the highest priority, but further reductions in child mortality will be obtained by scaling up community-based newborn care, and by beginning work on nutrition, with the expectation that this will be a major focus of NHSP 2. MOHP will continue and expand existing micro-nutrient and de-worming programmes for pregnant women and young children, and will also introduce de-worming in schools. The major new nutrition activities targeted at mothers and young children will be:-

- i. Pilot and then expand a community-based nutrition programme. This is likely to have multi-sectoral elements, with MOHP inputs complemented by working with the Ministry of Agriculture on food security and the growing of nutritious foods.
- ii. Expand community-based rehabilitation of acutely malnourished and link to hospital-based rehabilitation
- iii. Multi-sectoral action on nutrition may include food supplements or conditional cash grants, targeted to malnourished mothers and young children. To ensure sustainable benefits, the programme would need to be coordinated with other initiatives, including the CBNP to ensure that recipients are aware of sound nutrition practice, and of locally feasible options for sustaining improved nutritional status without subsidy. Depending on the coverage and design of cash or food subsidies, this could be a big cost commitment relative to the size of the MOHP budget. It is not yet captured in the NHSP rough costing

Population and Family Planning: Over three quarters of modern contraceptive methods are supplied free of cost by the public sector, though non-Government sources supply 70% of condoms, half of contraceptive pills, 40% of implants, and do 40% of VSC. The CPR increased rapidly over the last two decades, but has stalled in recent years at about 44%, although the rate would be 55% if adjustment is made for women whose husbands are working away from home. Nevertheless, it is estimated that there is substantial unmet demand for family planning which, if it could be met, would raise the rate to over 70%.

The strategy during NHSP 2 will aim to raise CPR by:-

- i. Increased BCC
- ii. Micro planning to target pockets of low use and unmet demand
- iii. Ensuring all public health facilities offer 5 methods, and that district hospitals offer year-round VSC
- iv. Integration of family planning advice in other MoHP services, to ensure that opportunities to offer timely FP advice are fully utilised.
- v. PPP will continue to be used to increase the availability of FP services and supplies.

Communicable Disease Control: Existing communicable disease programmes will be maintained. MOHP 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. Public health lab capacity will be strengthened.

HIV/AIDS remains a concentrated epidemic, but there are substantial risks. BCC programmes for most at risk groups for HIV/AIDS are not presently achieving sufficient coverage, and will be scaled up. The biggest threat in terms of scale represents the 2 million or so migrant workers and their wives.

MOHP will aim to eliminate or significantly reduce three neglected tropical diseases that are responsible for high levels of morbidity but which are readily treatable. The NTD programme will aim to eliminate lymphatic Filariasis (LF), currently endemic in 60 of the 75 districts, reduce infection with soil-transmitted helminthes from 50% to less than 10% of children and pregnant women, and eliminate trachoma (currently 43000 in advanced stages of the disease) by 2014.

Non Communicable Diseases and Injuries: NCDs are now responsible for more than 44% of deaths and 80% of outpatient contacts. Limited medical care is available as part of EHCS, but in their advanced stages NCDs can require complex interventions that are simply unaffordable. The main response will therefore 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.

As recommended by WHO, and reflecting high incidence associated with the legacy of conflict, mental health will be added to PHC.

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.

To reach those mainly poor and marginalised who are not currently using services, MOHP will extend free EHCS to all up to District Hospital level, will bring facilities closer in under-

served areas by investments in new SHP/HP and scaling up outreach clinics, and will ensure staff and logistics in peripheral services. The reduced district hospital fee revenues and the increase in demand will require additional financial support to district hospitals. The aim will be to provide additional block grant funding to district hospitals to meet the increased costs, but with clearer service targets and increased accountability to users

MOHP 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. Non-state providers in receipt of public funds would be subject to a prior accreditation process to ensure quality. Similar quality standards will be considered for public sector hospitals.

A financing strategy will be prepared to address longer term issues of how to meet demand for more expensive care without damaging EHCS programmes.

Addressing Gender and Social Exclusion: Measures to tackle gender and social exclusion will be mainstreamed across the programme, with attention to ensuring that this is institutionalized. Particular approaches include:-

- Focus BCC awareness raising on poor and excluded
- Assist poor and excluded to seek health care using FCHVs and NGOs to support information, networking, women's and community groups
- Improve physical access to health facilities.
- Consider new incentive schemes based on evidence and resources
- Orient service providers on GESI principles and practice, & define responsibilities in job descriptions.
- Ensure peripheral facilities are appropriately staffed, equipped, managed and supported.
- Strengthen local accountability mechanisms.
- Increase the proportion of Poor & Excluded represented on HFMCs.
- Establish appropriate GESIR coordination and implementation units at different levels
- Accelerate the process of establishment of social service units in central, regional and zonal hospitals.
- The success of the equity strategies will be measured by reductions in disparities of neonatal, infant, and under-five mortality rates and the maternal mortality ratio between castes/ethnicities, wealth and ecological zones.

Working with Non-State Actors

Private sector pharmacies are widespread in Nepal, and are a major recipient of out-of-pocket spending by all income groups, providing diagnosis and examinations as well as drugs. 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 hospital beds and trains 90% of doctors. It is heavily under-utilised.

The diverse not-for-profit sector is far more broadly involved in the health sector and in the delivery of NHSP services. Although the intention to contract out service provision and the management of facilities was not taken forward with the exception of one or two pilots, there are existing partnerships of differing types in many areas of the sector. Examples include NGO involvement in family planning, TB, HIV/AIDS, and the prevention and repair of UP.

Future directions will include:-

- i. Clarifying policy, which will continue to pursue PPP where it is cost-effective. PPP requires clear performance standards and monitoring. MOHP will document and scale up successful PPP, strengthen the PPP policy forum for dialogue on future role, and develop clearer guidelines for those considering PPP approaches.
- ii. PPP may be especially relevant in finding innovative ways to provide services to communities that have not previously had access.
- iii. Finding ways to encourage and facilitate the private sector to offer specialised services in rural areas, while limiting any Government subsidy for services not forming part of the EHCS.
- iv. Quality assurance, accreditation – especially if receiving public funding

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 MoHP guidance on where non-pool EDPs should focus their support.
- Align EDP planning and approval cycles with the GoN budget cycle.
- Reduce transaction costs:- rely on the SWAp planning and monitoring processes, minimise additional bilateral requirements, more joint missions or co-financing or 'silent partner' arrangements.
- Prior MoHP agreement to all TA, annual TA 'plan' to complement 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 that proves easier for EDPs

Inter-Sectoral Coordination

MOHP will ensure that multi-sectoral programmes are designed involving key partners and effective intersectoral co-ordination and collaboration takes place. A multi-sectoral approach will be adopted to both health and non-health interventions that promote access to and utilisation of services. Effective mechanisms for inter-sectoral coordination and collaboration will be established. The main areas of partnership are summarised in the table:-

Area	Importance	MOHIP role	Partners
WASH	Main causes of child death are WASH related	Promote improved hygiene practice, coordinate BCC with WASH and local Government investment and users groups	Social welfare council, INGOs, MOWR, community level water and sanitation user groups, local Government
Food and nutrition	Malnutrition high and major cause of death and of poor cognitive and physical development	Link (CBNP, BCC to action on food security, local nutritious foods, food fortification, social protection for malnourished mothers and children	Agriculture, WFP, Education, MOLD
Rural infrastructure and housing	Reduce journey times and costs for accessing services	Coordinate health and transport investment	DOLIDAR, physical planning ministry, local governments
Education and information:- school health programmes, healthy lifestyle BCC	Attitudes and behaviour of coming generation are key to WASH, CPR, nutrition, STDs including HIV, growth of NCDs	Advocate and support health content of curriculum, health content of BCC by other Ministries, school based health programmes	Ministries of education and communication, NGOs
Waste management	Health hazards from general refuse and inappropriate medical waste disposal	Safe medical waste disposal	MOLD, local government at different levels
Alternative energy sources and cooking stove designs	Reduce ARI	Advocacy	MOST
Reduce accidents and trauma	Significant and growing causes of death and disability	Advocate for legislation and enforcement of preventive measures (belts, helmets etc)	Department of Roads, traffic police

Human Resources

HR remains the main problem in the sector. Although the position has improved in recent years, only two-thirds of Dr/nurse positions are both filled and have staff actually present at post, with the situation even worse in remote areas. There are some skill shortages in specialised areas such as anaesthetics, but Nepal has enough health staff in most categories. The problem is reluctance to serve in rural and remote areas.

NHSP 2 will address the problems of fragmented HR management and incomplete HR information, and will re-visit the skill needs for delivering the goals of NHSP 2. The current public workforce increased only 3% while population increased 35%. Some 25% of the workforce is unskilled.

Government aims to continue with ongoing programmes to upgrade the skills of the workforce. Refresher training for all providers at DH and below will be provided once in the plan period. MCHW and VHW positions will be upgraded to ANM/AHW. 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 on specific vertical programmes. This will make it easier to strengthen supportive supervision and monitoring.

Staff attendance and motivation problems need to be addressed. Productivity across the sector has been low though variable, the low average numbers of patients seen reflecting the barriers of cost and quality that have until recently kept utilisation down. 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 real financial consequences for them. Performance incentives will be piloted and carefully assessed, recognising that incentive schemes can distort behaviour in unintended ways, and can demotivate those who do not benefit

Problems of social exclusion will be addressed by allocating more staff in under-served areas, and recruiting them from marginalised groups.

Physical Investment

Future physical investment will be focused on under-served locations, with increased attention to optimal location for serving the catchment area, 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 DH, birthing units all SHP/HP, upgrading SHP-HP, HP-PHCC, PHCC-Hospital in locations most likely to increase access by the poor, vulnerable and marginalised.)

It has not yet proved possible to cost the physical investment plans. First priority will be given to completing existing projects, estimated to require NR0.7bn from 2010-11. As the current spending is NR2.7bn, there should be significant scope within current budget levels for significant new starts from 2010-11. The cost and financing of the physical investment programme will be further developed in preparing the next budget and MTEF.

A number of measures will be taken to improve the efficiency and effectiveness of the investment programme:-

- Define the functions of facilities at each level and, based on the defined functions, develop standard designs and construction guidelines.
- Develop and implement repair and maintenance guidelines and a monitoring mechanism.
- Organise training sessions for concerned construction entrepreneurs

Financial Management

Problems in financial management include slow disbursement, lower than desirable efficiency and effectiveness in budget implementation, and a generally weak control environment. MOHP 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, MOHP will focus on:-

- timely distribution of grants to health facilities;
- improvement in the FM system at central district and facility level;
- improvement in procurement at central level and at district level;
- alternative assurance arrangements such as social and performance audit;
- implementation of transparency and disclosure measures;
- capacity development supported by TA.

A permanent MOHP working committee will follow up on the implementation of the FM improvements, including audit irregularities and recommendations.

Procurement

The timeliness and value for money from MOHP 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 will also be offered to bidders too.
- Improved transparency: complaints handling, e-bidding.
- Improved value for money, with 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, LMD capacity 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 marginalized and excluded, will include :-

- Participatory planning, social and public audit, mandatory public hearings to strengthen accountability at local level.
- Capacity building to 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.
- At national level, build on existing policy forums (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 MoHP website, radio/TV, newspapers, performance auditing, and annual progress report among other activities.

Costs and Financing

On plausible 'high case' assumptions, the MOHP budget would increase by \$3.2 per head from NRs646 (\$8.5) per head in 2009-10 to NRs893(\$11.7) in 2014-15 (at 2009 prices). As was also the case with NHSP-IP 1, this document has not attempted a detailed costing of a programme that is intended to be 'sector wide' in scope, encompassing the entire budget of the health sector. Detailed costing will be taken forward in the annual budget and AWPB and in the health sector MTEF. However, a very rough attempt to put some ballpark figures to the broad magnitude of the additional and expanded programmes that will be taken forward during NHSP-2 suggests additional costs in the order of \$3.8 per head. These figures will be further refined in subsequent drafts of this plan. Underlying assumptions on both costs and resources could prove optimistic – but the financing gap should prove manageable. The largest potential areas of new spending based on present estimates are nutrition, human resources, and the costs of expanded demand for curative services at district hospital level and below.

Monitoring and Evaluation

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

The main weaknesses are:-

- No reliable source of HR data;
- Data reported by facilities and districts is not routinely analysed and used at that level
- Some NHSP indicators lacked baseline or means of measurement
- Regular reviews of performance take place from facility to national level, but the agenda is not consistent

Future directions during NHSP 2 will be:-

- Ensure all NHSP-IP 2 results matrix indicators have baseline and means for tracking progress
- NHSP targets and indicators to inform targets and performance reviews at all levels
- Ensure that analysed HMIS data reaches and is used at facility and district level
- 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 one-off surveys:- for example, on women's health-seeking
- Stronger analytical capacity in MOHP (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.⁵ 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 % between 1996-2004, 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.

⁵ 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. MOHP 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 NRs6.5bn (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. MOHP succeeded in raising actual spending as a share of the rapidly increasing health budget from 70 percent in 2004-5 to 81% in 2007-8, 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 to 75% 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 X). 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 41 per 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

Outcome Indicator	Achievement					Target	
	1991	1996	2001	2006	2009 ^a	2010	2015
Maternal Mortality Ratio	539	539	415	281	229	250	134
Total Fertility Rate	5.3	4.6	4.1	3.1	2.9	3.0	2.5
Adolescent Fertility Rate (15-19 years)				19	2.2	2.3	1.5
CPR (modern methods)	24	26.0	35	44	45.1	48	55
Under-five Mortality Rate	158	118.3	91	61	50	55	38
Infant Mortality Rate	106	78.5	64	48	41	44	32
Neonatal Mortality Rate		49.9	43	33	20	30	16
% of underweight children		49.2	48.3	38.6	39.7	34	29
Spread of HIV/AIDS among population 15-24 years			0.29 ⁷	0.55 ⁸	0.49 ⁹	Halt and reverse trend	
TB incidence, prevalence and death rates (prevalence rate per 100,000)	460	2.4	310	280	138	Halt and reverse trend	
Malaria incidence and death rates (prevalence rate per 100,000)	196	2.5	52	25	2.6	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.

^a 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.

⁷ HIV/AIDS prevalence ages 15-49 (2000)

⁸ HIV/AIDS prevalence ages 15-49 (2005)

⁹ HIV/AIDS prevalence ages 15-49 (2007)

2.7 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 X shows that MOHP met or exceeded nearly all of the coverage targets by 2009.

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 piloted to address malnutrition among women and children, and vitamin A supplementation is almost universal with the involvement of FCHVs.

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, INGOs, 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 centers with 3,147 sub-centers. 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.

Table 2.2: NHSP 2004–2010 Targets and Achievements

Coverage Indicator	Target	Achievement (2009) ¹⁰
Measles and DPT 3 coverage	Measles: 88% DPT3: 90%	Measles: 85.6% DPT3: 89.8%
Births attended by SBA	26%	28.8%
CPR (modern methods)	48%	45.1%
Unmet need for family planning	21%	26.3%
Utilisation of EHCS at health and sub-health posts	ARI prevalence: 5.3% Treatment sought: 42.9%	ARI prevalence: 4.4% (17% decrease) Treatment sought: 54.4% (26.8% increase)
TB case detection	80%	71.4% ¹¹
TB treatment success rate	90%	88.1% ¹²
% young people who correctly identify ways of preventing transmission of HIV and reject misconceptions	Female: 50%, Male: 70% FSW, IDU, MSM: 80%	Female: 80%+
Proportion of Government funds to HIV/AIDS	15%	10% (MDG 5)

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 HIV/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 MOHP and outside Government. Anti-Retro Viral therapy has been provided free of cost by 20 hospitals to 2000 persons living with AIDS. The number of voluntary counselling and testing centres number 120 in 50 districts. The prevention of mother to child transmission scheme has been implemented in 9 hospitals and an increasing number of HIV-positive women have enrolled in the scheme. There are four 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.

2.7.1 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

¹⁰ Mid-Term for NHSP II (40 rural districts): and MOHP Budget Analysis 2009: 1:

¹¹ TB case detection rate for 2007/08.

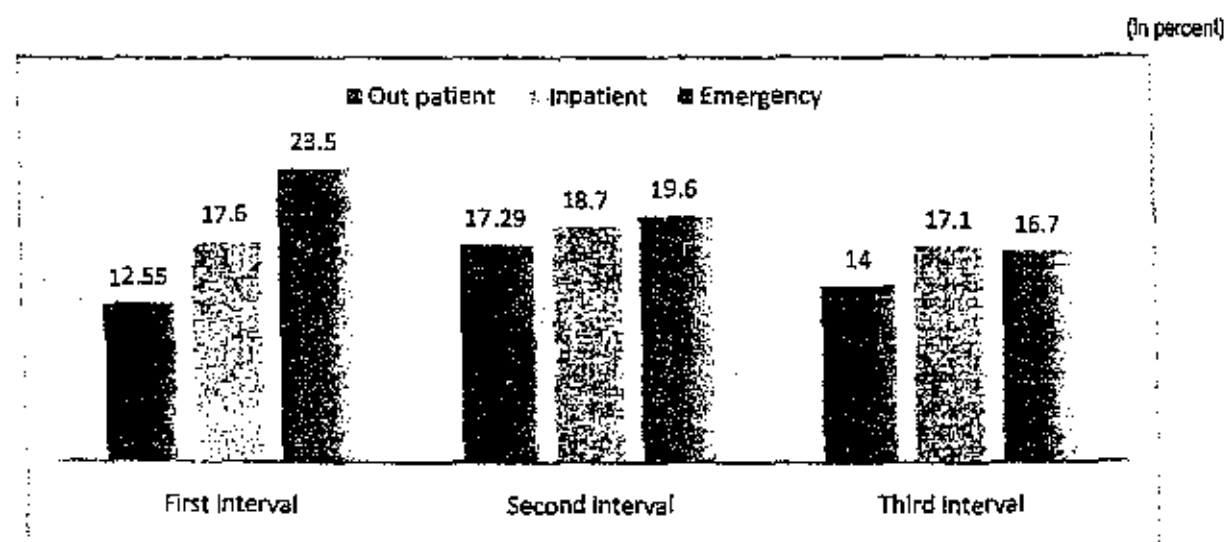
¹² TB treatment success rate for 2007/08.

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.

Figure 2.1: Utilisation of services by Dalits at hospitals and PHCCs, March 2008-2009



Dalit population = 16.7 percent in sample.

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 have an SBA at birth compared to 58% for the richest.

2.8 Output 2: Decentralised Management of Health Facilities

About 58% of the MoHP 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.

2.9 Output 3: Public-Private Partnerships

The NHSP-IP vision was of a sector in which MOHP 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 6.

2.10 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 I,

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.

2.11 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.

2.12 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.

2.13 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.

2.14 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.

2.15 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 neonatal 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.

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

3.1 Vision Statement for Health Sector

The Ministry's vision of the health sector is to improve the health 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, and underprivileged, 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
 - Institutionalising health sector reform
 - Improved financial management
 - EDP harmonisation and International Health Partnership
 - Gender Equality and social inclusion (improving equitable access and equal utilisation)
 - Inter-sectoral coordination, especially with MLD and Education
 - Sector-wide approach: improved aid effectiveness
 - Access to facilities and removal of barriers to access and use
 - Human Resource Development
- Increasing Modern Contraceptive Prevalence
- Disease Outbreak Control
- Local Governance: devolution of authority
- Patient/client centred health services
- Rights-based approach to health planning and programming
- Protection of families against catastrophic health care expenditures
- Health systems strengthening, especially monitoring and evaluation

3.5 Increase access to and utilization of quality essential health care services

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 matrix at 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.

3.6 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 deployment and retention of health care providers, particularly doctors and nurses in remote areas is the sector's biggest problem. 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. Major Interventions

4.1 Summary of Major Programmes under NHSP-IP 2

4.1.1 Introduction

The three objectives set out in the results matrix are:-

- i. To increase access to and utilisation of quality essential health care services;
- ii. To reduce health disparities and increase equity in essential health care services with improved health care for the poor and disadvantaged;
- iii. 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 basic package of services, because universal coverage will not be achieved if left to the market. EHCS includes 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, i.e. that have the biggest potential impact in reducing mortality per rupee spent.

The three objectives overlap:- the objective of increasing access and utilisation of quality health services (objective i) will be achieved in large part by interventions to make available essential health services to the poor and disadvantaged and encourage them to use them (objective ii), and by actions to strengthen the health system to be capable of reaching and sustaining universal coverage of essential health services (objective iii).

4.1.2 Increasing the Coverage of EHCS

The focus of all three objectives is on extending coverage of EHCS. This is appropriate. Although impressive progress was made during NHSP-IP 1 in extending the coverage of basic 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 main 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 the poor and disadvantaged. This implies measures to:-

- i. Overcome 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. This will involve bringing services closer to people, 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.

- ii. Reduce the demand side constraints to the utilisation of services that are available. This partly involves reducing the cost barrier to accessing services through the extension of free EHCS, and through selective 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 disadvantaged groups to demand the services which, under the interim constitution, they have a right to receive.

4.1.3 *Priority Additions to the Scope of EHCS*

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. The main changes in the package of services that will be delivered under NHSP-IP 2 can be summarised as:-

i. Free Services

For curative care, NHSP-IP 1 only included outpatient services within the EHCS package, and the free care policy was targeted. Under the interim Government's free care policy, free services, including inpatient care and access to basic drugs, is to be made available up to and including district hospital level.

The argument for universal free services up to district hospital level is that charging for services has a significant negative effect on utilisation. Efforts to target subsidies to those least able to pay have had only limited success in exempting the poor from charges, and have consequently had only limited impact on reducing the reluctance of the poor to seek care for fear of the cost. There are also questions as to whether those who can pay necessarily should pay, 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 revenue. It pays for staff incentives and for the salaries of locally recruited staff, both of which would be more difficult from Government revenues without requiring changes to existing regulations; and it also supplements inadequate Government budgets for drugs and medical supplies and for maintenance. Extending the scope of free services therefore

carries significant consequences for the ability of the hospitals to provide services. MOHP will need to allocate the necessary additional budget, and will need to develop an efficient means to replace the flexible finance previously available from user fees. This needs to be taken forward in conjunction with the reforms to increase hospital autonomy, linking decentralisation of authority and of more flexible block-grant budgets to clearer expectations as to the 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.

ii. Non-Communicable Diseases

NHSP-IP 1 did not define any action with regard to non-communicable diseases. A combination of increased urbanisation and the progress that has been made in reducing under five and maternal mortality mean that NCD and injuries now account for more than half of the disease burden. Most NCD are expensive to treat, but the EHCS will include a range of preventive measures aimed at behaviour change in order to reduce the burden.

iii. Nutrition

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 and their future earnings¹³. 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. 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.

iv. Neo-Natal Mortality

Between 2001 and 2006, the DHS surveys showed a steeper reduction in overall under five mortality than in neo-natal deaths, with the result that neo-natal deaths as a percentage of all under five deaths increased from 42% to 54%. This prompted a particular focus on reducing neo-natal deaths as part of the preparation work for the new NHSP. Very recent evidence from a 2009 survey of 40 districts suggests that neo-natal 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 2015¹⁴. The sample of deaths covered over the three

¹³ World Bank, Supplementing nutrition in the early years: the role of early childhood stimulation to maximise nutritional inputs. Child and youth development notes, March 2009.

¹⁴ 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

most recent years is small, and the statistical validity and probable cause of this rapid decline needs detailed analysis. Even if confirmed, neo-natal deaths still account for 40% of deaths in children under 5, and there remains a case for further efforts to ensure that the recent reduction is sustained and to further reduce the NNMR. The child health interventions will therefore include an expanded programme of activities aimed at reducing newborn deaths.

4.2 Description of Services to be provided under NHSP-IP 2

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

4.2.1 Family Health

Female Community Health Volunteer Programme

Current Situation: The major role of the 50,000 unpaid 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 DHS, they provided 20% of the treatment for diarrhea and 10% of treatment for ARI, with 88% success rate, and the proportion of cases treated directly by FCHVs will have subsequently increased as community-based IMCI has expanded into 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 with 18 days initial training, plus five days of refresher training in every five years. VHWS/MCHWs are to conduct monthly supervision visits to 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 natural wastage. The commodities distributed by FCHVs are supplied to them by their VHW supervisor, who is meant to keep 45 days supply in hand. The 2006 DHS reported that problems in the supply of commodities meant that FCHVs were unable to treat 20% of children brought to them with diarrhoea. Monitoring of the availability

of commodities suggests that the situation has subsequently improved¹⁵. 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 an unpaid 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 trimesterly meetings 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 NBC 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 Rs50,000 per VDC was increased to Rs 60,000 in 2009-10.

Future Plans: In line with the comprehensive FCHV plan prepared in 2003¹⁶, 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.

The main stress during NHSP-2 will be on supporting the existing cadre of FCHVs, but increased numbers will be supported on a needs basis, where the DDC/VDC or municipality demand it and circumstances merit it. During NHSP-2, the increase will be focused on those hill and mountain areas where population density is low and each FCHV can reach a smaller population, and on terai wards where large population would otherwise imply an excessive workload.

The FCHV approach is designed for rural areas, the 3% who are now located in urban areas reflect the spread of the municipalities into 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

¹⁵ Based on comments during EHCS workshop, but need a reference/statistics for this

¹⁶ Add reference

income outside the home, and weaker community solidarity. For the 15% of the population that is urban, ward level health workers paid for by the municipality are supposed to provide community-based services. MOHP provides technical back-up. 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 MOLD and with the municipalities (see chapter 5). This 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 Rs 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 natural wastage, 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.

Safe Motherhood

Current Situation:

Table 4.1: Maternal mortality reduced

	1996	2001	2006	2008
MMR (estimated)	539		281	229
Emergency obstetric care (% C-sections)	1.0%	0.8%	2.7%	
Skilled birth attendance	9%	11%	19%	32% ¹⁷
Antenatal care coverage	42%	50%	72%	80%
Family planning (total fertility rate)	4.6	4.1	3.1	

Source: NDHS for 1996-2006. 2008 MMR from Maternal Mortality and Morbidity Survey (8 districts only, but all deaths). Other 2008 data from DOHS Annual Report 2007-8. They are not directly comparable with DOHS, though trends seem broadly consistent.

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. This reduces the absolute number of deaths because fewer births take place, but also reduces the mortality rate because of better birth spacing. The emphasis being given to safe motherhood in community based services will also have contributed. The mid-term survey for NFHP, which covered 40 of the 75 districts, found evidence in both NFHP 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, increased percentage of women protected with

¹⁷ DOHS

tetanus injections and provided with treatment for anaemia and intestinal parasites¹⁸. The MMMS¹⁹ 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 is not free, 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 live²⁰.

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.

¹⁸ 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

¹⁹ Maternal mortality and morbidity survey, 2009

²⁰ <http://www.marfestopes.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. This may not be a representative sample so need to check if inferences drawn are legitimate.

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

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

- i. 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 communities to establish or expand the emergency funds that are managed by FCHVs on behalf of the community. These 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 up-front 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.
- ii. Training for 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, 4573 will be needed by 2012 and, allowing for attrition, MOHP will provide some kind of SBA training and/or orientation to around 5000 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.
- iii. In order to encourage increased institutional delivery, there will be continued investment in BEOC and CEOC towards national coverage. This 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.
- iv. A further 1000 Sub-health posts will be upgraded to health posts with the addition of birthing units.
- v. Expand on the current six district pilot in order 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.
- vi. In areas with poor physical access to facilities, making referral impractical, community-based administration of misoprostal will be/is being piloted, in order to reduce the risk of post-partum haemorrhage.

Newborn Care

Current Situation: According to the 2006 DHS, over one third of neo-natal 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 diarrhea. 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 40 district survey seems to show a sharp acceleration in the reduction of neo-natal mortality, from an average of 33 per thousand in the three years to 2006 to around 20 per thousand in the three years to 2009. The reasons for this sharp reduction are not well understood, and the relatively small number of neonatal deaths in the sample mean that the decline may be smaller than estimated, though 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 happening in health facilities, increasing from 17% to 27% of all deliveries. According to the 2007-8 annual DOHS report, the neo-natal death rate on hospital deliveries is much lower at just 8.3 per thousand. If the additional hospital based deliveries were typical then the increase in institutional deliveries would lower the NNMR by about 3 per thousand. 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 high 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 NNMR by 5-10 per thousand.

Modest but consistent improvements in ante-natal care and post-natal 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 seems to have reduced.

Future Plans: MOHP's Community-Based Newborn Care Package (CB-NCP) was developed based on the 2004 Neo-natal Health Strategy. It is being implemented as a pilot in 8 districts, with a view to scaling up if it proves successful. The aim is to reduce neo-natal mortality from 33/1000 live births in 2006 to 17/1000 by 2015.

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

The strategies being employed in the pilot focus around:-

- i. Awareness creation, through BCC campaigns and at community level through mothers groups, and one on one health education by FCHVs.
- ii. 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.

- iii. 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.

Population and Family Planning

Current situation: 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, though 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 40 district survey 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 eco 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.

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

- i. BCC using multiple channels to communicate messages and raise demand (media, FCHVs, health institutions). 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).
- ii. Continued micro-planning to focus on raising the prevalence rate in low CPR districts, and for disadvantaged and marginalised communities.
- iii. All district hospitals, PHCs, HPs will offer at least 5 family planning methods. All district hospitals will offer year-round VSC, which will also be introduced in selected PHCs, while mobile VSC clinics will continue.
- iv. All available routes will be used to integrate family planning services with other MOHP services. SBAs will be encouraged to offer post-partum family planning advice, family planning services will be integrated with safe abortion services.
- v. Reduce barriers to people accessing services, including making services more 'adolescent friendly' in order to encourage young people to utilise services. MOHP will also work with the Ministry of Education to advocate retaining reproductive health issues within the school curriculum.
- vi. Public private partnerships will be used in order to raise awareness and increase access and utilisation, particularly by population groups that are not being adequately reached by current approaches.

Gender Issues and Health

A startling finding from the MMMS 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.

Child Health

The objective is to reduce the under-five mortality rate further, from the 51/1000 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 41/1000 live births to 32/1000.

Immunisation

The Child Health Division will sustain and improve on the existing coverage of the immunisation programmes, rolling forward the Comprehensive Multi-Year Plan 2007-2011 that was prepared with GAVI support. The immunisation programme has succeeded in reducing deaths from vaccine preventable diseases to less than 2% of under five deaths, mostly from maternal and neo-natal tetanus, and from measles. The target is to achieve and sustain over 90% national coverage for all antigens in all districts by 2015. Micro planning will continue to be used in low-achieving districts and in municipalities in order to focus attention on the 17% of children who are still not fully immunised. GON will continue to implement strategies for the eradication of polio, will aim for the eradication of measles, and for less than 1 MNT case per thousand live births per district. JE immunisation will be introduced in areas where the disease is endemic.

A significant gap in existing coverage relates to the municipalities, where there is currently no clear strategy on immunisation services. A policy on immunisation in urban areas will be developed in partnership with municipalities, in order to ensure that regular EPI clinics take place in each ward. Partnerships with schools, private and social organisations and with traditional healers will also be developed in order to minimise the numbers of children missing out on immunisation. Approval will be sought for a policy of local recruitment of vaccinators on contract in order to ensure coverage in remote areas where there are currently staff shortages. Financial provision will be made for ensuring the good condition of the physical infrastructure on which the programme depends, including the regular maintenance and replacement of elements of the cold chain when they reach the end of their life.

The vertical organisation of the immunisation programme, as well as other public health interventions, has achieved high coverage. However, organising programmes to deliver a single intervention results in missed opportunities to also raise the coverage of other life-saving interventions such as Vitamin A distribution or de-worming. It also imposes major costs, particularly the cost and especially the time taken to reach populations in order to deliver services. Moving towards a more integrated approach is not straightforward, and needs to be carefully planned. Different staff are involved in delivering interventions, there are training and human resource management implications in making them more multi-skilled, responsibility for programmes falls under different divisions or programmes of DOHS, supplies and logistics would need to be coordinated, and there would be implications for the structure of budgets and for the design of external partner support. The MOH commits to making significant progress towards a more integrated health systems approach during the life of NHSP-IP 2. [As a first step, a working group will be formed drawing staff from the concerned divisions of DOHS, notably FHD and CHD, and charged with consulting staff at district level in framing their recommendations. EDP support will be obtained for financing health system management consultants to undertake analysis of the problems and potential, and work with the relevant stakeholders to arrive at practical recommendations, and an action plan for securing the necessary approvals and beginning to implement the changes within the life of NHSP-IP 2.]

All immunisation costs are included in the budget, but EDPs finance 37% of immunisation spending, and over 80% of the cost of vaccines. Pentavalent vaccine is being introduced from March 2009, financed with GAVI support of \$10mn per annum and procured by UNICEF. The funding runs to 2011. GON gives high priority to immunisation, but will need further support from EDPs beyond 2011, and decisions on the sequencing of the introduction of new and underused vaccines will be dependent on securing continued external support.

Community-Based Integrated Management of Childhood Illness

The community based integrated management of childhood illness is now active in all 75 districts of Nepal. It works through the network of over 50,000 unpaid female community health volunteers, who are supervised by village health workers. FCHVs are successfully assessing and managing childhood pneumonia and diarrhea, treating most cases at community level while identifying which ones need to be referred to a health facility. They are also instrumental in increasing the coverage of other public health interventions, distributing Vitamin A and de-worming treatment to children who missed out on the national campaigns, identifying children who have not been immunised and advising mothers how to remedy this, and working with mothers groups to encourage them to use maternal health services. The package of interventions delivered at community level has been steadily expanded based on evidence from pilots, with FCHVs now prescribing anti-biotics for pneumonia, and preventive zinc being introduced to control diarrhea.

The mid term review of NHSP-IP calculated that CB-IMCI had probably been responsible for a reduction of 8 per thousand in the under five mortality rate based on the then coverage of 66% of the country, mostly as a result of improved treatment of pneumonia. The challenge for NHSP-IP 2 is to maintain the quality of the programme at national scale. Staff in all 75 districts have been trained and are now operating CB-IMCI. CHD are developing a paper on how to maintain the programme, including plans for training new entrants to replace the 3-4% annual natural wastage, as well as refresher and updating training. CB-IMCI training will also be offered to those private clinics wishing to offer equivalent services.

Nutrition

Current Situation: Although the situation of chronic malnutrition has improved since 2001, Nepal remains one of the most malnourished countries in the world. Nearly half of Nepalese children under five are stunted, indicating early chronic malnutrition, 39% are underweight, and 13% in 2006 were wasted, an indicator of acute malnutrition. Malnutrition is much higher in the mid and far west hill and mountain areas, 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 micro-nutrient interventions, notably Vitamin A distribution. Problems of goitre exist despite salt iodisation, partly due to importation of less adequately iodised Indian salt. In 2006, some 48% of children aged 6-59 months were anaemic, 23% of them moderately to severely so; some 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 5 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 under 5s.

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 breast fed 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 development²¹.

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 awareness raising 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.

The 2009-10 budget introduced another major programme targeted at nutrition, a programme of cash transfers of 200 Rupees 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 MOLD, 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 720mn Rupees 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.

Future Plans: 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 micro-nutrient supplementation, and partly concerned with behaviour change to improve maternal and child feeding practices within the constraints

²¹ <http://siteresources.worldbank.org/SOUTHASIAEXT/Resources/223546-1171488994713/3455847-1232124140958/5748939-1234285802791/NepalNutritionBrief.pdf>

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 will continue to come under the child health 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.

² 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 co-operation, and MOHP 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 MOHP 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.

Communicable Disease Control

Current Situation: 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 mainly 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 2007-8²²), down from 15,000-18000 per year in 1994²³. In 2007-8, the TB programme detected 72% of cases and had a treatment success rate of 85%. The target is to achieve 82% 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 in Kathmandu (2.2%) and Tarai highway districts (2.3%), Truckers, 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 sex workers and 4 % in 'men having sex with men' (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 percent of HIV infections among low-risk rural women, likely the wives of seasonal labor migrants. Male Labour Migrants have an infection rate of 1.4 % in 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.

²² DOHS Annual Review, 2007-8.

²³ WHO, www.intinf-new/tuber4.htm, accessed 11 Dec 2009

Of the vector born diseases, malaria and filariasis are the major public health problems. Kala-azar accounts for around 1400 cases and less than 10 deaths per year.

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.

In 2007-8, there were 83,000 cases diagnosed as probable malaria ('clinical cases'), but only 4500 laboratory confirmed cases. There were 330 suspected/possible malaria deaths. Malaria control activities are carried out in 65 at risk districts, with concentration on 12 highly endemic districts where 70% of malaria cases originate.

Roughly 12.5 million people live in areas at risk of JE. The disease affects 1000-3000 people each year, with annual deaths of 200-400. 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 25,000-30,000 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 in order 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 through out the country. All these activities are supported by WHO Nepal.

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.

Future Plans: 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, and cooperation with neighbouring countries will be strengthened, especially India.

Public health laboratory capacity will be strengthened at all levels. Policy, guidelines and an overall framework for doing this 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 main 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 NTD program will be a partnership between the Ministry of Health and Population 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 program 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 under 5, 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 program it expects to eliminate trachoma in Nepal by 2014.

Non-Communicable Diseases

WHO estimate that NCDs account for 39% of DALYs lost, and for 44% of deaths. About half of the deaths are from cardio-vascular diseases, a further 18% relate to cancers, 10% respiratory diseases and 7.5% 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, with 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:-

- i. 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.
- ii. MOHP will also advocate the implementation and enforcement of tobacco and alcohol controls and legal requirements to wear seatbelts and helmets.

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 services in this area, one or more scaleable 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.

Other than violence, the major and growing cause of injury is road traffic accidents. In addition to prevention activities, the capacity to handle RTA injuries will be strengthened in those health facilities located close to highways and to the site of frequent traffic accidents.

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.

Curative and Outreach Services

Current Situation: Roughly half of all outpatient visits for acute illness among both children and adults are to private providers (NDHS 2006 and NLSS 2004). This includes private pharmacies, many of which are owned by Government health staff, and which provide diagnostic services as well as drugs: - nearly two thirds 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.

Private sector use increases with wealth. Government services are used at similar rates by most wealth groups, but less by the wealthiest²⁴.

²⁴ 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 PHCs, 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 HP/SHP level, and targeted free services at PHCC and DH level 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. Under-reporting by private and NGO service providers makes it difficult to provide figures for them, but adjusting pro rata for under-reporting 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 main purpose for which patients seek curative health shows that more than 80% is for non-communicable diseases.

Future Plans: The main reasons for low and late 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, 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, MOHP is committed to progressing towards a target of 80% of the population living within 30 minutes travel time to a HP/SHP. However, new investment in physical facilities will only make sense if they can be staffed, supervised, and kept supplied with drugs. NHSP 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 HP/SHP where justified, but will also consider more frequent outreach clinics, options for re-siting existing facilities, and possibilities of contracting and PPP 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. The upgrading all SHPs to HPs and the addition of birthing units will continue at the current rate of 500 per year and all 3100 will be completed during NHSP 2, with the posting of an additional HA and upgrading of the existing MCHW position to Assistant Nurse Midwife.

EHCS includes prevention, clinic services, basic inpatient services, delivery services, and a basic list of essential drugs. In order to make services affordable, these essential health services are free to all citizens at SHP/HP/PHC level. At district hospital level, EHCS services are currently free for specified target groups (the poor, destitute, elderly, disabled, FCHVs). Delivery services are free to all, and there are demand side subsidies to cover

transport costs and encourage mothers 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 what is charged for. 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 up to and including district hospital level 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 DH level, 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.

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.

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 year of NHSP 2. The approach to referral is likely to include some financial incentives to encourage patients to use the referral chain, reducing the 'bypassing' that occurs when patients go direct to the tertiary facility, resulting in over-crowding at that level and under utilisation of district hospitals.

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 2007-8 DOHS Annual Report. In response to this important cause of morbidity, staff at HP/PHCC level will be trained to provide basic dental/oral check-ups, dental surgeons or dental assistants will be recruited and posted to selected district hospitals, and mobile dental camps will be taken to community level in collaboration with medical and dental colleges.

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

- i. Greater discretion 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. This will be linked to a strengthened system of inspection and accreditation for the services to be provided, covering both public sector 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. Those public or private sector health facilities in receipt of block grant funding will be required to sign contracts with monitorable targets setting out what they are expected to deliver with the funding provided.
- ii. Within the public sector, facilities at all levels from SHP 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.
- iii. Health facilities will contract out ancillary services such as cleaning and laundry in order to improve cleanliness and reduce infection.

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 behavior change among people. Health education and behavior 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 location as appropriate to the local socio-cultural practices. It is important for health education and BCC activities to go hand in hand with service delivery.

The role of health education and communication in the context of public health is on preventive and promotive side. Evidence from research and HMIS show low institutional delivery, low use of contraceptives, low coverage of routine immunization etc. There are occurrence of 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 behaviors. With new emerging diseases like human and pandemic flu as well as for non-communicable diseases, and during the occurrence of epidemics like diarrhoea and cholera, there has been a growing need to focus on health education and behavior change communication to prevent and even respond to these diseases. There is also a need to promote key interventions started by GoN like free maternity services, free health care service, 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 into the overall program design.

Health education and communication is cross cutting to all health programs which aims to increase knowledge and improve behaviours on key health issues of all caste, ethnic groups, disadvantaged and hard to reach population. It will also aim to create demand for quality essential health services, thereby increase access, create public trust in health services and ultimately encourage people to utilize the existing health services and mitigate public panic and respond to communication needs during emergency situation. In NHSP-II health education and communication will prioritize certain focused programs of EHCS such as maternal and child health, adolescent health, communicable diseases, non-communicable diseases, tobacco control, emergency and disaster preparedness including pandemic influenza, gender equality social inclusion and rights and occupational and environmental health.

Recommended Strategies

- The strategic design followed for health education and communication program has been mutually reinforcing approaches: advocacy, social mobilisation and behavior change communication/IEC linked with service availability on EHCS and beyond.
- Advocacy activities will be carried out to gain support for essential health care services, occupational and environmental health and tobacco control issues and to get political and social commitment as well as for resources for the implementation of the program.
- Social mobilisation to mobilise resources at local level, mobilisation of human resources of existing networks as well as for getting support for FCHVs and health workers.
- BCC/IEC will inform people about essential health care services, social issues, services availability and will promote positive behaviours.
- Mass media, community based media and inter-personal communication will be used to disseminate and reinforce messages.
- To cater to the specific gender needs and the needs of the socially excluded and disadvantaged communities, efforts will be made to produce and disseminate messages and materials in local languages and for different socio cultural context. The concept of rights to health will be promoted. This will be especially true in the context of possible political restructuring and decentralization acts of the country.

- Strengthen institutional as well as technical capacity of NHEICC/RHD and DHO, and in hospital settings in order to provide appropriate health education and communication programs at all levels. Coordination will be done with other ministries, academic institutions to ensure in-service and pre-service training specifically on health education.
- Multi sectoral collaboration will be sought to implement communication programs. Efforts will be made to ensure that the impact of communication intervention gets captured through HMIS and additional resource will be explored to do periodic surveys.

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, communication and information system for timely deployment. Whatever may be the reason, the impact on human life are 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.

Recommended Strategies

- Allocation and training of staff needed for emergency purpose in all health facilities.
- Assure prepositioning of drugs, medical consumables and equipments for emergencies.
- Prepare working guidelines and orient community people at all levels.
- Set up coordination committees with clear chain of command during emergency.
- Set up inter-ministerial coordination committee from the centre to the peripheral level to mobilize resources and supplies essential for preventing and promoting health of people during emergencies.

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 target 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 roles of MoHP 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.

Environmental health and hygiene program aims at improving water quality with particular emphasis on the water quality surveillance and monitoring, promote hygiene and sanitation with 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.

Recommended strategies

- Promotion of hygiene and sanitation through the existing institutional set up.
- Health promotion is undertaken in combination with hygiene and sanitation activities. H&S promotion to be effectively mainstreamed and adopt key performance indicators for behaviour change on improved hygiene practices.
- MoHP to work with MoE and partners to promote use of cleaner fuels for cooking like biogas, improved cook stoves and to improve ventilation in the cooking area.
- The MoHP to 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.
- Based on the standard mentioned above MoHP/DoHS to increase its capacity and institutional set up and human resources.
- Establish a knowledge network with academia and practitioners on climate change and climate change public health response team.
- Collaborate with other ministry and non-government agencies and take steps in preventing the harmful effects of occupational hazards particularly in urban areas where large number of people are being exposed everyday.

Ayurvedic and Alternative Medicine

Ayurveda is a national method of therapy/treatment in Nepal which still has good promise in treatment protocol. Over time people have shown some attraction towards Ayurvedic treatment. In 2064/65 a total of 706,128 people have received Ayurvedic treatment.

According to National Ayurveda Health Policy-2052, Government has planned to establish new Ayurveda health services and make all the services well-equipped in proportion to the population density, public demand and participation. So the new Ayurveda Health services are being established in different parts of country not only in government sector but also in private sectors.

Top ten diseases identified for Ayurvedic treatment are Amalpitta (Gastritis), Udar rog (Abdominal disease), Swosan Bikar (Respiratory disease), Vatavyadhi (Vataja disease), Bal rog (Paediatric disease), Stri rog (Gyneocological diseases), Karna, Nasa, Mukha, Danta and Kantha rog (ENT, Oral, Dental diseases), Jwar (Fever), Brana (Wound, abscess) and Atisar/Grahani (Diassheoal disease).

Future programs:

- Continue the treatment of top ten diseases through central, zonal and district hospitals and dispensaries.
- Continue production of required human resource.
- There will be established an Ayurvedic Research Institute furnished with the required equipment, for research of international standard in matters related with the use of Ayurvedic medicines and entities and the Ayurvedic treatment.
- In the rest four development regions, regional hospitals with 15 beds and medicine production branch in each hospital will be established and operated.
- The system of Supervision, monitor, evacuation and referring process of the technical and administrative functions of the Ayurvedic hospital will be made effective.
- Production, collection and promotion of the herbs locally available and for utmost utilization thereof in Ayurvedic treatment, presently existing District Ayurvedic Health Centers will be consolidated.
- The Ayurvedic Dispensaries being currently operated will be equipped and made capable of producing, protecting, promoting of the herbs available in local level.
- Build Ayurvedic Health centers and dispensaries and develop model herbs farm.
- Co-ordination will be made with governmental and non-governmental associations related with the herbals, so as to maintain standard in domestic trade and export to foreign countries by identifying genuine herbals.
- Governmental and non-governmental Ayurvedic medicine manufacturing companies established or to be established in the country will be encouraged to manufacture quality medicines.
- One Ayurvedic Medicine Examination Committee and Laboratory will be developed for maintaining the quality of Ayurvedic Medicines.

4.7 NHSP-IP 2 Strategies to Address Gender and Social Exclusion

Gender and social exclusion concerns need to be mainstreamed throughout NHSP-IP 2. The following strategies will be important in addressing gender and social exclusion:-

- 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 vulnerable and marginalized. 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. Build new health facilities in underserved areas and improve referral system.
- As coverage increases, the major programmes and interventions described previously will target their future efforts on reaching communities and groups who are currently making little use of services, or are being missed by promotive and preventive interventions. In aiming to increase their coverage, programmes at national and local level will need to research and address the key constraints inhibiting utilisation by the poor and marginalised. This may require action to address cost and physical barriers to access, but could also involve changes in the way knowledge is communicated or services are delivered, or changes in the attitudes and behaviours of service providers.
- Fully implement MoHP's HR strategy. Orient staff on GESIR principles and practice. Ensure facilities (particularly peripheral) are appropriately staffed, equipped, managed and supported. Improve registration, regulation, coordination and collaboration of private sector providers.
- Strengthen local accountability mechanisms (see section 6.6), and ensure representation of poor and marginalised groups.
- Examine and develop mechanisms to engage civil society organizations and private sector for demand creation and service delivery.
- Build on GESI strategy 2066 and establish appropriate GESIR coordination and implementation units at central, zonal, regional and district levels. Ensure inclusion of GESIR in health policies, strategies, plans, setting standards and budgeting.
- Ensure that the collection of data and analysis on inequalities in utilisation and the reasons for them is collected and used to inform policy and planning at all relevant levels. Capture the service provider voice to better understand barriers limiting change for use in policy development. This can be done through the existing review mechanisms, but will need to be pro-actively encouraged by MOHP and DOHS managers.

Institutional mechanisms for ensuring that these approaches to mainstreaming GESI concerns actually get implemented at national, programme, district, and facility level are discussed in section 6.?

5. Stakeholders and Partners

5.1 Role of Non-State Actors

5.1.1 Context and Background

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

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

Household out of pocket expenditure is estimated to account for 50% of total expenditure on health, compared to 23.7% by Government and 20.8% by EDPs²⁵. Other than households, the financial contribution of the private sector is relatively small. NGOs and philanthropic organizations pay for nearly 4% of total health expenditure, and corporations with health insurance schemes for their employees and families account for the remaining 2%.

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 consultation²⁶. 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% of the poorest did not seek care at all for their last acute illness, compared to 27% of the richest. The subsequent expansion of free care increased out-patient contacts in Government institutions by 35% 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, though 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

²⁵ 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.

²⁶ National Living Standards Survey, 2003-4

Nepali origin and 240 foreign based pharmaceutical companies, 40 diagnostic laboratories and research centres and two radio therapy facilities.

5.1.2 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 for the better off. The sector now produces almost 90 per cent of medical doctors (MBBS) in Nepal (ibid), and a similar share of staff nurses. The private health sector in 2005-6 had two thirds of hospital beds, 13,400 compared to 6796 government hospital beds. It also operates three times more health laboratories (1000) 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). The utilisation of private sector facilities is very low, especially medical schools, which is a problem because students who see few patients make bad doctors.

Nepal has also developed a private pharmaceutical industry that meets around 32% 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.

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

Non-profit service providers started with the 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 Organizations, and Community Based Organizations have been more involved in public health activities, including advocacy on health rights and awareness raising on prevention of diseases. Some philanthropic organizations are involved in rehabilitation relating to disability, after disease care etc. For example: Leprosy Association and others are

working on rehabilitating leprosy victims, 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.

5.1.4 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: (i) immunization, (ii) Tuberculosis control, (iii) expanding contraceptive measures, (iv) controlling HIV/AIDS.

Though immunization services are provided mainly through government facilities, the for-profit private sectors and NGOs clinics are also providing the service. Private sector provides immunization services mainly in urban areas: through clinics of hospitals, nursing homes and through NGOs. Government supplies vaccines and related logistics and provides technical assistance including monitoring and supervision to ensure uniform and quality service.

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

Formal contractual relationships for 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-IP 1 was approved. They include:-

- 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 government and local community (Jiri district hospital);
- c) partnership with private hospitals and medical colleges in prevention and treatment of uterine prolapse.

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

a) 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 indicate 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. The intention was

to achieve increased efficiency and effectiveness through more competition and performance-based contracts.

In the event, 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.

c) Quality assurance and coordination

Non-state efforts are not documented, recognized and 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.

d) 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. MoHP has been providing some ad hoc financial support to these community level 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.

e) Limitations of for-profit private sector

The private sector facilities represent an under-utilised resource and MOHP will look for opportunities to work in partnership with the private sector to improve their contribution to achieving the goals of NHSP-IP 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 cant at present be afforded from the Government budget

5.1.6 Strategic Direction for Next Five Years

In summary, the following will be the strategic direction on partnership:

- a) *Clear policy and strategy formulation* involving private (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
- b) *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 UP 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 it's market power to ensure that services procured by Government from non-state actors are procured at prices that give good value for money.
- c) *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 case studies, to capture the lessons of successful and less successful experiences. Successful approaches will be considered for adoption and scaling up.
- d) *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 and make the services accessible and affordable to the poor. This 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.

- e) 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 partnership.

5.2 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 1 summarises the commitments set out in these two documents.

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, simplify 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 systems.
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.

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 basic 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.

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-IP 1, considerable progress has been made in improving the effectiveness of Government procedures in the health sector:-

- i. Budget implementation has steadily improved, with increased focus on overcoming bottlenecks through approaches including more realistic budgets, earlier funding releases 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.
- ii. 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, Government and EDPs to 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 workplan 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 MOHP 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, each reform output has been implemented by the responsible Division/Centre and all outputs are coordinated by a Coordinator, Health Sector Reform Unit, MoHP. This approach internalized the reforms and saved the costs. During NHSP-IP 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 external development partners 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. Donor competition remains a problem, particularly with regard to TA by non-pool EDPs. EDP

support continues to be driven to a large extent by the policies and preferences of the individual agencies. It supports GON 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.

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 agreed agenda of future actions, and has become more realistic and better attuned to MOHP 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 have largely confirmed the accuracy of HMIS data, and have also revealed remarkable progress in reducing under 5 and maternal mortality, while narrowing inequality.

Under NHSP-IP 2, MOHP 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.

Mutual Accountability - Donors and partners are accountable for development results.

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 agreed 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 MOHP 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 financial gaps within the NHSP. EDP projects are always negotiated with and agreed by Government, but MOHP 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.

Untying

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.

The Way Forward

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

- i. Increased direction from MOHP on where those EDPs that are not providing pool funding should focus their support. The aim will be to ensure that the programmes identified in this NHSP-IP 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, MOHP needs to be cautious in taking on new commitments that that will inevitably entail additional recurrent costs eventually falling to MOHP.
- ii. As far as is practical, EDPs will be asked to align their own planning and approval cycles with the GON budget cycle. It is recognized that this will present some difficulties for those EDPs operating to different financial years, but it is equally or more difficult for MOHP to adjust budgets to accommodate commitments that have not been planned for in the national budget.
- iii. Reducing the transaction costs of dealing with development partners. Excluding the NGOs, there are 14 donors supporting NHSP, but the two 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 MOHP 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 MOHP 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.

- iv. A particular effort will be made to improve the coordination of TA, with a more formal requirement that TA missions and terms of reference be agreed with MOHP 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 in future 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 MOHP, putting an end to the situation where TA can be commissioned by EDPs based on passive MOHP acceptance or (in some cases) without MOHP prior knowledge or approval.
- v. 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 MOHP is responsible for managing the SWAP relationship, but has limited staff (how many?), and is also responsible for coordinating and reporting on a complex reform agenda.
- vi. A more balanced partnership, with a stronger focus on EDP performance assessment as well as reviewing Government performance in implementing NHSP-IP 2. Some preliminary steps have been made to introduce EDP reporting, but these have so far been limited to EDP self reporting. MOHP 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.
- vii. Recognising that EDPs are reluctant to provide medium-term indications of support, and that even annual figures indicated by EDPs have proved unreliable, MOHP 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 is so unreliable as to be of little value in estimating the future resource envelope.

5.3 Inter-Sectoral Coordination and Collaboration

5.3.1 *Current Context and Issues*

There are many factors outside the health system that influence people's health. MOHP 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 of Health has been mandated to coordinate this multi-sectoral intervention and the ministry also established a multi-sectoral coordination mechanism for implementation.

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

5.3.2 Future Plans

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

Area	Importance	MOHP Role	Partners
WASH	Main causes of child death are WASH Meeting the MDGs requires the support of other sectors and the MOHP will 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 adopted to both health and non-health interventions that promote access to and utilisation of services. For this purpose, effective mechanisms for inter-sectoral coordination and collaboration will be established The following are the key areas of related	Promote improved hygiene practice, coordinate with investments in WASH	Social welfare council, INGOs, MOWR, community level user groups, 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)
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, marginalized, 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.

MDG Goal 7b: Ensure access to water and sanitation

Target: Halve, by 2015, the proportion of people without sustainable access to drinking water

MDG Indicators	1990	1995	2000	2005	2015
Improved water source (% with sustainable access)	46	70	73	81	73
Improved sanitation (% with sustainable access)	6	22	30	39	53

Nepal government recognises the importance of rapidly improving the poor water and sanitation conditions and of meeting the MDG goals and target. MoHP is the lead agency with respect to promoting health and hygiene. H&S promotion will be effectively mainstreamed with the adoption of key performance indicators for behaviour change on improved hygiene practices.

MOHP 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, MOHP will work closely with Ministry of Agriculture on food security and the promotion of nutritious local foods, with Ministry of Industry on food fortification, and with agencies 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 providing physical 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 over-loaded 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 NHSP outputs. MOHP will also conduct school health programmes, including supporting de-worming for this older age group. With regard to information, MOHP has an interest in advocating that appropriate health related messages are included in the BCC work of other departments.

Waste management

The MoHP will implement the medical waste management action plan, a... 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. MoHP/DoHS will... required capacity and institutional arrangements, including additional human resources... implement and monitor compliance with the standards.

Alternative fuels and cooking stoves

MoHP to work with Ministry of Education (MoE) and other partners to promote use of cleaner fuels for cooking like biogas, improved cooking stoves and 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. MOHP will also collaborate with other ministries and nongovernment agencies and take steps in preventing the harmful effects of occupational hazards particularly in urban areas where large number of people are being exposed every day. 'Public bads' such as smoking and excessive drinking can be discouraged by a combination of regulation and tax measures.

Climate change

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

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 MoHP is responsible for delivering preventive, curative, promotive 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: Policy, Planning and International Cooperative Division, Public Health Administration and Monitoring and Evaluation Division, Human Resource and Financial Management Division, Population Division and Administration Division. There are five autonomous bodies established by law for the 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 the 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 the dialogues in the policy matters and harmonise the efforts between MoHP and External Development Partners (EDPs) and align the 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 the coordination and collaboration between public and private, and among development ministries respectively. In addition to these, a Health Financing Forum has been established to provide the support to HEFU and share the evidences to inform the policy formulation and implementation purpose.

There are three Departments under the MoHP. They are departments of Health Services (DoHS), Ayurved (DoA) and Drug Administration (DDA). At the DoHS, the Director General (DG) is organisational head with all programme management division/units working under the DG. The recent reorganisation includes Management Division with infrastructure, planning, quality care and management information system as part of the Division. The Family Health Division is made 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 Division are Epidemiology Disease Control, Leprosy Control, and Logistic 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 the care providers. Similarly, all IEC/BCCs related activities are coordinated by NHEICC thus avoids the duplication. Both centres collaborate with the private sector to implement their programme., These centres support for the delivery of EHCS and work with 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 their 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 the Aurvedic care to the people and also implement the health promotion such as Yaga.

At the regional level, which is directly under MOH, the Regional Directors are responsible for technical backstopping as well as programme supervision. However, their role would be more likely to 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 Centre (RTC), Laboratory, TB centre (in some) and medical stores at the regional level.

system. The intention is to bring power and service provisions near to the people or to the lowest level.

In the health sector of Nepal, MoHP needs 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 in the existing institutional set-up, referral system, research and training, human resource management, and delivery of health service at different levels. The lessons from the current decentralization and restructuring related initiatives will need to be redefined in the context of federalism.

Recently, the MoHP decided to prepare a plan for smooth transition and it has been integrated in this plan document as an integral part of it (Annex 1). This plan needs to be implemented along with the restructuring process.

6.2 Human Resource Management

Human resources for health

Background: A competent, motivated health workforce forms the core of a high quality, effective and an efficient health system. Nepal's health policy and strategic documents over the past several decades repeatedly identify issues in the availability, distribution, management and motivation of health sector staff as the major problems facing the health sector in Nepal. The health sector constitutes about one fourth of total personnel of the public sector. The current situation of human resource for health is as follows:

Position	Sanctioned	Fulfilled	Vacant	% of filled positions	Share %
Medical doctor	1062	816	246	76.84	4.34
Nursing staffs including ANMs	5936	5307	628	89.42	24.25
Paramedics	10642	9212	1430	86.56	43.48
Other	6838	6394	444	93.51	27.94
Total	24477	21729	2748	88.77	100.00

Source: Annual report, DoHS, 2007/08

Current context: The following contextual factors affect the production, distribution and retention of health care providers

1. Institutional development

- *The upgrading of SHPs to HPs* was initiated in 2008/9 and each year 529 SHPs are upgraded to HPs, a total of 1000 SHPs will be upgraded as HPs by the years 2009/10. All remaining SHPs will be gradually upgraded to HPs during NHSP IP 2. A post of HA and an ANM will be increased in each HPs. Thus, the numbers of HAs will be increased to over 3100 and ANMs 3100. The position of MCHWs will be upgraded as ANMs and strengthening them by providing additional training and orientation.
- *Upgrading of PHCCs to community hospital* has initiated since 2008 and 5 PHCCs are upgraded as 15 bedded rural hospitals to provide the inpatients

services. The numbers of these rural hospitals will more likely to increase at sub district level due to increasing demand for rural hospitals. An additional doctor, 3 nurses, and support staffs are needed to run the community hospital for 24/7.

- *Upgrading positions of care providers* will have the implications on HRH. The position of VHWs and MCHWs will be gradually upgraded to AHW and by ANMs respectively. Over 1000 MCHWs are upgraded as ANMs. There are the vacant positions over 1200 VHWs and their positions and they will be upgraded to AHWs.
2. **Ensuring right based approach** and equitable distribution of human resource remains a challenge to the health system. Additional one ANM (from Dalits) could be provided to HPs located in underserved and less accessible area, thus, the numbers of health workers more likely to increased.
 3. **Population size:** population of Nepal has increased by 35% between 1991-2008, while the number of health workers has increased only by 3.4%. The aging population will also be increased during the NHSP IP 2 period. Thus, it is difficult to meet the demand of people by the existing workforce.
 4. **Diseases transition (double burden of diseases):** The communicable diseases remained unfinished agenda and non communicable diseases increasing due to the changing life styles and environmental changes. The new emerging diseases, H₁N₁, avian flu, need more epidemiologists and public health experts.
 5. **Increasing demands for health care in the context of free care:** after the abolishing user fees in EHCS and all types of delivery care the demand for health care has increased considerably 40% for outpatients and inpatients for 21 percent in medium demand scenario ((NHRC 2009) and demands will be increased further due to the programmes implemented under HNSP-2.
 6. **Changing the role of government and health system functions:** purchasing services, regulating, financier, facilitating private sector – need procurement specialists, health legislation expert, health economists, health governance expert,
 7. **Migration of health workers:** there is trend of migrating from rural to urban, urban to capital city, and capital city to abroad, it has adverse implication in the distribution and retention of human resource.
 8. Despite the need for additional care providers there are limitations. The Government of Nepal would like to reduce the public workforce including health. There is a cap on the availability of funds for human resource development (8-10% of total salary). Monitoring of human resource is limited.

Issues and concerns

- The human resource development strategic plan 2003 needs to be revisited in the context of the health related MDGs, free health care and health system development and abovementioned transition. The new projection of human resources by categories and sub categories is imperative to support EHCS and beyond EHCS service delivery.
- Market has supplied sufficient human resources for health however there is still a shortage of critical human resource for service delivery, for example we need 7000 trained SBAs but the supply is only 1000, need of MDGPs is 90 but only 34 are available and there is the chronic shortage of anesthetists, psychiatrists, radiologists, radiographers,

anesthetist assistants), In addition to these, there is the shortage of health system related human resource such as procurement specialists, health legislation experts, epidemiologists, health economists and health governance experts.

- The inequitable distribution of human resources remains a problem. Out of a stock of 8118 medical doctors, 1062 have been working as position holders and 300 working as scholarship obtained medical officers under the Ministry of Health and Population, of whom about 2/3 are in Kathmandu valley and other cities. There appears to be a sufficient national stock of key medical doctors in some of the key specialisms related to the health MDG. For example, the Medical Council in March 2009 had registered 182 in obstetrics and gynaecology, and 139 pediatricians. The problem is their uneven distribution.
- The retention of medical doctors and nurses remains a major concern. There is a lack of evidences on the average length of stay of care providers. The health facility survey showed that only 77-79% of posted medical doctors were available at the time of survey. The figure for nurses is 68-80% and for paramedics is 80-83% (RTI International, 2009, examining the Impact of Free Health Care Policy First and Second Survey report). This is the mean. The situation could be worse in the remote districts.
- Productivity has remained a challenge. Paramedics clinical consultations per day are as low as 6 at HPs and SHPs (calculated based on HMIS data 2006/07), which is low even after allowing for their involvement in both preventive and curative services. Daily output per physician varies across the ecological belts. On average a physician located in the Terai belt provided medical consultation to 18 out patients and 3 in-patients in district hospitals, nearly twice as many as physicians located in the mountain districts. The productivity in the hill belt is in between the Terai and mountain belts. At the referral hospitals also on any given day, a doctor provided, on an average, only 10 consultations to outpatients and 3 to in-patients. The highest productivity (13 consultations to OPD and 6 to IPD) was observed in Bheri Zonal Hospital. The low productivity was observed in Janakpur hospital followed by Bhaktapur hospital (MoHP, 2005, Hospital productivity analysis). Factors outside the control of the staff, such as the availability of drugs, affect patient demand and hence productivity. However, the figures at the time of the survey were certainly low, and demonstrate that there was capacity to significantly increase the number of patients seen without increasing staff numbers – as has actually begun to happen with the increase in utilisation since 2006-7
- The existing skills mix revealed that only 4.34 percent of total health care providers are doctors, 12.11 percent nurses excluding ANMs and 0.92 percent public health officers, 47 percent paramedics, 3.1 percent traditional health care provider (HuRIC, 2008). There is currently a high number of unskilled support staff (28% of the total workforce). There is a challenge to the health system to reduce the volume of unskilled and semiskilled labour as a percentage of the total workforce (MoHP, 2004).
- The very low participation of Dalits and other highly marginalised groups in the health workforce at both policy and service delivery level remains a concern. Increasing their participation remains a challenge.
- There is a need to focus more on increasing the quality of human resource.

Strategic directions and outputs

Projection and strategic planning of human resources for health: as mentioned above, a scientific and robust projection of human resources for the coming 5 years is needed to develop/update strategic planning for HRH. The projection and strategic planning includes public and private sector demands/needs, supply and maintenance. Measures will be spelled out for the internal mobility, career advancement and optimum use of HRH.

Producing and deploying critical HRH: In order to meet the most critical service delivery related human resource requirements identified for NHSP 2 include about 7000 SBAs, 56 MDGPs, 44 Anesthetists, 56 Psychiatrists, 55 Radiologists, 20 Physiotherapist 70 Physiotherapy assistants, 100 radiographers, and 62 assistant Anaesthetists (will be produced and deployed (HuRIC,2008). A total of 27 health system related human resources will be trained and deployed: procurement specialists -7, health legislation expert -3, epidemiologists -7, health economists -7, health governance experts -3. The MoHP will coordinate with medical schools/academia and training centres for the production and supply of these critical human resources.

Upgrading and updating skills of care providers: Quality of care largely depends on quality of human resource. Upgrading and updating the skills of care providers will be done to enhance the quality of care. All positions of MCHWs and VHWs will be upgraded to ANMs and AHWs respectively and their skills will be upgraded and updated. Skills of care providers and support staff of HPs/SHPs/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.

Offering incentives to care providers: Performance based, and retention based payments systems will be introduced in the service delivery system. Three incentive packages for care providers will be developed and piloted. 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. This will also increase the productivity of the care providers.

Monitoring and ensuring right skills mix: Regular monitoring, supervision, facilitation, onsite support and technical backup contribute to increase the efficiency of HR in service delivery. De-concentration and delegation of authority of case management and resource management will also help to increase the efficiency. An approach of posting a team rather than focusing on physicians will be adopted to ensure the skills mix in order to enhance the efficiency in service delivery.

Strengthening HuRDIS, Human Resource and Financial Management Division and Personnel Administration Division: The present human resource information system contains only ¼ of the total personnel and the database is not kept up to date. Capacity building of HuRDIS for maintaining up to date and reliable information is imperative. HuRDIS will be strengthened through training, equipping and networking with other information systems for

retrieving, analyzing, disseminating and using of information. The human resource information system (HuRIS) will be made compatible with the personnel information system (PIS) of Ministry of General Administration and appropriate linkage will be established between the PIS and HuRIS. An evidence/ information based decision making system will be promoted in the field of human resource management.. Direct access will be given to Secretary, Director General, Joint secretaries and Regional Director to promote the use of human resource related information. A human resource management coordination committee will be created to coordinate the activities of Human Resource and Financial Management Division and Personnel Administration Division and National Health Training Centre,

Purchasing the service of key care providers: Creating new positions of health care providers is a lengthy process. In order to meet urgent needs for care providers, temporary contract appointments for key health care providers have been initiated to purchase the services of Obstetricians, gynecologists, MDGPs, medical officers, nurses and ANMs. A provision of Multi-years contract for the services of critical health care providers (Obstetricians, gynecologists, pediatricians, physiotherapists, 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. The purchasing service would be applied in other fields where service is urgent. Procedures and operational guidelines should be developed to purchase the services of these care providers for longer period.

Inclusion of Dalits and other highly marginalized in workforce: The process of inclusion of Dalits and other highly marginalized in health care workforce will be initiated. The underserved areas will be developed and additional one ANM will be provided to the HPs of that areas as *Rahat (welfare)* and trained ANM from Dalits and highly marginalized groups will only be hired for this purpose. In the plan period a total 1000 ANMs will be provided as *Rahat* (200 per year) in planned period.

Similarly, dropped out / additional positions of FCHVs will be selected only from Dalits and highly marginalized groups and they will be trained subsequently

Improving the skills mix for health care: At present only 4.2% of the total health force are medical doctors and only 12 percent are nurses, nearly half (47%) are paramedics and one-third (28%) are support staff. This skills mix hardly allow delivering the quality health care as demanded by people, therefore, strategy for skilled advancement for existing human resource should be done wherever possible and/or a part of vacant positions of unskilled should be upgraded as semi skilled workers. Provision will be made to integrate vertical programme supervisors (FP, EPI, TB/Leprosy, disease control etc) as public health supervisors and provide a training to them to increase their effectiveness and reduce the cost.

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

In the context of the expansion of the EHCS to deliver services equitably to all citizens, particularly to the poor and the marginalised, it is imperative that a well planned and

functional Health infrastructure system with the enabling environment for delivering quality health services equitably and sufficiently distributed across the country is in place. Therefore, EHCS implementation will entail substantial investments on new construction, and refurbishment and upgrading of existing facilities. At the same time, repair and maintenance of existing facilities as a regular and routine activity must be kept ongoing.

Critical Issues

For the prioritization of scarce resource allocation for physical facilities, the key areas of concern that have been identified are, to:

- Strengthen, Institutionalise and decentralise existing Health Infrastructure Information System (HIIS)
- Develop standard functional designs and guidelines that helps to increase quality, accountability and transparency
- Ensure sufficient appropriately located facilities
- Predictable and timely financing budgeting and resource Allocation mechanism
- Ensure repair and maintenance of existing Infrastructures through more rational budgeting using HIIS

Strategic Direction for Next Five Years

The NHSP-II 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 HIIS. This will be followed by the following strategies:

- Revisit government's policy to construct on donated lands only, as experience has shown that many of the donated lands have not been suitable for health infrastructure and have incurred huge costs in development.
- New construction will focus on locations most likely to increase access by the poor, vulnerable and marginalised to meet their health service needs.
- Develop upgrading criterion for SHP-HP, HP-PHCC, PHCC-Hospital.
- Upgrade/construct the PHCC buildings at an appropriate location able to serve a larger population than that presently accommodated in an HP building to the standard Primary Health Care Centre building with BEOC service.
- Addition of Birthing Centre in all the old HPs/PHCCs without it.
- Construction of CEOC in all the District Hospitals without it.
- Upgrade appropriate Sub-Health Post to Health Post and establish new Primary Health Centres in electoral constituencies which do not have Primary Health Centre as yet for making free service provision meaningful and effective.

- Based on defined functions, develop standard designs for each construction methods, specifications for building materials and finishes for all primary level of health facilities (HP, PHCC and District Hospital).
- Develop and implement standard construction guidelines.
- Develop and implement repair and maintenance guidelines and monitoring mechanism.
- Train technicians from DUDBC, DTO and DHO at the districts on the use of HHS and develop mechanism to update it regularly from the district
- Enhance the capacity of engineers and architects at DUDBC and DDO/DTO in the planning and implementation of Health Infrastructure.
- Adopt e-bidding for transparent tendering procedures and to 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.

6.4 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 side, these include:-

- i. Slow disbursement/release of fund/budget, exacerbated by an excessively complex budget structure with an unmanageable number of budget/program heads and activities, and with some duplication in program-activities, and frequent transfer/change of budget head/program. Late approval of the budget and changes in heads can result in long delays while MOHP re-programmes the budget at the beginning of FY.
- ii. 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-program activities, and a tendency of giving advances at the end of the FY.
- ii. Inadequate computerized accounting system. MOHP is dependent upon PCGO's FMIS and has no independent electronic system. The lack of an integrated MOHP system makes it difficult to resolve differences in figures of physical and financial progress reports, and delays submission of reports.
- iii. Weak inventory/store and assets management

- iv. An input oriented and top down system of budget planning, and a lack of program wise accounting formats in the Integrated District Health Program.
- v. Low priority for maintenance of medical equipments and hospital buildings
- vi. Transparency measures such as using and updating the Website, Citizen Charter and Documentation System have not been sufficiently prioritised
- vii. 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 the audit irregularities.
- viii. No separate rules/guidelines for non state partners/NGO contracting (one reason for low utilisation of PPP arrangements).
- ix. No uniformity of financial regulations in Hospitals, no specific rules for program implementation by Management Committee of facility/below district level, inadequate monitoring indicators and standard reporting formats.

The capacity and ability of MOHP 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 program, the direct budget execution practice by some EDPS, weak forecasting of external assistance, weak harmonization among EDPs(donor wise separate reports and audit practice), etc.

Most of these problems are long-standing and were also identified in the Bottleneck study(2006/7),annual review workshops, Independent Review (2007/08), annual financial audit and Performance Audits of (2007/08 and 2008/09).

Critical Issues

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 weak 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.

Action to address the problems

The problems are being addressed via an agreed 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 software for preparing the annual workplan 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 MOHP 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.

Strategies Direction for Next Five Years (2010/011 to 2014/015)

MOHP 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 MOHP working committee will be established to follow up on the implementation of the FM improvements, including audit irregularities and recommendations.

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

6.5 Procurement and Distribution

Leaving HRH apart, the most discussed issue during MoHP reviews at all levels is supply of drugs, equipments, buildings and their quality/condition. Obviously, major contributing factors for quality health care delivery come in forms of various commodities (medicines, instruments / equipments, furniture and other supplies), physical infrastructures (buildings for S/HPs, hospitals, labs. etc) and consultants as part of capacity research and enhancement program.

In order to correct procurement related anomalies that existed for decades in this country and delayed the entire development process, GoN has enacted a Public Procurement Act (PPA) 2007 and its rules that take care of procurement of commodities, works and services. MoHP officials are in the process of getting used to its practice. Under MoHP, commodities are procured from DoHS, RDHS and District (Public) Health Offices. Responsibilities of constructing physical facilities including repair and maintenance works costing one million rupees and above have been handed over to DUDBC. Concerned MoHP offices carry out the works 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.

Critical Issues

Procurement and related critical issues are existent in all three areas and they need to be addressed.

- **Delay:** In the absence of preparatory works in place and absence of required level of coordination amongst various divisions and sections, procurement activity does not meet its time line. Preparatory works means here timely planning of procurement activities, latest costing from the manufacturers and their agents. Delay is occurring due to **avoidance** of decision making for a number of reasons including a **sense of in-security** on the part of managers at the level of making decisions.
- **Standards /Quality:** MoHP does not have defined standards of space, equipments and instruments to be used in a particular level of health facilities. Once MoHP has a specification bank explaining standards/qualities of commodities and instruments to be procured for each tier of health facilities, the procurement work becomes simple and less time consuming. In the works side, there is no ownership of the projects and supervision from various tiers of the MoHP while construction work is in progress. This apathy towards works generates automatic negative results.
- **Capacity:** As PPA 2007 is new to MoHP staff at all levels, they are applying it gradually. Confidently practicing with new act and rules takes some time and the time taken depends upon how much effort has been put to learn new tricks. In case of MoHP, there have been efforts to orient and give new skill to its staff. When the issue of capacity is raised, understanding must accommodate not only the MoHP staff but also the bidder parties. Unless they understand the spirit of the bid documents, their attempts fail and the consequence is upon health care delivery.
- **Pilferages:** For reasons like inadequate transparency in the process and established norms and practices, procurement activities have been accused of causing leakages and loss of GoN 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, information leakage, absence of specifications defining standards of commodities or incomplete design and estimation in case of works provide loopholes for pilferages.
- **Transparency:** This is a tricky area and allegations will not diminish unless a transparent complaints handling mechanism is established. Pre-bidding meeting to explain various aspects of the bid document and taking suggestion from bidders from their experience are two ways for developing mutual confidence.
- **Price control/economy of scale:** Quality and cost remain two issues which perhaps top the agenda for discussion in MoHP reviews. Current practice of procurement under MoHP 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 program divisions and LMD. This makes repeated bid call for almost the same items, which is an expensive procedure to repeat. And also, there is less practice of multiyear procurement that needs to be considered.

- **Management efficiency:** Regular training and repeated practices are the two most respected elements to develop efficiency and procurement management is not an exception. However, personnel keep on changing under MoHP, which does not allow developing their proficiency. An enabling environment is the important aspect in order to accomplish the desired/expected result and MoHP needs to consider this aspect seriously in procurement too.
- **Interference:** This is an unseen killer of any system and gossips suggest that it applies in MoHP too. 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 for interference.

Distribution related issues stem from inadequate storage space, lack of sufficient 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.

Strategic Direction for Next Five Years

In order to procure quality goods, works and services timely, efficiently and cost effectively, a number of strategic steps will be introduced/ consolidated during the NHSP II period. 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, MoHP will establish a procurement unit at each level of health facility up to district level and build their capacity and update regularly. After some years all the districts will have trained persons and MoHP will not lose them once specialty is recognized. In case transfer takes place, new staff will come with the same skill.
- **Preparatory work:** There are few preparatory works to be completed in order to timely streamline the procurement activities. In the NHSP –II period, the health facilities will be classified on the basis of: a) type of services they will provide and b) their bed capacities. Once the classification and standardization of facilities is done, it is easy to determine the types of equipments, their quantity and level of sophistication. This will guide the professionals developing the specification of instruments/equipments and other commodities. As part of preparatory work, an extra hand will be assigned to carry out market survey 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 whole sale) 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, program divisions have been requested to develop a procurement plan while estimating their budget for the next fiscal year. On account of the practice of somehow getting a reduced budget compared to the estimated budget, the tendency has been not to prepare a procurement plan and develop specification at the time of budget estimation. This non

observance of the MoHP request on the part of the program divisions will not be accepted and strict emphasis will be on preparing the procurement plan at the **time of budget planning**. Procurement plan will be adjusted to the tune of red book figures if changes occur. This will foster better **coordination** amongst the concerned divisions and help timely procurement.

- **Transparent process in practice:** To avoid the pitfalls of pilferages, leakages and collusions, MoHP will introduce **e-bidding process**. Entire procurement related documents- specifications, instructions including downloadable authenticated PDF tender documents, will be made available in website so that transparency and 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. Mechanism of **pre-bid consultation** will be regularized and a mechanism for **managing complaint** will be devised.
- **Quality and multi-year procurement:** In order to make the process further transparent and ensure quality, procurement process will be made rigorous by introducing **quality control mechanism including WHO GMP certified producers**. Present capacity of DDA needs to be enhanced and LMD needs to have capacity to conduct **mobile lab tests** on sites to ensure quality. PPP with private sector laboratories will be promoted on strengthening the testing of health commodities and drugs.
- Efficiency will be gained through **multi-year contract** and introducing the concept of **CBLP**.
- The practice of central bidding and local purchasing (CBLP) for essential drugs, recently initiated, in order to address the issue of disparities in price, quality and quantity of medicines procured by the districts will be further developed, expanded, and improved along with their capacity building to shoulder the responsibility of procurement in both quality and the requisite quantity. Similarly, the practice of multi-year contract 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.

6.6 Governance and Accountability

A number of governance and accountability (G & A) issues has been included in the previous sections, this section deals with the key issues, future plans and mechanisms that are not included in other section of the document.

It has been increasingly realized that injecting resources to health will not achieve their intended results without giving proper attention to health governance issues. The following are the critical health governance issues that exist in the health sector of Nepal.

Current Context and Issues

As decentralization takes on a high profile in overall governance reform and Nepal's national development initiatives, the NHSP-IP (2004-2009) recognized decentralization of health services as one of the overarching sector reform strategies and a key approach to achieving the MDGs.

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 decentralized system of governance, and its Second Amendment further paved the road towards state restructuring through the federal setup. By principle, as the federal system becomes a more decentralized system, it needs timely and rigorous preparation by the state apparatus, the MoHP and related authorities in this case. 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 decentralized governance is the driving spirit.

It is widely recognized in the health sector that decentralized 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 and the marginalized groups, in particular. The broad objective underlying decentralization is to bring government closer to people with a view to empower them and to make service delivery 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 remained ineffective. The following are the key issues related to decentralization and local governance related to the health sector of Nepal.

a) 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 through top-down structure does not work effectively. Therefore, there is a need to focus on empowered community participation, local leadership, stakeholder's participation with local governance perspective following the 'subsidiarity principles'.

In the health sector of Nepal, decision making power lies largely at the center and community and other stakeholder's participation from local health governance perspective remained very weak. This resulted to less transparent system, weak local ownership and weak linkages with other sectors at district level and below.

b) Centralized planning and budgeting practices, and weak planning linkages

Another prerequisite, which still needs significant technical support, is the improvement of the planning and management capacity of health institutions at the district level and below and establishing functional planning linkages with the national level. There is a clear recognition that weak planning and management capacity is a critical constraint to delivering better health outcomes for the 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.

c) Weak downward accountability and local ownership

Over the years, MoHP handed over 1,433 local health institutions of 29 districts to local health management committees. MoHP also prepared operational guidelines to management of the health facilities at the decentralized level and provided orientation to key officials of local management committees. However, it was done in a very ad hoc manner without any preparation. Handing over of health facilities on a piecemeal basis in absence of clear vision, policy, and plan invited a number of management confusions 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, health system was not able to hear the voice of 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 government able to hear the voice of ordinary people, and make these institutions accountable to them.

d) Weak transparency and fiduciary risk

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

Strategic Directions and Future Plan**a) Accountable to the client 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.

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

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

b) Defining the 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 of delineation of clear functional assignment with proper financial backup for different levels of health governance according to the subsidiarity and stewardship principles in the context of federal structure.

c) Capacity building to local health management committee

Capacity building of local government units and local health management committees to better manage health service at local level is an important task. They need to be empowered with flexible grant to help address local health needs and develop their functional capacity. Currently, the National Health Training Center took initiatives, developed flexible training and capacity building modules and started strengthening management capacity of local health management committees. It brought quite positive impacts in realizing effective health service delivery and managing health at local level. It will be further coordinated, collaborated and expanded in the plan period.

d) 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 related issues threaten local ownership, weaken downward accountability, and undermine the effective utilisation of funds and challenge

sustainability aspects. In addition, lack of transparency and participation, limited coverage and access to health services by marginalized 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 decentralization and local health governance efforts and will provide evidences 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 long-run. It 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 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.

e) Transparency, Voice and Accountability

The Ministry introduced quite a number of policies and strategies to increase the access to and coverage of health services targeting to poor and marginalized groups of people. It has also started discussing policy issues using different policy forums (e.g. Health Sector Decentralization Policy Forum and others) as platforms. However, there is still a need to review policies in the changed political context and using the evidence as basis of improvements. There is also a need initiate open policy process where stakeholder's views are valued and accounted. For the purpose, civil society organizations will be involved in the policy discussions. Regular organization of public hearing at different levels of health governance will also help strengthening transparency, voice and accountability.

f) Inter-sectoral 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 WatSAN, nutrition and governance related health issues. There is a need to establish a mechanism for effective coordination and collaboration with other sectors.

f) Documenting and sharing best practices and learning

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

g) Strengthening transparency and reducing fiduciary risks

The Ministry is aware of some health governance issues and has already designed and implemented a number of initiatives to improve the health governance at different levels. These 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.

To improve the transparency and reduce fiduciary risks, the Ministry will ensure regular and timely public disclosure activities through MoHP 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 nation-wide in the NHSP-IP 2 period.

6.7 Institutional Arrangement for GESI

Various institutional mechanisms and structures have been created by GoN over the years to address gender and inclusion issues from central to regional and zonal levels. GESI strategy for MoHP is prepared and recently approved. However, there is the need of developing policies, and work plan for mainstreaming GESI, to increase capacity of service providers and increase the access of poor and marginalized in health services and increase the health service seeking behaviors of right holders.

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, utilization 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 on social inclusion, develop monitoring tools for social inclusion, and facilitating the process of 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 do necessary coordination.

A guideline has been prepared for social service units in central, regional and zonal hospitals which lays out the roles and responsibilities and is in the process of establishment. This unit will be staffed by 2-3 persons (depending on patient load) per hospital. The unit is expected to assist the poor and marginalized to access the services, recommend for partial or free treatment and coordinate with different departments in the hospitals.

MoHP has initiated the process of analyzing annual planning and budgeting from a gender and poverty perspective.

Further building on the above, the Ministry will:

- Strengthen Gender Responsive Budget Planning.
- Accelerate the process of establishment of social service units in central, regional and zonal hospitals.
- Plan and Develop indicators on GESI for analysis, monitoring and evaluation at each level and link with HMIS. Review HSIS (pilot tested) to see adequacy of desegregation for data and analysis mechanism on health service utilization by marginalized and update if necessary.
- Further strengthen GESI unit at MoHP and roll-out up to district level based on national GESIR strategy. Draft clear role and responsibilities of different departments and sections in MOHP and regional directorate, D/PHO and health facility in charges.
- Prepare necessary guideline to implement GESI's mandate from central to local level.
- Design and install identity card (to understand type and level of exclusion)
- Review and revise the existing HFMC guideline to make it 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.

7. Research, Monitoring and Evaluation

7.1 Current Monitoring System

Review: There is a monthly review at ilaka HP or PHC level which is reported to the district level. District does the similar monthly review and district level report is sent to region and centre. Region conducts 4 monthly review and center does an annual one. Center compiles all the information coming from districts and produces an annual report. Reviews at different levels are based on HMIS data.

Joint annual review: JAR is done among central level government officials, EDPs and other major stakeholders. Review focuses on macro level indicators and major agenda discussed are the government commitment (progress towards it) and milestone whether attained or not. After the review, JAR report is prepared.

Technical review: Periodic reviews are done before four monthly review at regional level and annual review at central level. This review intended to collect necessary information, analyse and present in regional and national reviews.

Progress tracking: There are five major data system which helps to track the health indicators, Population Census, Demographic Health Survey, Nepal Living Standard Survey, Maternal Mortality and Morbidity Study and Health Management Information System (HMIS). HMIS includes data collection, compilation, processing, dissemination, analysis & interpretation in a regular basis starting from lowest level of health institution to national

level. Coverage is excellent for Government services, but reporting by private and NGO health facilities is very incomplete. In addition there has been under reporting from central level hospitals.

HMIS is intended to monitor the achievement, coverage, continuity and quality of health services, assessing progress (evaluation), and to support planning and policy development. It includes disaggregation by age and gender. Recently, government updated HMIS to HSIS (being piloted in three districts) to more comprehensively track the contribution from private and community (including NGO) health institutions and get the disaggregated data by marginalization (caste/ethnicity as proxy). Result of HSIS tracking is yet to be seen. There are dangers of over-loading what is already a very detailed monitoring system, and it may be more feasible to collect data and analysis of exclusion and inequality from regular survey-based instruments, rather than from facility based data which has limitations (cant collect data on non-users, nor data by wealth quintile). Other data sources like national household survey, national livelihood survey, poverty monitoring analysis etc may give some data to compare some of the indicators over time. HMIS data corresponds remarkably well with survey based figures at the aggregate level, justifying confidence in the system.

7.2 Constraints and challenges of current monitoring system

Current monitoring mechanism of MoHP produce a range and level of detail of information that is without compare in the region, but systems are quite scattered, and there is limited analysis for inputting the result in the planning system. Monthly, four monthly and annual reviews at different levels do take place, and are based around review of the HMIS data. They need to become more systematic in analysis of progress against the indicators in the strategic plan (NHSP), and in discussing constrains within the system and looking for solutions. The current system does not have transparency and accountability issues built in, although these issues have received regular attention in the JAR. Consideration will be given to bringing together the national review held by DOHS, with the JAR reviews that are organised by MOHP for the purpose of coordination with the EDPs. There is considerable overlap between the two review processes.

HMIS needs to be more effectively used as a monitoring tool for the overall health system rather than simply a database. The annual DOHS report that incorporates the detailed tables from HMIS does include reviews of progress across the different national programmes, and the regional reviews provide opportunities for districts to compare progress with their peers, but the wealth of data expensively collected for the HMIS could and should be more consistently made available and used for management at all levels of the system..

The current monitoring system collects gender and age-disaggregated data but is not able to see the service utilization by the poor and marginalized as data not yet fully incorporated in the reporting system. This weakness is intrinsic to facility based reporting systems, but is addressed through data collected in periodic surveys such as DHS.

HMIS does not have linkages with financial information system, human resource information system and logistic information system.

The systems for feeding the results of reviews into the planning process as inputs and to policy makers for further policy analysis need to be strengthened. The JAR in particular does discuss the AWPB and does produce action plans to address issues that have been identified, but capacity for follow up needs to be strengthened. Combining the JAR with the DOHS annual review would help to strengthen the linkage from the review to implementation coordinated by the DOHS programme heads.

7.3 Strategic recommendations

Develop current review system in a monitoring frame of overall health system to see the progress of major indicators at different levels. At district level and below, accountability can be strengthened by ensuring participation by the right holders, and by I/NGOs and other stakeholder's in review process so that transparency and accountability can be taken care of.

Review HSIS [pilot] result and develop further to feed in the data for the reviews mentioned above. HSIS should cover private sector contribution and provide disaggregated data by marginalization so that coverage of the health system and utilization by different class, cast and ethnicity and by location can be monitored.

Devise a mechanism to analyse the performance indicators laid out in the logframe (Annex 1) and feed in the information to health facility in charges, HFMC, D(P)HO, RD, central level decision makers, planners, policy makers and EDPs. Ministry will scale up HSIS in all 75 districts.

Regular supervision will be done from the centre to region/district and from district to peripheral levels, to help solve problems, educate care providers and support implementation of the health plan. Systematic guidance will be provided and kept current to help define expectations for the frequency and type of supervision that should be undertaken, and the criteria against which performance should be monitored.

Client exit interviews will be introduced for regular monitoring of client satisfaction.

A monitoring committee at each level will be formed which will collect suggestions from the clients by means of a suggestion box. Analysis modality and response mechanism will be developed.

Regular surveys will continue to be conducted to collect facility-based data on client characteristics and satisfaction, availability of care providers and drugs, budget adequacy and allocation of funds. The survey will also collect data on client volume, trends in health care utilisation and costs. These are currently undertaken on a trimesterly frequency, but the frequency actually required will be kept under review.

A household survey will be conducted to monitor the health seeking behaviour of women aged 15-49 of different caste, ethnicity, wealth, and education, assess the financial and non-financial barriers to care, use of services, and reduction in household costs for health care.

Current MMMS will work as base line. Consideration will be given to whether a similar survey should be conducted at the end of NHSP II so that progress on mortality and morbidity can be analysed.

Annual social audit will be made mandatory at each health institution, district, region and center. HFMC will do its own monitoring of their institution.

7.4 Policy Research

There continues to be a need for policy research to feed into the review cycle and to inform the development and adjustment of policies and programmes based on evidence. A particular weakness of the monitoring system is the lack of integration of data and analysis of physical progress with economic and financial analysis. At present, there is an excessive dependence on TA and on ad hoc studies financed by EDPs, and there would be merit in building institutional capacity within MOHP. Three specific proposals are:-

1. Institutionalising NHA, public expenditure review

The Health Economics and Financing Unit of the Ministry of Health and Population will regularly update the data base of NHA, PER, produce a report and promote the use of the information to inform choices on how best to allocate the available budget between competing uses. They will also input economic and costing analysis into the preparation of MOHP budget proposals to the Ministry of Finance, with a particular role in supporting the preparation of the MTEF.

2. Conducting economic analysis

Economic analysis is particularly important in focusing resources where they can have the biggest impact in achieving health goals, 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 the evidences to inform the policy makers and programme managers.

3. Strengthening Health Economics and Financing Unit (HEFU), MoHP

To build permanent capacity for economic analysis in support of policy, the HEFU will be strengthened by providing additional human resource, training, books and journals, and networking. The linkage will be established with Nepal Health Economic Association and other research institutions.

8. Financing NHSP-IP 2

8.1 Health sector financing strategy

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

Chapter 4 describes how the Government financing of health services has gradually expanded beyond free provision of promotive and preventive interventions, to gradually include within EHCS a broader range of free-to-user or highly subsidised curative services. It discusses the evidence that the broadening of the package of curative services that are provided for free, and the extension of eligibility to receive those services, has been associated with a big increase in demand, and a narrowing of inequality in utilisation of services. The planned further expansion of coverage to make EHCS free to all users up to and including DH level will help to address the problem identified in the facilities survey that more than half of the poor are not receiving the level of support to which they are entitled. It should result in further increases in utilisation and further reductions in inequality.

Although there is a strong rationale for the modest extension of free-to-user services proposed under NHSP-IP 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 OPD contacts are for non-communicable diseases and injuries. The expanded prevention effort proposed under NHSP-IP 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.

During NHSP-IP 2, a health financing strategy will be developed in order to inform future strategic choices about how best to meet the growth in demand for an ever more complex range of health services. There are no easy answers, and this document will not pre-empt the findings of the strategy.

The experience of other countries that have succeeded in achieving close to universal coverage suggests that a mixed approach may be needed. Experience suggests that 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 as to use.

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. It may be feasible to find other approaches such as micro-credit to smooth the burden of unexpected health costs. It may be feasible to build on existing schemes for free beds for the poor in private hospitals and medical schools. The strategy will seek to identify options and criteria for access.

8.2 Financial Resource Envelope

Table 7.1 provides one estimate of the resources potentially available to finance Government health expenditure during NHSP 2. They assume that GDP growth will accelerate from 5.5% in 2009-10 to reach 7% per annum from 2012-13, that public expenditure will retain a constant 22% share in GDP, and that the health share in public expenditure will steadily increase to reach the previous peak of 7% of public spending. For the first two years, these projections imply spending about 4% higher than assumed in the current Ministry of Finance approved MTEF. For the whole NHSP 2 period, real health expenditure would increase by 54% between 2009-10 (the final year of NHSP 1) and 2014-15 (the final year of NHSP 2). In per capita terms, spending would increase by 38%, from the current level of Rs 646 (US \$8.5) to Rs893 (US\$11.7), both expressed at 2009-10 prices and exchange rates. Over the five year period since the final year of NHSP1, an increase of public health spending per head of Rs247, about \$3.2, would be implied.

MOHP Health Expenditure	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Nominal expenditure	17.84	20.61	23.07	26.59	30.55	35.07
Real expenditure, 2009-10 prices	17.84	19.63	20.86	22.97	25.13	27.48
Annual growth rate in real expenditure	19.2	10.0	6.4	10.0	9.4	9.3
Real spending per head, Rupees	646.4	696.0	724.8	779.8	834.7	893.1
Real spending per head, US \$	8.5	9.2	9.5	10.3	11.0	11.7
Memorandum items						
Real GDP growth rate	5.5%	5.5%	6%	7%	7%	7%
Public expenditure share in GDP	22.2%	23.0%	22.0%	22.0%	22.0%	22.0%
Health share in public expenditure	6.24%	6.38%	6.52%	6.70%	6.85%	7.00%

Sources: - 2009-10 budget speech; June 2009 economic survey; MTEF 2009-10 to 2011-12.

Average real growth in MOHP expenditure on health over NHSP 2 would be 9% per annum on these assumptions. Financing this increase will require a significant increase in both Government and EDP resources for the health sector. We do not have detailed analysis of EDP financing intentions, but Table 7.2 presents two scenarios:-

- If GON were to continue to finance 56% of MOHP expenditure and EDPs 44%, the same average shares as in NHSP 1, then real GON financed spending would need to increase by 10.7% per annum compared to the 2009-10 budget, and EDP spending would need to grow by 7.1% per annum. EDP spending growth is slower because EDP spending was budgeted to be a higher share (48%) in the 2009-10 final year of NHSP-1. The implication of this scenario, on the same macro-economic assumptions as in Table 7.1, is that GON would need to devote a higher share of domestic sources (revenue plus domestic borrowing) to the health sector, increasing from 4.5% over the last two years to about 5.2% in the final year. This share is lower than the share of health in the budget because health is a popular sector for the EDPs, and receives a higher than average share in external funds.
- If GON is unable to allocate an increased share of domestic funding to the health sector, then GON finance for the sector would increase by about 7.4% per annum. Achieving the increases indicated in table 7.1 would require EDP funds to increase by about 10.7% per annum in real terms. EDPs would finance half of total MOHP plus EDP expenditure.

Table 8.1: Budget Projections

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	Ave growth rate
NRs Billions							
Same shares as in NHSP 1, Real 2009-10 Prices, NRs Bn							
GON	9.32	11.07	11.78	12.96	14.17	15.50	10.7%
EDP	8.52	8.56	9.11	10.02	10.96	11.98	7.1%
Total	17.84	19.63	20.89	22.97	25.13	27.48	9.0%
Implied health share of GON domestic finance	0.045	0.049	0.049	0.050	0.051	0.052	
GON provide a constant 4.5% share of domestic sources:							
GON	9.33	10.16	10.86	11.65	12.47	13.34	7.4%
EDP	8.51	9.48	10.04	11.32	12.67	14.14	10.7%
Total	17.84	19.63	20.89	22.97	25.13	27.48	9.0%
Memorandum items:							
Revenues plus domestic borrowing:							
NRs Bn	207.4	225.7	241.3	258.9	277.0	296.4	
Percentage of GDP	16.1	16.6	16.8	16.8	16.8	16.8	

The future outlook for EDP support for the health sector remains uncertain. 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 expenditure at about 70% of the level in real terms that was achieved in the last two years of NHSP 1. GAVI funding is not guaranteed beyond 2011. On the other hand, there is a strong possibility of at least one additional donor joining the pool and of significant new commitments for nutrition and from major non-pool donors. The uncertainty reinforces the need for EDPs to give far clearer and longer-term indications of their likely support and the expenditures for which it is available. It is very difficult for MOHP to make decisions on whether to extend the EHCS package without knowing what resources might be available.

Based on currently available information, the resource envelope proposed in Table 7.1, though implying a painfully slow increase in resources for the health sector, will be difficult to achieve. Although some overall increase in financial resources from the EDPs should be achievable, current indications would provide at most half of the increase required to maintain the same EDP share as in NHSP1, and there is a significant downside risk to these guesstimates. Moreover, the largest part of the potential new funding is likely to be from non-pool fund donors, and may not necessarily fund the programmes identified by Government to be of highest priority. There is also a significant downside risk to the domestic revenue assumptions, which depend on achieving accelerating economic growth in the context of a difficult international and domestic environment, as well as finding an increased share of resources for the health sector. Achieving the modest increase in per capita spending envisaged will thus be a difficult challenge.

8.3 NHSP-2 Costs and Resource Allocation

NHSP-2 should be thought of as an extension of the approach that has brought about the remarkable achievements of NHSP-1 in reducing under five and maternal mortality. 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 marginalised and by women will be addressed, and new initiatives will be gradually introduced as funds permit and 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 the public sector funds that are available for the health sector.

Table XX presents some very rough estimates the additional costs of the major initiatives that will be prioritised during NHSP-2.

	Baseline	Increase on Baseline, NRs Billions				
	2009-10 Budget	2010-11	2011-12	2012-13	2013-14	2014-15
Central Functions						
HR cost	3.015	0.302	0.634	0.993	1.401	1.845
BCC						
Nation:	0.057	0.086	0.114	0.114	0.114	0.114
District:	0.065	0.098	0.13	0.13	0.13	0.13
Research (1% of budget)	n.a.	0.196	0.209	0.230	0.251	0.275
Curative Care						
Free services to all at Dist. Hospital		0.163	0.359	0.594	0.876	1.215
Increased OPD below hospital level		0.184	0.352	0.549	0.720	0.916
Family Health						
Raise FCHV fund to NR100,000		0.200	8.4	8.5	8.6	8.7
CPR commodities	0.281	0.018	0.051	0.103	0.181	0.295
Maternal health						
Expansion of free delivery service, add. Cost		0.035	0.077	0.118	0.159	0.210
Extend safe abortion for poor and disadvantaged in remote areas		0.015	0.03	0.045	0.06	0.075
Free LIP surgery		0.228	0.285	0.38	0.57	0.76
Non-surgical or pessary		0.002	0.003	0.006	0.012	0.018
Child health						
Newborn care package		0.024	0.030	0.037	0.043	0.050
Nutrition						
Community based nutrition		0.054	0.076	0.097	0.130	0.162
Community and centre based rehabilitation of acute cases		1.301	1.711	2.140	2.567	3.054
Supp. Food to malnourished U5 children		3.860	5.528	7.271	9.917	12.681
Non-Communicable Diseases						
Piloting introduction of mental health in PHC		0.001	0.003	0.007	0.014	0.021
Oral health in PHC		0.019	0.028	0.037	0.046	0.056
Totals						
Additional MOHP		6.786	9.621	12.858	17.220	21.875
\$ p.c.		3.1	4.3	5.6	7.3	9.0
Exclude supp feeding		2.926	4.094	5.585	7.303	9.193
\$ p.c.		1.3	1.8	2.4	3.1	3.8

Central Functions

We have not attempted to cost all aspects of the NHSP, nor to attribute all cost increases to specific programmes.

Human resources 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.

BCC A number of key promotive 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.

Research A number of studies and pilots are proposed in the plan document. These are not individually costed or phased in the cost assumptions, but additional provision equal to 1% of the total budget is made for research.

Procurement: The costs of additional drugs and equipment and the annualised costs of physical infrastructure are built in to the unit costs for inpatient and outpatient costs and the unit costs of the new programmes.

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 in real terms at the level of the 2009-10 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.

Curative Care

Extending free services to district hospital level

The table assumes that EHCS at district hospital level will be made free to all, and that the volume of OPD, in-patient and emergency services at that level will nearly triple by 2015. The unit costs are derived from the study by Ensor and W, and include annualised capital costs. The costs can be thought of as long-term sustainable expenditure levels, but the actual investments in facilities and staff to deliver the increased level of services over the five year plan period would probably be different. The normal assumption is that they would be higher; in the case of Nepal, with considerable unused capacity in staff and buildings, this may not be the case, and marginal costs may be mainly the additional operating costs including any incentives required to persuade staff to deliver the additional services.

Increasing OPD coverage below hospital level

New and repeat OPD visits to public sector facilities and via ORCs below hospital level are also assumed to increase, from about 0.57 per capita at present to 0.75 per capita by 2015. The unit cost per OPD contact is assumed to be the same as for the district hospital. The increase in the volume of services is assumed to reflect improved coverage of ORC, improved staff incentives and quality of service as a result of more adequate drug supplies, together with demand side factors reflecting in particular increased access and increased awareness of free services of improved quality.

Family health

The table includes the cost of additional family planning supplies to achieve the target CPI; of 55% by 2015; and explicit costing of the increase in the FCHV incentive fund. Other incremental costs are not explicit, but the assumed real increases in human resources and in OPI coverage will partly finance strengthened support and supervision and scaling up of coverage of on-going programmes.

Maternal health

The costing of the expansion of free maternal health services is based on the study by Ensor and W, adjusted to 2009-10 prices and to the target of achieving 40% institutional delivery by 2015. The cost estimates include annualised capital costs for investment in new CEOC/BEOC facilities. The actual phasing of those investment costs will be front-end loaded, and will require higher spending in the early years than is estimated here.

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 sector²⁷. 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 mesoprostal, where unit costs are extremely low.

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 NRs19,000²⁸. 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.

Newborn care package

The newborn care package has been roughly costed based on Borghi's 2005 study which calculated the unit cost for a community-based newborn care package in Nepal, including health system strengthening. The NRs 95 unit cost is based on updating Borghi's costs to 2009-10 prices, but these costs represent a minimum set of community based interventions, and do not therefore relate to the specifics of the Nepal programme. The costs assume 75% coverage of live births is reached by 2014/15. The costs for the community based

²⁷ Asia Safe Abortion Partnership, www.asap-asia.org

²⁸ Unit cost estimates from Farkouh, 2008

interventions are very low. Costs of facility based interventions are assumed to be largely captured in the costing of the free delivery care programme.

Other child health costs

With IMCI now operating in all districts, and immunisation coverage relatively high, other child health interventions have not been explicitly costed.

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. Following the work of the EHCS thematic group, re-habilitation 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 re-habilitation is expanded and proves more cost-effective. Coverage is assumed to increase to 75% of those in need by 2015.

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, 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.

Communicable disease control

The CDC programme is on-going. There are some new challenges on the horizon, but there is also scope for off-setting savings through a more integrated approach, and for some reduction in costs as the incidence of some of the major diseases falls while others approach eradication. We have not costed any specific increase in the costs of CDC over the period, although CDC will benefit from some of the overall increases in expenditure on the health system. The costs of the neglected diseases programme can and should be added in the next draft.

Non-communicable diseases and injuries

The main intervention with regard to NCD is an increased prevention effort. This is not explicitly costed, but both national and district level spending on BCC is assumed to triple in real terms, allowing scope for major new initiatives on both NCD and road traffic accidents. The proposed improvements in accident and emergency provision near to highways will be

tackled within the physical investment programme when resources per assumption at this stage that the overall scale of the capital budget will be increased for this purpose.

Mental Health WHO estimate that 12% of the population have mental health problems. The cost estimate is based on updating estimates by Chisolm et al that it costs 20 cents per person to add a mental health component to primary health care. Coverage is assumed to reach 10% of the country by 2015.

Oral health Based on a Thai study, the cost assumes 65% of 5-15 year olds are covered by an oral health programme by 2015, at unit cost of NRs80.

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:-

- i. Medical waste management
- ii. Adolescent friendly services
- iii. Expanded school health (assumed to be part of the cost of expanded OPD coverage)
- iv. Action on gender-based violence
- v. Support to municipal MCH services
- vi. Costs of strengthening facility management through accreditation and stronger users groups are assumed to be absorbed within the cost of expanded services
- vii. Data on the neglected diseases programme became available to the team too late to be incorporated, but will be in a subsequent draft.

The next draft will try to improve on the current estimates, particularly by explicitly costing the physical investment and human resource assumptions.

Conclusions

This discussion presents some rough guesstimates of possible costs for the major priorities that will be implemented under NHSP-2 in order to illustrate that the programmes that are intended to be introduced are likely to prove broadly feasible and sustainable in financial terms. Excluding the costs of supplementary feeding or conditional cash grants for malnourished children, the rough costings imply additional annual expenditure at 2009-10 prices of \$3-\$4 per head by 2015. This is higher than the \$3.2 per capita rough estimate of the possible increase in resources by 2014-15, but not unmanageably so. The main conclusion to draw from the very rough figures is that the proposals in this plan are not an irresponsible 'wish-list', but add up to a responsible and well thought out programme of evidence-based proposals that can be broadly accommodated within a feasible estimate of future growth in resources. There is a financing gap, but it is one that can be bridged, either as the excellent track record attracts additional support, or by prioritizing and adjusting the phasing and the design to fit within the resources that are actually available.

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	Achievement						Target		Remarks
	1991	1995	2001	2006	2009 ^a	2010	2015		
Maternal mortality ratio ^b	539	539	415	281	229	250	134	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	3.0	2.5	Assumes a continuous linear decline; data source for verification--DHS 2011 and 2016	
Adolescent Fertility Rate (15-19 years)				19			15	To be verified by DHS 2011 and 2016	
CPR (modern methods)	24	26.0	35	44	45.1	48	55	Assumes a continuous linear decline; 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	55	38	Assumes a continuous exponential decline; data source for verification--DHS 2011 and 2016	
Infant Mortality Rate	106	78.5	64	48	41	44	32	Assumes a continuous exponential decline; data source for verification--DHS 2011 and 2016	
Neonatal Mortality Rate		49.9	43	33	20	30	16		
% of underweight children		49.2	48.3	38.6	39.7	34	29	Weight-for-age < 2 SD.	
% of stunted children		48.4 ³⁰	50.5 ³¹	49.3 ³²	45.5 ³³			Height-for-age < 2 SD.	
Spread of HIV/AIDS among MARPS				IDUs: 10% MSMs: 4% FSWs: 2%		Halt and reverse trend		HIV infection among IDUs was 10% in 2007; among MSMs, 4%; and among FSWs, 2%.	
TB incidence, prevalence and death rates (prevalence rate per 100,000)	460		310	280	138	Halt and reverse trend		TB success rate was 89% in 2009. It should be maintained through 2015.	
Malaria incidence and death rates (prevalence rate per 100,000)	196		52	25		Halt and reverse trend		Target?	

^a 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.

^b Age group (0-36 months)

^c Age group (0-59 months)

^d Age group (0-59 months)

^e Age group (0-59 months)

Specific Objective	Strategy	Action/Activity	Intermediate indicator and target	Outcome or Impact indicator and target
1. To increase access to and utilization of quality essential health care services	Expand the EHCS package to include affordable nutrition and mental health services Reach remote rural populations, populations limited by terrain, by road access or access to transportation Overcome supply-side constraints to access and use Reduce demand-side constraints to access and use Decentralize management of health facilities to districts and local management committees Promote public–private (NGO and community) partnerships Strengthen referral practices Implement comprehensive national BCC Develop and implement a broader nutrition package Promote healthier lifestyles to combat growing burden of non-communicable diseases Scale-up community-based newborn care package	Scale up free essential health care services, including the Aarva programme, CBNCP and SAC at primary health care level and district hospitals Deploy and retain trained and motivated staff, especially in remote rural areas Build and maintain health and sub-health posts in communities most in need Expand outreach clinics at community level Adopt a strategy to reach people in remote areas, including maternity waiting homes and use of ultrasound and misoprostol for PPH prevention Allocate resources from local bodies Establish more PPPs for essential health care delivery Ensure minimum stocks of 3 to 5 months of free essential drugs and program commodities at district health facilities Distribute impregnated bed nets	% of children under 12 months of age immunized against DPT 3 (PENTA) and measles (or fully immunized per HIMS scale up) at least 85% annually disaggregated by gender, caste/ethnicity, wealth, and region Contraceptive prevalence rate (modern methods) from 44% in 2006 to 55% by 2015 disaggregated by method, age, caste/ethnicity, wealth, and region % of deliveries by SBAs from 22% in 2008 (28.8% NFHR 2009 survey) to 60% in 2015 % of institutional deliveries from 18% in 2006 to 40% in 2015 EOC met need increased from 31% in 2006 to 45% in 2015 Caesarean Section rate to be increased from 2.7% in 2006 to 4% in 2015 Obstetric case fatality rate to continue at less than 1% Knowledge of safe abortion sites increased from 50% in 2006 to 75% in 2015 Abortion complications reduced from 14% in 2009 to 7% in 2015 Availability of post-abortion family planning services in facilities increased from 50% in 2006 to 60% in 2015	Reduce neonatal mortality rate from 33/1,000 live births in 2006 to 16 by 2015 disaggregated by gender, caste/ethnicity, wealth, and region Reduce infant mortality rate from 41/1,000 live births in 2008 to 32 by 2015 disaggregated by gender, caste/ethnicity, wealth, and region Reduce under-five mortality rate from 51/1,000 live births in 2008 to 38 by 2015 disaggregated by gender, caste/ethnicity, wealth, and region Reduce maternal mortality ratio from 281/100,000 live births in 2008 to 180 by 2012 and to 134 by 2015 disaggregated by caste/ethnicity, wealth, and region Reduce total fertility rate from 3.1 in 2006 to 2.5 by 2015

Specific Objective	Strategy	Activity/Activity	Intermediate Indicator and target	Outcome or Impact Indicator and target
	<p>Develop, pilot and scale up an urban community care approach</p> <p>Integrate disease surveillance</p>	<p>Initiate cervical cancer screening through VJA</p> <p>Scale-up uterine prolapse programme at hospitals and camps</p> <p>Include co-packaged medical abortion drugs in essential drugs list</p> <p>Improve transport systems, including ambulances and availability of emergency funds</p> <p>Strengthen Health Facility Management Committees</p> <p>Carry out intersectoral action and coordination to address gender-based violence</p>	<p>% of hospitals that have at least 2 ob/gyns, 2 anaesthesiologists, 10 staff nurses and blood service, including Voluntary Sterilization Care (VSC)</p> <p>% of PHCCs that provide BEOC, including SAC and at least 5 FP methods, including VSC</p> <p>% of health posts that operate 24/7, including delivery services and at least 5 FP methods</p> <p>% of women 15-49 with comprehensive knowledge about AIDS from 19.9% in 2008 to 40% by 2015</p> <p>% of children treated with antibiotic for pneumonia from 25.1% in 2008 to 50% by 2015</p> <p>% of underweight children under five years of age reduced from 39.7% in 2009 to 29% by 2015</p> <p>% of children under age 5 stunted reduced from 45.5% in 2009 to 33%</p> <p>% of low birth weight babies decreased from 33% in 2008 to 25% by 2015</p> <p>% TB treatment success rate to 89% in 2009 and to be maintained through 2015</p> <p>% of children exclusively breastfed in the first 6 months increased from 53% in 2007 to 60% by 2015</p> <p>% of pregnant women attending at least one antenatal consultation during first trimester OR at least 4 visits during pregnancy increased from 35.2% in 2008 to 80% by 2015</p>	

Specific Objective	Strategy	Action/Activity	Intermediate Indicator and target	Outcome or Impact Indicator and target
<p>2. To improve equity of access to and utilization of essential health care services by reducing disparities between the poor and wealthier, and otherwise disadvantaged and advantaged</p>	<p>Continue implementing EHCSS free of charge, including essential drugs, and expand to include lab and diagnostic services, HIV testing and safe abortion</p> <p>Introduce demand- and supply-side schemes in essential health services</p> <p>Implement MoHP GESI strategy</p> <p>Target schemes to poor and disadvantaged</p> <p>Increase resource allocation to essential health care services</p> <p>Implement targeted and tailored BCC and community mobilisation</p>	<p>Introduce more incentive schemes for targeted groups</p> <p>Implement focused health interventions to improve the health of poor and disadvantaged</p> <p>Disaggregate monitoring and analysis by gender, caste, ethnicity, wealth, and region</p> <p>Implement community mobilization through women and youth groups/networks</p>	<p>Intermediate indicator and target</p> <p>Zinc supplementation for treatment of diarrhoea cases available at district facilities</p> <p>% vitamin A coverage maintained at 90% (2009) or more for children aged 6-59 months</p> <p>% coverage of IDU, MSM, and FSW populations with prevention services increased from 76%, 54%, and 65% in 2009 to 80%, 60% and 70% respectively</p> <p>Utilization of essential health care services (outpatient, inpatient, especially deliveries, and emergency) by targeted groups, and disadvantaged castes and ethnicities at least proportional to their populations by 2015</p> <p>% of clients satisfied with their health care at district facilities is at least 80% among targeted groups, and disadvantaged castes and ethnicities by 2015</p>	<p>Reduce disparity of neonatal mortality rate between castes / ethnicities, wealth and ecological zone by 50%</p> <p>Reduce disparity of infant mortality rate between castes/ethnicities and wealth by 50%</p> <p>Reduce disparity of under-five mortality rate between castes/ethnicities and wealth by 50%</p> <p>Reduce disparity of maternal mortality ratio between castes/ethnicities and wealth by 40%</p>

Activity	Action/Activity	Outcome or Impact Indicator and target
<p>Strengthen health service delivery systems in rural health care facilities</p> <p>Implement a Performance-based payment system</p> <p>Improve human resources for health management</p> <p>Strengthen national monitoring and evaluation, including free essential care and EOC disaggregated by gender, caste/ethnicity, wealth, and region</p> <p>Carry out research to strengthen service delivery modalities and improve equity</p> <p>Mainstream social auditing at health facilities</p> <p>Ensure Reproductive Health and Safe Motherhood and Newborn Health commodity security</p>	<p>Human resources training, including production of SBAs, ANDEPs, OACyns, Paediatricians, Anaesthetist Assistants, Lab technicians</p> <p>Human resource deployment and retention, especially of doctors and nurses, and improve on-site supervision</p> <p>Create new positions for CEOC</p> <p>Physical infrastructure development: Population- and travel time-based allocation of health services</p> <p>Availability of essential drugs and commodities</p> <p>Strengthen Regional capacity, including SHNH focal person for supervision and monitoring</p> <p>Create PHN posts in all DPHCs</p> <p>Include EOC monitoring up to PHCC level</p> <p>Conduct Maternal Mortality and Morbidity survey</p> <p>Ensure continued functioning of LMS with expanded RSHS/INH drug list to ensure no stock outs</p>	<p>At least 85% of the MoHP budget is spent by 2015</p> <p>At least 75% of the MoHP budget has been allocated to EHCS by 2015</p> <p>90% filled posts at PHCCs and district hospitals by doctors and staff nurses</p> <p>One health facility per 3,000-5,000 population; 1 HP (with 2 SBAs) per 5,000 population (with 4 SBAs) per 50,000 population; and 1 district hospital bed per 5,000 population</p> <p>80% of sub-health posts that have sufficient space per MoHP standard (need baseline)</p> <p>90% of district facilities will have no stock outs of tracer drugs/commodities for more than one month per year by 2015</p> <p>At least 5,000 additional Female Community Health Volunteers (FCHVs) will have been recruited and deployed in the mountain region and female districts by 2015</p> <p>90% of actions identified in the governance and accountability action plan have been implemented by 2015</p> <p>At least 25% of district facilities will have been subjected to social audits by 2015</p> <p>A comprehensive health care finance strategy will be approved by 2012</p> <p>5,000 SBAs by 2012 and an additional 7,000 by 2015</p>