

Health Infrastructure Development and Maintenance Works

Capacity Assessment for Infrastructure Development and Maintenance Works

Sunil Khadka 1/11/2011



An assessment of capacity building for infrastructure development and maintenance works and to deliver NHSP 2 results framework

Capacity Assessment for Health Infrastructure Development and Maintenance Works

Contents

	Abbreviations and acronyms
	Acknowledgements4
1.	Context/Background
2.	Infrastructure Development And Maintenance: Institutional Setting
3.	Technical Issues
	3.1 Planning6
	3.2 Design and Construction of Health Facilities7
	3.3 Tendering
	3.4 Execution: Reporting and Management8
	3.5 Monitoring and Evaluation8
	3.6 Coordination and Ownership8
	3.7 Regular Repair and Maintenance8
4.	INSTITUTIONAL ASSESSMENT9
	4.1 Human Resources and Skills9
	4.2 Fund Release10
5.	CAPACITY DEVELOPMENT STRATEGY10
	5.1 Health Infrastructure Information System (HIIS)10
	5.2 Physical Assets Management (PAM)10
	5.3 Design Standards11
	5.4 Enabling environment including waste management11
	5.5 Construction planning12
	5.6 Repair and maintenance
	5.7 Tendering and contracting
	5.8 Planning and budgeting13
	5.9 Monitoring and reporting14
	5.10 Equipment supply14
6.	PROPOSED TECHNICAL ASSISTANCE14

Abbreviations and acronyms

AWPB	Annual Work Planning and Budgeting
DFID	Department for International Development
DoHS	Department of Health Services
D(P)HO	District (Public) Health Office
DTO	District Technical Office
DUDBC	Department of Urban Development and Building Construction
e-AWPB	Electronic Annual Planning and Budgeting
EDP	External Development Partner
EHCS	Essential Health Care Services
FA	Financial Aid
GoN	Government of Nepal
HIIS	Health Infrastructure Information System
JFA	Joint Financing Agreement
MD	Management Division
MPPW	Ministry of Physical Planning and Works
MoHP	Ministry of Health and Population
NHSP	Nepal Health Sector Programme
NHSP-IP	Nepal Health Sector Programme-Implementation Plan
NHSSP	Nepal Health Sector Support Programme
NPC	National Planning Commission
PAM	Physical Assets Management
PHCC	Primary Health Care Centre
PLAMAHS	Planning and Management of Assets in the Health Sector
SSMP	Support to the Safe Motherhood Programme
STTA	Short Term Technical Assistance
ТА	Technical Assistance

Acknowledgements

I am grateful to all respondents listed in Annex 3 for giving their time to discuss this work.

1. Context/Background

Sunil Khadka, currently working as Infrastructure Development Adviser, undertook an initial assessment of the existing institutional capacity in health infrastructure development and maintenance and the Technical Assistance (TA) required under the new Nepal Health Sector Support Programme (NHSSP) to NHSP-II. The assessment was conducted in the period 4th to 10th December 2010, with follow up work until 9th January 2011.

Well planned and managed infrastructure is essential to the creation of an enabling environment for provision of quality health services and the motivation and retention of skilled human resources. This includes ensuring the safety of service providers and users within health facilities. Sustainable operation of facilities, including buildings, medical equipment and support services, with equitable access and distribution, requires proper planning and efficient utilisation of available resources. Currently the health sector suffers from shortages of appropriate infrastructure, so that health staff often struggle to provide services in unsuitable buildings without essential functional equipment and supplies.

It is acknowledged that institutionalisation of regular and planned maintenance is as important as new construction, to ensure buildings remain fit for purpose and avoid wastage of resources when they deteriorate to the point where major expenditure is required. The Government's Maintenance Strategy for Health Infrastructure (2007) marked a major shift in attitudes and practice, and led to a marked improvement in maintenance, with increased budget allocation.

The Nepal Health Sector Programme Implementation Plan (NHSP-IP) 2004-2009, in line with the National Health Policy 1991, aimed to improve health facilities by establishing structures and systems for resource allocation that support effective management of physical assets and procurement, distribution and rational use of drugs, supplies and equipment. The Health Care Technology Policy 2006 resulted in formulation of strategies, guidelines and work plans to improve physical assets management. The Health Care Waste Management Assessment and Action Plan 2003 and Repair and Maintenance Strategy 2007, with the electronic database inventory of health infrastructure, provide a foundation of sound policies and strategies. Physical assets management now requires support to ensure these are implemented as envisaged, and institutionalised through efficient processes.

The emerging context of the anticipated new constitution, post-conflict reconciliation and restructuring of the state to a federal government will provide Nepal with major opportunities, as well as challenges. The guiding strategic document will be the Nepal Health Sector Programme NHSP-II (2010-1015), which commits to equitable access to health care for all and greater efficiencies in expenditure for logistics and health infrastructure development.

2. Infrastructure Development And Maintenance: Institutional Setting

No separate division/unit for health infrastructure development existed until 2051 BS (1995), when the Health Institution and Manpower Division was established under the Department of Health Services (DoHS). Within this Division, which was renamed Management Division (MD) in 2003, the Infrastructure Unit was responsible for planning construction and maintenance of health infrastructure. In 2010, in

response to widespread demand for measures to improve management of physical assets (infrastructure and equipment), the Infrastructure Unit became the Physical Assets Management (PAM) Unit, with additional responsibility for maintenance of medical equipment. The main function of the PAM Unit is to plan construction of new infrastructure and maintenance based on identified needs and priorities.

Management Division is directly involved in planning for infrastructure at district level and below. For zonal, regional and central hospitals, planning is conducted by the Curative Division of the Ministry of Health and Population (MoHP). In line with the Cabinet decision of 2060/61 (2003/04) implementation is carried out by the Department of Urban Development and Building Construction (DUDBC) under the Ministry of Physical Planning and Works (MPPW) if the project is valued above NRs.1 million, or directly by the concerned institutions if it is less. At present around 450 construction projects are in process under DUDBC and the PAM Unit, but in both agencies current shortages of human resources with the required skills and experience pose significant challenges to realisation of the commitments of NHSP-II.

3. Technical Issues

3.1 Planning

- Current planning, including numbers, types of infrastructure and site selection, is *resource based rather than need based*.
- No specific universally applied criteria exist for *selection of sites* for development, resulting in many health facilities being situated in unsuitable or inaccessible locations, which discourages utilisation of services and does not support retention of staff. In particular, the government policy of developing facilities only on land donated by the local community has been a key factor in this, as donated land is often of low value, located far from settlements and expensive to develop (on a steep hill or poorly drained, for example). Under Support to the Safe Motherhood Programme (SSMP) some criteria were developed for maternal health infrastructures, providing an example of how such criteria can be developed and used to good effect.
- There is no unit with responsibility for managing the *Health Infrastructure Information System* (HSIS) including updating and using the information for planning construction and maintenance, although a comprehensive electronic database has been developed, with support from SSMP.
- There are no established *universal standards* for health infrastructure in Nepal. Larger government projects use Indian standards, and smaller projects are based on the requirements of implementing organisations or the individual designer. A comprehensive set of draft standards for different levels of health facility has been developed and this urgently needs to be finalised and endorsed.
- The *functions* of different levels of health facility have not been formally defined.
- Most health facilities do not have *master plans*, and parts were constructed at different times, often by different organisations, without any functional linkage. Unplanned layouts pose constraints to efficient service delivery.

- Lack of regular *repair and maintenance*, often leading to non-functionality, makes service management difficult and puts undue pressure on service providers.
- Support services (water, electricity, waste disposal) and an enabling environment for service providers (accommodation) are not planned and constructed at the same time as the facility.

3.2 Design and Construction of Health Facilities

- Many facilities are not designed to meet standard infection prevention protocols.
- Waste management and management of environmental hazards are not provided for.
- Service sites often have no provision for a logical flow of service users between providers and between he different services they may need.
- Privacy and cultural values of patients are often not taken into account in facility design.
- Fixtures and fittings are often unsuitable and of low quality.
- Flooring and walls often do not comply with quality requirements and ventilation is not properly maintained.
- Cost effective utilisation of available natural resources is not considered, for example solar power.

3.3 Tendering

- Some areas of current tendering practice need to be improved to ensure transparency and open competition with the best procurement outcome for the health service. There is evidence of influential contractors dominating the tendering process, thus restricting the field of bidders and potentially compromising quality and cost advantages for the health service. To address this, an e-tendering and submission system has been established at DUDBC, and needs to be implemented from this fiscal year.
- Under-bidding, by up to 40% below the estimated cost of construction, is a practice used by some companies to secure a contract. As a result, either the tenders are deficient in terms of specification of quality standards, or there is no monitoring to inspect the quality and grades of materials used, which affects the quality of construction. There is no rule to bar such practices.
- Bidding documents for both National and International Competitive Bidding (NCB/ ICB) need to be standardised.
- Timely and proper preparation and submission of a procurement plan to the appropriate authorities is required by the Joint Financing Agreement (JFA) signed between MoHP and External Development partners (EDP), with approval prior to the tendering process. Directives from post procurement reviews are also supposed to be followed up. Support is needed to ensure these processes are duly followed.

 According to DUDBC officials, there is confusion as to whether the JFA also applies to MPPW. Clear directives are required from MoHP to DUDBC to clarify this point.

3.4 Execution: Reporting and Management

The work of Management Division in overall infrastructure planning is constrained by the lack of an overall reporting and management system, both vertically from the district and within the division. There are no models for reporting on fund utilisation and progress of repair and maintenance work from the districts. The requirement for quarterly progress reporting from DUDBC to all stakeholders including Management Division, needs to be adhered to.

3.5 Monitoring and Evaluation

Management Division and DUDBC do not have systems for regular monitoring of ongoing construction, which are an essential part of quality assurance. DUDBC has an extensive reporting system, but reports are not always regular, timely or consistent. Management Division has no regular reporting system for ongoing district projects, making it difficult for central authorities to fully understand the requirements of the districts for annual planning or other purposes.

3.6 Coordination and Ownership

At present there is no permanent coordination mechanism between the DUDBC district office, which is responsible for construction, and the local facility management, as the users. This is important for the development of a sense of ownership of the construction on the part of the users, and can even be associated with delays caused by their consequent lack of coordination with implementers. Frequent staff changes (doctors and district health officials in particular) can also hinder understanding between implementers and users on the agreed construction design, again causing delays in the work.

3.7 Regular Repair and Maintenance

The absence of a national policy for regular maintenance of infrastructure has led to many buildings becoming almost unusable a result of lack of maintenance, sometimes requiring major investment for reconstruction. With such a huge portion of the budget going towards reconstruction, there are insufficient resources remaining to support plans for increasing the number of health facilities and upgrading.

The recently completed comprehensive electronic database of existing health infrastructures (HIIS), developed by Management Division in close coordination with DUDBC, and with support under SSMP, now makes it possible to plan for the required interventions, including future infrastructure expansion,

upgrading, maintenance, renovation and reconstruction needs and can also be used to support pro-poor (inclusive) planning.

The accompanying maintenance strategy (2007), which has yet to be endorsed officially, provides a framework for formulation of a maintenance programme for all levels of health institutions under MoHP, specifying the numbers of infrastructures (by site), types and levels of repair and maintenance required, costs and timeframe for completing the work. However, there is a need for clear implementation guidelines to support effective use of the strategy. As an indication of the extent of the need, the maintenance strategy showed that in 2007:

665 structures required regular maintenance

1,076 structures required minor repair and maintenance

452 structures required major repair and maintenance and

225 structure needed reconstruction

Total number of structures: 2,418 in 65 districts

SN	Maintenance/Reconstruction	Number of Buildings	Total Cost (NRs)
1	Cost of total planned preventive maintenance	665	50,249,270.95
2	Cost of total planned preventive maintenance with minor repairs	1,076	65,855,856.70
3	Cost of total major repair and maintenance	452	40,310,059.81
4	Reconstruction	225	1,729,300,000.00
	TOTAL	2,418	

Summary of Cost for Building Maintenance Including Reconstruction

4. INSTITUTIONAL ASSESSMENT

4.1 Human Resources and Skills

- The lack of human resources with the required skills and experience to operate the HIIS and manage construction issues is strongly felt within the Management Division, both at central and district level.
- DUDBC has a strong team of technical persons, at central level and in many districts, who are very competent at managing construction, especially the structural work. However, gaps have been observed in the finishing of buildings and overall site planning and supporting services. DUDBC field staff also need additional training in health facility design and planning, since they are less familiar

with the particular technical area of health construction and the associated needs, although they have demonstrated admirable willingness to engage and learn when given the chance.

4.2 Fund Release

- The release of money for construction is often a bottleneck, causing significant delays in the work. The budget release and allocation mechanism would benefit from review to identify adjustments to support more prompt release of budget. This would help to ensure completion of projects on time and avoid carrying over projects into another year. It would also support increased budget utilisation.
- Budget allocations for infrastructure do not always reflect the high liability for ongoing projects, as even more new infrastructures are planned each year. This tends to result in very little money remaining for repair and maintenance

5. CAPACITY DEVELOPMENT STRATEGY

5.1 Health Infrastructure Information System (HIIS)

Support is proposed to help strengthen, institutionalise and decentralise the existing HIIS to promote evidence based planning, rational resource allocation, timely implementation of projects and improved quality of construction. This will include support for:

- Developing HIIS in web based and real time format, using Short Term TA (STTA)
- One time updating of HIIS using STTA
- Training district level technicians from DUDBC, the District Technical Office (DTO) and District/Public Health Offices (D/PHO) to use HIIS and develop a mechanism for its regular updating, using TA in the first year and mixture of TA and Financial Aid (FA) in subsequent years
- Building the capacity of officials at Management Division, and engineers and architects at DUDBC and the DTO to plan and implement health construction projects using HIIS; through a mix of training, orientations and demonstrations using TA initially and a mix of TA and FA at later stages
- Ideally HIIS should be integrated with the Planning and Management of Assets in the Health Sector (PLAMAHS), to ensure integrated information on equipment and instruments.

5.2 Physical Assets Management (PAM)

Support is proposed for the recently established the PAM Unit within the Management Division of DoHS, to ensure appropriate and sufficient human resources with the required skills and effective logistics planning, using FA budget.

5.3 Design Standards

Support is proposed for development of a set of standard health infrastructure designs that include specifications and implementation guidelines for district hospitals, Primary Health Care Centres (PHCC) and health posts for different site conditions and geographical zones (Terai, hills, mountains). These would be based on defined functions, identified through workshops, interaction programmes, feedback from key officials MD and work done under SSMP on standard designs for maternal health care. The designs will be sufficiently flexible to accommodate vertical or horizontal expansion to cater for increasing populations over time, and to allow for internal changes in function as required. Such standards will support the construction of facilities that are suitable for their purpose and easy to maintain in the immediate and longer term, and make the best use of physical surroundings and available budget. Developing and institutionalising these will include the following key steps:

- Updating the drawings of present design standards using STTA
- Developing accompanying specifications and guidelines for construction of the standard designs
- Ensuring the standard designs are compatible with the National Building Code and standard earthquake measures recommended
- Endorsement of the standards, specifications and the guidelines by MoHP
- Publishing the first edition of the standards
- Developing the capacity of technicians working at DUDBC and its district offices to work with the standard designs to produce quality buildings.

5.4 Enabling environment including waste management

TA is proposed for identifying the supporting infrastructures required for each level of health facility, to create an enabling environment that supports smooth functioning and a user friendly service, and promotes retention of staff. A master list of requirements will be developed for items such as staff quarters, stores, guard house, waste management, essential services/ supplies (water, electricity etc). Provision for effective waste management will be addressed as an issue of high importance, through the following:

- Support for design of waste management facilities, using appropriate technology
- Awareness programme for staff at different levels and among users and communities
- Capacity building of engineers and architects in planning and implementation of waste related infrastructures, through exposure visits and orientations
- Development of models that encourage partnership with private sector waste management companies.

ANNEX 1 5.5 Construction planning

As the foundation for quality construction, support is proposed in the area of construction planning, including: identification of the numbers of different types of facility that need to be constructed, renovated, upgraded or reconstructed or require repair and maintenance. This should be based on HIIS and demands from the districts; preparation of long and short term plans and targets, including the resources required; identification of priority work based on level of need and resources available; development of rational Annual Work Plans and Budgets (AWPB) and long term plans.

This will be provided in conjunction with support to Management Division to help develop rational upgrading and site selection criteria, to provide a sound base for construction and a supportive and convenient environment for service providers and clients. In particular, the current government policy of constructing facilities only on donated land will be revisited, as experience shows that in many cases such land proves unsuitable and entails large development costs. Research will be conducted to provide evidence for advocacy to modify this policy. Criteria for site selection will be based on:

- Availability of land already owned by the institution, which is easily accessible to the community (reducing travel time and costs) and/or located within the service centre of the settlement. Accessibility and effort analysis tools will be introduced. Staff in the Planning Section at the Ministry, in MD and in the districts will be trained to identify and take advantage of suitable sites located within the service centres
- Large catchment area and accessible to people from outlying areas, who are often the most disadvantaged groups
- Capacity to provide the volume of services required and for easy expansion in the future
- Potential for development as a training site, if appropriate
- If a substantial proportion of the population is from Dalit and Janajati groups, the development will be given priority.

Capacity building support is proposed for staff in the Planning Section of MoHP and the Management Division in the use of spatial analysis tools that will be introduced. Specific support will be provided to aid staff in addressing problems in areas with poor physical access to facilities, looking for locally appropriate solutions in consultation with populations and service providers. Options to be considered may include recommendations for new investment in health and sub-health posts where justified, more frequent outreach clinics, relocation of existing facilities, upgrading sub-health posts to health posts and addition of birthing units.

Planners will be supported in the development of mechanisms and guidelines for needs identification prior to initiation of the infrastructure planning and development process. This will assess existing site conditions, support services requirements and availability, user and client perceptions, human resources available, required linkages between different units or services and requirements for further development. Local consultation will help increase ownership, promote smooth project implementation and result in a more appropriate and better quality product that can be quickly handed over after construction, easily maintained and will support effective functional flow between units.

ANNEX 1 5.6 Repair and maintenance

Support is proposed to help Management Division develop and implement repair and maintenance guidelines for rational implementation of the repair and maintenance budget, to support timely repair and maintenance works and ensure prioritisation that supports optimal use of resources.

5.7 Tendering and contracting

Support is proposed to assist DUDBC to prepare standard bidding documents, specifications and estimates that are accurate, reflecting all the required dimensions, specifications, construction methodology and terms and conditions, including legal procedures and requirements, and that support the effective execution of construction work. Accompanying this, support is proposed to create a conducive environment between the client and the market place through the following activities:

- Initiation of e-bidding to promote transparent tendering procedures that enable wider participation and competition. (Under SSMP, software has already been developed and tested in DUDBC)
- Capacity building of DUDBC staff members at central and district levels to implement e-bidding, with process orientations for bidders if required.
- Interaction with stakeholders to clarify the requirements of the health sector for those in the market for contracts and avoid possible conflicts related to bidding documentation in future
- Development of improved provision for legal requirements for e-bidding (such as such as digital signatures) to ensure confidentiality of bidders and a fair process, in coordination with the Public Procurement Monitoring Office, High Level Commission for Information Technology and other stakeholders as required.

5.8 Planning and budgeting

Support is proposed for planning at the macro level, including budget release, to create an enabling environment for project planning and implementation. This will include support for:

- Strengthening the capacity of MD and the Planning Section/MoHP to analyse the budget to ensure provision for completion of ongoing projects as agreed in the contract, and only after this, reallocation of remaining resources for new projects
- Institutionalisation of a system for preparing an agreed and endorsed master plan for each new construction, renovation, upgrading or reconstruction, to promote clarity and confidence among all parties
- Development of a mechanism for good coordination between, Ministry of Finance, MoHP and DUDBC throughout the planning, implementation and monitoring process
- Development of a tool for analysis of budget allocation for new projects, to ensure they are able to implement up to the expected level of construction within the planned year.

5.9 Monitoring and reporting

Regular and accurate monitoring and reporting are essential to support effective project implementation and use of budget. Specific support is proposed for:

- Developing and institutionalising web based monthly and trimesterly reporting, from the district to the centre, showing construction progress against the procurement plan and budget status. Training will be provided initially through TA and in later years through a mix of FA and TA
- Developing and implementing monitoring and evaluation guidelines, specifying frequency of monitoring, level of monitoring (central, regional, district, local), composition of monitoring teams at different levels, and monitoring tools
- Initiation and institutionalisation of a system for regular presentation by DUDBC to all stakeholders, reporting on progress, problems, issues and expenditure at all levels
- Developing a Social and Performance Auditing Manual on use of infrastructure after completion for feedback to future construction and ensuring the site becomes functional.

5.10 Equipment supply

Completion of the building is not the end of the story. In order for a new construction to become functional without delay, equipment plans need to be developed ahead of completion, ready for action. Support is proposed for development of a mechanism whereby DUDBC informs Management Division about imminent completion of projects before the planning period of each fiscal year, so that equipment supply can dovetail with the end of construction. An equipment procurement plan for each year is needed, based on the construction completion schedule

6. PROPOSED TECHNICAL ASSISTANCE

An Infrastructure Development and Maintenance Adviser will be embedded as Long Term Technical Support within the MoHP, working closely with Management Division of the DoHS, DUDBC and Planning Section of the Ministry. The Adviser will support strengthening of the management of the infrastructure development and maintenance process, including needs assessment, budgeting, contracting, quality management and facility performance. He will work closely with the Crown Agents Procurement Advisers in all areas related to infrastructure procurement and link with human resource planners to ensure supply is fully coordinated with infrastructure development.

The Infrastructure Adviser will work with the MoHP to further support the recently established Physical Assets Management Unit within the Management Division of the DoHS. In line with information provided earlier in this report, capacity building plans will be developed for and in collaboration with officials and technicians working with MD and DUDBC. Analysis of gaps and types of construction, repair and maintenance needed will be carried out, using the HIIS, with analysis of the required cost based on

standard rates, review of current site selection criteria and assessment of the long term infrastructure plan against available resources.

Short term consultancy support will also be provided as required.

During year 1 we will support evidence based infrastructure planning and maintenance through strengthening, institutionalising and supporting decentralisation of HIIS. This will include: improving the HIIS web-based application, supporting integration of the HIIS with PLAMAHS for integrated information on equipment and instruments; training technicians in DUDBC, District Technical Offices and D/PHOs on use of the HIIS and its regular updating. We will develop the capacity of technicians working at DUDBC and its district offices to adopt standard designs for health facilities, and develop standard protocols to improve quality, accountability and transparency in the construction process. This will include further defining construction methods, preparing specifications for building materials and finishes and developing standard construction guidelines. We will develop a master list of infrastructure requirements for each facility level; make the standard design and construction compatible with the National Building Code and develop repair and maintenance guidelines for rational implementation of a repair and maintenance budget.

Based on our cost analysis conducted during inception and the available resources, we will support MD/DoHS to develop a prioritisation plan to be integrated into the MoHP annual work plan and budget and linked to human resource planning. We will develop upgrading criteria for hospitals, PHCCs, health posts and sub-health posts and site selection criteria for these facilities (using material developed under SSMP for maternal health), which ensure facilities meet the needs of clients, especially under-served groups. This will include revisiting the government policy of constructing on donated land only. We will support the development and implementation of a participatory needs assessment tool to support evidence based infrastructure planning. The Infrastructure and Maintenance Adviser will work closely with the procurement advisers to institutionalise the e-bidding process, including at decentralised levels. We will support development of guidelines to integrate infrastructure and maintenance into social auditing, and ensure this evidence base is fed back into planning.

Within three years we anticipate that capacity will be built in the Physical Assets Management Unit, DUDBC, and the districts for rational and evidence based infrastructure planning and maintenance. Standards will have been developed that support technicians in designing and constructing facilities that are suitable for their defined functions and services. This will include appropriately designed infrastructure; an appropriately costed master plan for rational planning and infrastructure expansion, integrated into the AWPB; and evidence from social audits fed back into needs based planning to ensure facilities meet the needs of the populations they serve.

Position:	Infrastructure & Maintenance Adviser		
Employer:	Options Consultancy Services		
Responsible to:	Nancy Gerein, Team Leader		
Supervisor:	Greg Whiteside, Senior Quality Assurance Adviser		
Duration:	3 years, full time. Renewal for a further 2 years may be possible		
Location:	Based in Kathmandu but with occasional monitoring trips to districts		
Counterpart:	Director, Management Division, DoHS		

Background

Purpose of this Post

To build the capacity of key staff in the Planning Section of MoHP, Management Division of DoHS and Department of Urban Development and Building Construction (DUDBC) of MPPW to develop effective evidence-based policies, strategies and implementation guidelines and practices for the efficient procurement, construction, commissioning and maintenance of quality civil works for health.

Key Areas of Responsibility

Lead Adviser for NHSSP Output 6:

- Provide ongoing capacity building and practical support to key counterparts in the above mentioned GoN offices for the effective planning, use and monitoring of resources for the development of safe, effective and appropriately located civil works for health.
- Provide capacity building and technical support for the development of infrastructure needs assessment procedures and monitoring systems.
- Provide capacity building and technical support for the preparation of health facility building standards, construction guidelines, repair and maintenance guidelines, technical specifications, standard bidding documents and procurement plans.
- Provide additional inputs to help institutionalise these improved systems and practices.

- Support GoN in its efforts to improve market conditions and encourage building contractors to implement quality construction projects
- Build the capacity of appropriate GoN officials to ensure the participation and ownership of local stakeholders (e.g. HFMC members) during the planning, designing and construction of new infrastructure and so facilitate the efficient construction, commissioning and utilisation of new buildings.
- Build the capacity of government counterparts to manage the Health Infrastructure Information System (HIIS) and support its use in the planning of new and upgraded facilities to include appropriate site selection and ensuring appropriate repair and maintenance budgets.
- Build the capacity of GoN counterparts to follow approved procurement procedures including managing requests for proposals and tendering and contracting documents. This will also include support for comprehensive record keeping, progress reporting and carrying out utilisation audits.
- Support, on request, the NHSSP procurement team at LMD in dealing with procedures and requests for proposals, tendering and contracting. This will conceivably include all stages of procurement for goods and commodities including pre-contract inspection, evaluation, storage, distribution, utilisation audit and repair and maintenance.
- Build the capacity of government counterparts to manage public private partnerships for medical waste management and support including formulating appropriate contracting arrangements.
- As a member of the NHSSP team, participate in periodic reviews of the NHSSP jointly with government stakeholders, EDPs or others as required by the programme in order to optimise the plan in relation to a changing environment and to adjust Programme support activities accordingly.

Person Specification

Qualifications

A Bachelor's Degree or other appropriate qualification in engineering, architecture, procurement or management studies, or other related disciplines, from a recognized university / institute. At least five years relevant experience at senior levels is also required.

Core competencies and experience required for all NHSSP technical staff:

- A sound appreciation of Nepal's development agenda
- Good experience of using consultants, preparing TORs and monitoring progress and outputs
- Some experience of the impact of conflict on access to and uptake of services
- An understanding of the issues in the health sector and access to service in Nepal
- Excellent written and spoken English and Nepali
- Basic budgeting, logistics and computer skills
- A commitment to capacity development. participation by stakeholders, and the promotion of equity issues and voice within a Nepali context.

ANNEX 1 Professional experience and skills for this post

Essential:

- Institutional strengthening and capacity development skills
- Ability to communicate effectively and empathetically with all levels of Nepali society
- A commitment to transparency of processes and participation of stakeholders
- Practical experience in developing designs, standard drawings, specifications, construction, repair and maintenance guidelines and procedures.
- Practical experience in preparing quantity estimates, cost estimates and tender documents
- Experience in monitoring and supervising constructions works and preparing reports.
- Practical experience of preparing procurement plans for civil works
- A thorough understanding of the issues involved in public building construction and procurement in Nepal
- Willing to work closely in a team and spend some time travelling in rural areas
- Extensive practical experience in overseeing sizable building construction and procurement programmes
- Previous experience in the renovation and equipping health care facilities
- Commitment to working procedures and approaches to construction which can contribute to capacity development, local employment and poverty alleviation
- Understanding of sustainable physical assets management

Desirable: A thorough knowledge of technical building design and construction matters sufficient to understand complex drawings and construction methods