



# PULSE

UPDATING YOU ON HEALTH DEVELOPMENTS

## E-BIDDING AND INTEGRATED DESIGNS FOR THE CONSTRUCTION OF HEALTH FACILITIES

Assessing Value For Money Of NHSSP Technical Assistance

### HIGHLIGHTS

- ▶ The introduction of 'e-bidding' began under the DFID-funded Support to Safe Motherhood Programme (SSMP) in 2008. Support has continued under NHSSP and the system first went "live" under DUDBC in FY 2010/11.
- ▶ An assessment of costs for the introduction of electronic-bidding (e-bidding) for the procurement of health facility construction and renovation services was carried out in mid-2012. This found that e-bidding in 2010/11 had reduced the average price of new contracts by 12%, leading to projected savings of 456 million Nepalese rupees (£3.4 million) in the year.
- ▶ These savings generated a first year benefit-cost ratio of 70:1 and can largely be attributed to technical inputs and financial support provided by NHSSP and earlier DFID funded programmes. They also suggest that bidding competition has increased.
- ▶ A separate assessment of projected savings from the use of integrated designs for health facilities, introduced in 2010/11, shows the average construction cost per square metre can be expected to reduce by around 16%. Applied to all new buildings in 2011/12, this could result in a saving of NPR 400 million (£2.97 million) in the year.
- ▶ E-bidding and integrated designs are likely to have jointly contributed to the savings in construction costs. However this does not alter the overall conclusion that the £3 million saving generated in the first year alone is high enough to exceed the £85,000 cost of the two programmes.

### ASSESSMENT

NHSSP provides technical assistance to Nepal's Ministry of Health and Population (MoHP) and Department of Health Services (DoHS). DFID funds NHSSP under the principle that its aid spending should demonstrate value for money and that maximum use should be made of every pound spent to improve the lives of the poor and disadvantaged.

A large part of Nepal's health budget goes on procuring infrastructure, goods and services. However, a lack of fair competition for public contracts, bid-rigging and intimidation of rival bidders is believed to have kept contract values higher than they should have been.

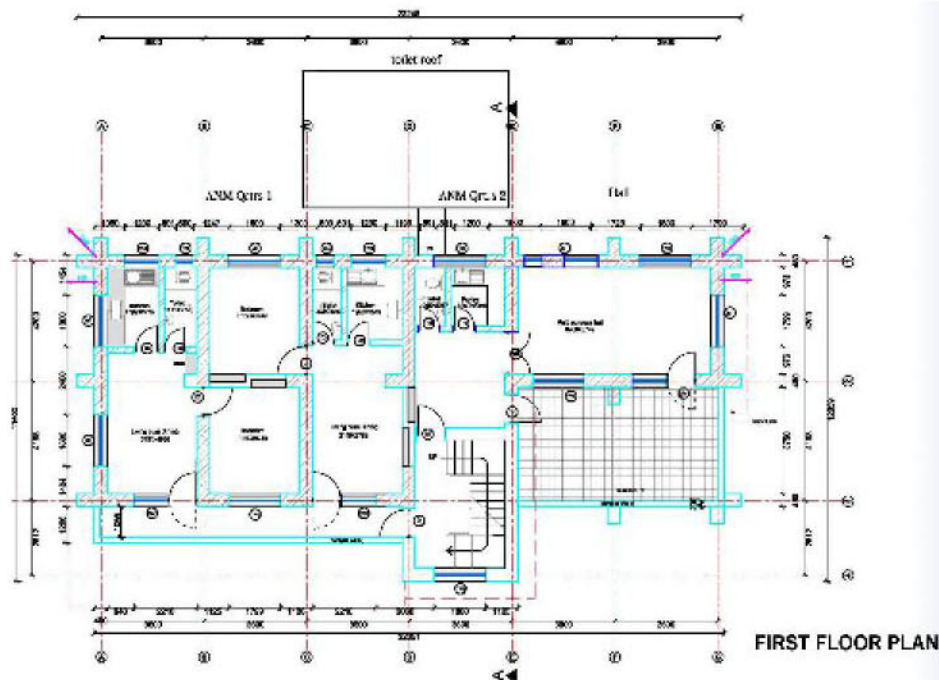
The construction and renovation of most public health facilities in Nepal is contracted out to the private sector by the Department of Urban Development and Buildings Construction (DUDBC) on behalf of MoHP. In 2010/11, DUDBC launched an e-bidding system comprising the electronic publication of tender notices, electronic access to tender documents, and electronic submission of tenders for health facility building contracts. In addition it introduced integrated and standardised designs for new health facilities.

In August 2012 NHSSP assessed the value for money associated with the introduction of e-bidding and standardised facility designs. This assessment took DFID's 'Four Es' of economy, efficiency, effectiveness and equity as its conceptual framework.



Panchkhal PHCC under construction, Kavre District





FIRST FLOOR PLAN

	<b>Owner:</b> Management Division Department of Health Services Ministry of Health & Population		<b>Financial &amp; Technical Support:</b> NHSSP Nepal Health Sector Support Programme	<b>Job Name:</b> Health Post, Integrated Design No. of PHC: 2 (Maha, Type - 1)	<b>Sheet no.:</b> AR/02 HP/H
				<b>Scale:</b> As Shown <b>Date:</b> 2081/1/11	<b>Drawing No.:</b> PHC/Plan/Phc <b>Page No.:</b> 52

Plan view of health post integrated design

## CALCULATING VALUE FOR MONEY

The assessment identified £53,673 of technical assistance costs for introducing e-bidding and £30,500 for introducing integrated designs. This money was spent on standardising documents, training DUDBC staff, educating stakeholders and developing legal requirements. Value for money was assessed as follows:

### For e-bidding:

- selecting 416 contracts for health facility construction from the five-year period before 2010/11 and 137 contracts in the year since e-bidding was introduced; and then:
- calculating the percentage by which winning bids differed from DUDBC's expected-value-for-contract estimates for each of five types of smaller health facilities. Here we made the assumption that the margin of error in DUDBC cost estimates remained constant across the six years under review.
- note here that we did not include government staff costs (although these are unlikely to be high enough to undermine the cost saving conclusions).

The assessment found that for the five years preceding e-bidding, the winning bid price averaged 9% below the DUDBC estimate, while in the one year following the introduction of e-bidding the average was 21% below. This represents a 12% cost saving.

For integrated designs the assessment:

- compared the construction cost before and after the introduction of integrated designs in 2 Primary Health Care Centres and 4 Health Posts using a matched pair approach.

Here it was found that, at current 2011/12 prices, the average cost of construction without integrated design is NPR 37,746 (£280) per square metre while the average cost of construction with integrated design is NPR 31,701 (£235) per square metre: a difference of NPR 6,045 (£45) per square metre i.e. 16%. In addition, one third less ground area is required for integrated design leading to additional savings related to land acquisition.



Home page for DUDBC's e-bidding site

NHSSP (Nepal Health Sector Support Programme) is funded and managed by DFID and provides technical assistance to the Nepal Health Sector Programme (NHSP-2). Since its inception in January 2011, NHSSP has facilitated a wide variety of activities in support of NHSP-2 objectives, covering health policy and planning; health financing; human resource management; essential health care services (EHCS); gender equality and social inclusion (GESI); procurement and infrastructure; and monitoring and evaluation. For more information visit our website [www.nhssp.org.np](http://www.nhssp.org.np)