On October 8, 2005, an earthquake of 7.6 magnitude shook parts of Pakistan, Afghanistan and India. Losses were most severe in Pakistan as the epicenter was located 100 kilometers north-northeast of Islamabad. Azad Jammu and Kashmir (AJK) and five Districts of the North West Frontier Province (NWFP), namely, Abbottabad, Battagram, Mansehra, Shangla, and Kohistan, were severely affected and bore the full force of the earthquake in terms of number of lives lost, injuries sustained, and destruction of infrastructure and economic assets. According to available data, more than 73,000 people died and more than 70,000 were injured. The 2005 earthquake was arguably one of the most debilitating natural disasters in Pakistan’s recent history. The earthquake caused significant damage to the health infrastructure. At least 574 health facilities and management offices were partially or fully destroyed, including 75% of first level care facilities. The secondary care District/Tehsil Hospitals and smaller health units serving remote small mountainous hamlets were also wiped out. The earthquake also destroyed vehicles, drug stores, cold rooms, health staff accommodations and offices, medical equipment, and records. The disruption of health services left nearly four million people without access to primary and secondary health care, highlighting the need to focus on restoring access to essential primary and preventive health services and secondary care. Women and children were the primary users of the primary health care (PHC) services, representing 60-65% of the clients before the earthquake and 70-75% of the reported deaths and injuries from the disaster.

The surviving population faced significant challenges due to the inadequate shelter, pre-existing poor nutrition levels, and lack of access to essential health care following the collapse of the health service delivery system. The vulnerability of the affected population was significantly increased, particularly for women and children.

When the Government of Pakistan requested international aid, the international community was quick to respond and assistance poured in within days of the earthquake. The World Bank in collaboration with other development partners undertook Earthquake Damage and Needs Assessment and assisted Pakistan in mobilizing resources to finance...
the reconstruction and rehabilitation efforts. Based on a request from the Department of Health of the Government of NWFP, the World Bank also provided assistance through the Japan Social Development Fund (JSDF) under the project “Revitalizing and Improving Primary Health Care in Battagram District” in May 2006 in an amount of US$2.99 million. Battagram District is an underdeveloped district located in a mountainous setting with land area of 1,301 km² with an estimated population of 361,000 (2004-05).

The project

The project objective was to:

i) rapidly revitalize PHC services so as to enable widespread delivery of a standard package of services; and

ii) help strengthen the capacity of district management to coordinate, plan, implement, and monitor the delivery of PHC services.

The JSDF project had three components:

i) Revitalization of Primary Health Care Services,

ii) Strengthening the Capacity of District health Management and Health Workers; and

iii) Contracting of NGOs to Manage PHC Services. The project envisaged provision of an essential primary health services package with a focus on maternal/child health including obstetrical and family planning services; diagnosis treatment of major infectious diseases including tuberculosis; basic curative services; nutritional support including improving micro nutrient deficiencies, therapeutic feeding and breast feeding promotion; and carrying out public health functions including disease surveillance and response to epidemics. The services were expected to be provided through static facilities, mobile units and community based workers.

Key features of the Project

1. **Contracting out management of PHC services:** Under the project, the Department of Health contracted out management of delivery of primary healthcare (PHC) services to a NGO (Save the Children USA) with full administrative control of all health facilities and staff, and financial powers. The contract specified roles and responsibilities of both parties with the Government’s role being of financier and stewardship/oversight, and the NGO responsible for management and implementation of an agreed package of PHC and community based services. This was appropriate to the needs of the post-earthquake emergency and to today’s needs in areas where militancy and conflict have disrupted provision of public services. In addition, the management reforms and strengthening management capacity were and continue to remain highly relevant to the country’s programmatic priorities and organizational reform agenda for the health sector. The characteristics of the contracting out model implemented is summarized in the following four elements:

   - **A great degree of autonomy and flexibility for innovation** was given to the contracted NGO to manage and to innovate, such as the introduction of performance-based incentives, hiring staff at market rates, through the agreement between the District Government Battagram, and the NGO. Specifically, full budgetary, human resource, and administrative control of all district health services were transferred to the NGO. The NGO was responsible for procurement of medicines, supplies and equipment. While the Government continued to finance the salary of existing government employees that was under the NGO’s control, their motivation was addressed to some extent by performance incentives. Non-performing workers could be transferred or stopped from working in the facilities under its control.

   - **Ensuring availability of health care workers:** The project ensured availability and presence of staff in the district particularly female health providers. With flexibility to use resources across budget lines, the project recruited additional staff (53 percent increase in the number of qualified professionals) with a special focus on women health providers and strengthening community based outreach to address gender constraints in a traditional society. The additional staffs were paid market salaries - higher salaries as compared to government salaries (roughly triple the government rate) and provided security, fully furnished accommodation, and transport.

   - **Effective coordination** was maintained with
provincial and district governments as well as community stakeholders. The transfer of execution responsibilities to the NGO, as described above, gave space to the Government to focus on its leadership functions. The NGO gained the cooperation of local officials by actively involving them in project activities. For instance, the Executive District Officer Health (EDOH) was part of the recruitment panel of staff to be hired by the NGO. The District Health Management Team was operationalized and actively participated in field monitoring using the supervisory checklists. Key policy decisions including on the salaries of staff were taken in consultation with provincial and district officials. The project team also maintained close liaison with local leaders and community influential.

• **Working closely with local community:** The security situation in the province deteriorated during the project period and international NGOs were especially targeted. Close ties were established with the local community and the fact that many of the managers belonged to the community enabled the project activities to continue with minimal disruption.

2. **Adoption of a hub approach:** The project adopted a hub approach that decentralized management to the Rural Health Center 2 (RHC) level. Its core was to make RHC or above level to function as a hub center for 8-10 Basic Health Units (BHUs), provide 24/7 emergency obstetric and neonatal care with a functional ambulance and resident male and female staff, and devolve financial and administrative powers to RHC/hub manager. At the hubs, all the staff were resident and provided with accommodation and indoor recreational facilities. All the hub centers were equipped with an ambulance for patients requiring referral to a secondary or tertiary level facility. In addition, medicines and equipment were supplied to the attached BHUs from the hub center. Laboratory services and medical stores were established at each RHC. Most of the medical officers were located at RHCs; and each center was staffed with five medical officers including two women medical officers.

3. **Improvement of the district management:** The District Health Management Team (DHMT) including district officials from the Departments of Health, Finance and Planning met regularly to review physical and financial progress, findings from Health Management Information System (HMIS) and to resolve specific issues. District officials were trained in planning budgeting and use of information. Performance-based incentive contributed to the use of data as a management tool. The HMIS was strengthened and monthly reports submitted regularly. The HMIS reports and monthly supervisory visits in addition to tracking coverage of key indicators also kept NGO supervisors informed of the demand for drugs/supplies and staff attendance. The data was reviewed regularly in DHMT meetings and formed the basis of decisions such as the need to bring services to remote communities.

**Delivering Results**

According to the original design, project outcomes were to be evaluated through baseline and follow-up household surveys. The surveys were undertaken but due to serious quality limitations including questions on the comparability of the two samples and internal inconsistencies in the estimates, some indicators could not be used for a comparative analysis of performance. Hence, review of coverage and utilization of services are based on analysis of HMIS reports.

Available evidence suggests that the project objectives were met. The data points to substantial improvement in utilization of services and the findings of the facility survey indicate positive effects on availability of medicines, staff, and equipment and high levels of patient satisfaction.

Table 1 (below) summarizes trends in project performance indicators over the period from 2007 to 2010 (the district health services were transferred to NGO management in 2008).

Table 1. Trends: Project Performance indicators (2007-10)

<table>
<thead>
<tr>
<th>Description</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Monthly</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outpatient Dept visits</td>
<td>7029</td>
<td>20568</td>
<td>33550</td>
<td>31174</td>
</tr>
<tr>
<td>Number of registered mothers for antenatal care</td>
<td>451</td>
<td>838</td>
<td>1223</td>
<td>1481</td>
</tr>
<tr>
<td>Number completed 2 Tetanus Toxoid immunization</td>
<td>137</td>
<td>414</td>
<td>521</td>
<td>499</td>
</tr>
<tr>
<td>Deliveries assisted by skilled birth attendants</td>
<td>32</td>
<td>189</td>
<td>363</td>
<td>577</td>
</tr>
<tr>
<td>Number of newborns weighed</td>
<td>0</td>
<td>124</td>
<td>301</td>
<td>544</td>
</tr>
<tr>
<td>Children fully immunized</td>
<td>128</td>
<td>922</td>
<td>793</td>
<td>1010</td>
</tr>
</tbody>
</table>

The findings show an increasing trend in coverage of preventive and curative services. The results are

**“This program is rapidly revitalizing PHC services enabling a wide-spread delivery of services. The key was to establish close ties with local communities to create ownership”**.  
_Task Team Leader_
particularly impressive for deliveries by skilled birth attendants that rose by over 200 percent and users of antenatal care increased by 77 percent.

However, improvement in immunization rates (at facility level) has been relatively slow. The above gains in service provision are all the more impressive in the context of a deteriorating security environment in the province.

Annual cost per capita of the project including government expenditures was estimated at US$ 4.5 as compared to public spending of US$ 1.65 per capita. The actual costs were comparable to estimates derived for contracting of primary health care services in other low income countries. The interventions supported by the project are recognized as the most effective means of improving maternal and child health. Maternal health is associated with increased chances of child survival while fertility reduction and nutrition have benefits beyond the household. The cost effectiveness of these services in the context of South Asian countries with low levels of coverage is well demonstrated.

Development Impact

The development impact of the JSDF project was substantial. The project successfully revitalized primary health care service delivery in Battagram, as seen by the substantial increase in utilization of preventive and curative services. The project also helped the Government of NWFP explore options to improve the provision of primary care health services through improved management of district-level health systems by testing out innovative methods through public private partnerships. The results of the JSDF pilot were disseminated through a workshop to a wider audience of political representatives and government officials at the provincial and district levels.

The success of the JSDF pilot made a strong impression on the Government of NWFP, considering the improvements in utilization of preventive and curative services, establishment of systems of monitoring, supervision and increased availability of qualified staff were achieved in an under developed and relatively remote district. Service statistics are now better than pre-disaster data. The pilot has further strengthened ownership and support within the bureaucracy and the provincial political leadership to replicate and scale up the initiative particularly in underserved districts.

Follow-on Activities

The Bank has received a request for the replication of the JSDF pilot model in additional five districts where health services have been affected by the 2009 militancy and 2010 flood crises. The project is to be financed by the Multi Donor Trust Fund (MDTF) for Khyber Pakhtunkhwa, FATA, and Balochistan from 2011 to 2014, with the total amount of US $16.0 million.

The Japan Social Development Fund -- JSDF Good Practice Notes seek to share achievements, knowledge and lessons learned from the implementation of JSDF projects over the past decade. The JSDF is a partnership between the Government of Japan and the World Bank to support innovative social programs that directly meet the needs of the poorest and most vulnerable groups in developing countries. JSDF projects meet four basic requirements: Innovative, introducing new approaches to development; Responsive to the needy, by directly meeting the needs of vulnerable, marginalized, and disadvantaged groups; Rapid response activities that deliver short-term results and benefits to targeted beneficiaries; and Community capacity building activities that empower local governments, NGOs, and disenfranchised groups, while promoting stakeholders participation and ownership.