



Pakistan: New Logistics Management Information System Incorporates Sustainability and Cost Savings



USAID | DELIVER PROJECT 2012

Jehanzeb Khan of the Population Welfare Department from Tank district of Khyber Pakhtunkhwa province successfully completed a three-day LMIS training and pledged to upload contraceptive data in the LMIS regularly.

To outsource the training would have cost approximately U.S.\$250,000, whereas the budget for insourcing was only about U.S.\$150,000. The insourcing strategy ensured value for money, and built stewardship and sustainability into the program.

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In Pakistan, lack of accuracy in the logistics data was a major issue for policy-level officials of the Health Department (HD) and the Population Welfare Department (PWD), which both provide family planning services. Differences in the contraceptive prevalence rate reported by various stakeholders clearly showed that data reporting at district and subdistrict levels was unproductive; it negatively affected planning, procurement, and resource mobilization, ultimately impeding the ministries' ability to provide family planning services to the population.

With the two departments having separate reporting systems for contraceptive commodities, it was difficult to analyze the supply situation across departments, and there was concern that services and data might overlap at district and subdistrict levels.

When USAID and the Government of Pakistan (GOP) tasked the USAID | DELIVER PROJECT with improving data visibility along its public health supply chain, the project modeled the approach on a similar effort in Bangladesh, where training and support is partially outsourced.

However, with further analysis, and significant support and collaboration from the GOP, it became clear that building the capacity of workers in the government system would create a more sustainable system and reduce the cost of the initial training.

The USAID | DELIVER PROJECT worked with the GOP to introduce a comprehensive restructuring of the supply chain reporting system, which included a web-based logistics management information system (LMIS) and an integrated reporting and requisition form that both departments could use to report data and to request contraceptive supplies. The web-based LMIS also has the ability to incorporate contraceptive data from nongovernmental organization (NGO) partners.

The new LMIS in Pakistan is already showing that insourcing can build country ownership and long-term sustainability, while realizing cost savings in the process.

Structure of the Web-based LMIS

Over several months of in-depth consultations with all stakeholders from the private and public sectors, the project adapted and enhanced the web-based application that is currently being used in Bangladesh, resulting in an LMIS system contextualized to fit local stakeholder structure and the devolution of health programs to provincial governments, which took place in 2011. The LMIS was launched by the Prime Minister of Pakistan in July 2011 as the first web-based LMIS under the ownership of the GOP.

The web-based LMIS has the flexibility to integrate other health commodities in addition to contraceptives. In the future, the project plans to incorporate all health products used at the district level, according to the provincial integrated commodity management requirements.

In addition to public-sector supplies, the LMIS can record contraceptive information from national sales data from the private sector. To strengthen reporting and visibility of private-sector contraceptives, a district-level web-based interface will be incorporated to enable provincial and regional Health and Population Welfare Departments to see the contributions of private sector in their geographical areas.

The system brings in district-level reporting by aggregating facility-level data through paper-based reports. The future vision for the LMIS is to accommodate facility-level reporting on logistics indicators for each district, along with district store commodity status.

In the first phase of the implementation, 19 districts across Pakistan were equipped, trained, and pilot tested to verify that the new system would play a significant role in improving data visibility and stock monitoring. Alongside the LMIS implementation, the project worked closely with federal, provincial, and regional governments to advocate for supply chain strengthening by streamlining supplies and reporting from the central to the district level.

With a unified system for reporting and requisitioning, the LMIS system is able to integrate information from all levels and sectors, and the GOP is helping to enforce the use of it by declaring it mandatory to use the new system for all pilot districts, as well as all other districts as soon as they are automated. The web-based LMIS can be accessed at www.lmis.pc.gov.pk.

Building Human Capacity for LMIS

For nationwide implementation of LMIS, the project needed to train users of the system on its purpose and functionality. Timely and accurate data entry and submission of a monthly report, at the district level, are critical components of a well-functioning LMIS. The data collected through the LMIS is used at each level of the supply chain to enhance informed decisionmaking to meet service delivery demands. Utilization of the LMIS depends heavily on the level of understanding of those trained on its various functionalities.

As the project aims to scale-up LMIS to all 143 districts of Pakistan, the capacity of all those required to operate the LMIS will need to be built. The project aimed to identify the right individuals from the government departments and build their capacity in order to ensure sustainability and accuracy of the LMIS up to the district and subdistrict levels. Initially, the entire training task was to be outsourced, but with further analysis the project recognized that it was possible and desirable to ensure sustainability and government ownership by using the services of trained officials within the government. To outsource the training would have cost approximately



A master trainer guides a district-level trainee during the LMIS training on August 15–17, 2012 at Abbotabad, Khyber Pakhtunkhwa province.

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U.S.\$250,000, whereas the budget for insourcing was only about U.S.\$150,000. The insourcing strategy ensured value for money, and built stewardship and sustainability into the program.

The first step in the human resources portion of the LMIS implementation plan was to have commitment from provincial and regional governments toward long-term sustainability of training activities, capacity building, and continuous monitoring. This was achieved through continuous dialogue and consultations with all stakeholders and development of province-specific training plans.

Within the existing pool of government human resources, provincial and regional governments were asked to identify 12–16 trainers with certain skills to be trained by the USAID | DELIVER PROJECT in five separate training-of-trainers (TOT). Of the 80 nominated trainers, 21 master trainers were selected, based on prescribed criteria and training skills, to deliver district-level trainings on web-based LMIS, monitoring implementation of LMIS, and to help troubleshoot at the district level. Each province ended up with 3–5 master trainers responsible for district-level trainings. Later on, the master trainers received a two-day orientation session for building additional training and presentation skills.



Participants of the first TOT session with the secretary of the PWD; the session was held during May 9–11, 2012 in Lahore, Punjab.

The target audience for the master trainers was 450 district-level LMIS operators, consisting of individuals from each of the three district programs: HD, PWD, and the Lady Health Workers' Program (LHW). Through dialogue with the provincial and regional governments, the project ensured that the LMIS operators had basic skills in operating computers, and that logistics reporting and data management was one of their assigned duties.



Cluster III LMIS training in progress in Faisalabad, Punjab.

All 143 districts of Pakistan were divided into 29 clusters (5 districts per cluster) for better facilitator interaction, and master trainers from the provincial governments, with support from provincial logistics managers of the USAID | DELIVER PROJECT, conducted district-level trainings for each cluster. A facilitator training manual, training instruction handbooks, training CDs, practical exercises, charts, and job aids were provided to the participants during the three-day training for LMIS operators.

Additional monitoring of the quality of the training was provided by staff from the project's Islamabad office, through visits to the training sites, analysis of tests given before and after the trainings, and assessment of the training impact.

The LMIS district-level trainings were completed in September 2012 with more than 400 officials from health and population sectors trained; they will immediately start entering contraceptive consumption data into the LMIS, and the data will be visible for decisionmakers.

The participants' level of understanding of the LMIS was measured through tests before and after the courses. The results showed significant and satisfactory results for the majority of trainees. For example, in Cluster I (Khyber Pakhtunkhwa province) the level of understanding of trainees increased up to 60 percent after the training.

Next Steps

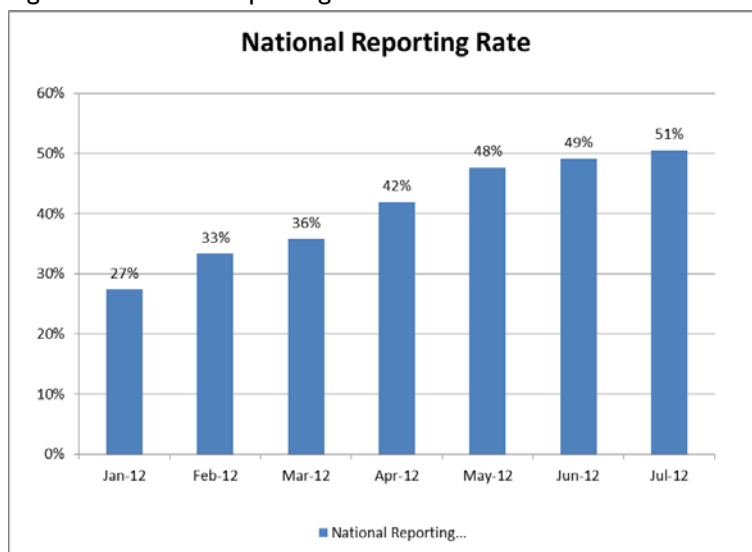
In partnership with the GOP, the USAID | DELIVER PROJECT will continue to improve the availability of contraceptive commodities by increasing data visibility in the supply chain, particularly at the district level. The following actions are planned to ensure sustainability of the system:

1. A databank of all trained district-level LMIS operators is being developed to facilitate communication in regard to uploading monthly consumption data.
2. Logistics and Procurement Cells are being developed at provincial and regional levels to coordinate with districts, provide on-the-job support, and make sure that district LMIS operators are uploading data on a regular basis.
3. The services of master trainers will be used to monitor the implementation of LMIS at the district level, provide on-the-job support, and resolve software issues.
4. Interns are being posted at provincial and regional levels to coordinate with the district governments in developing integrated requisition, distribution of contraceptives from the Central Warehouse to district and subdistrict levels, and regular uploads of consumption data. The interns will also report major issues that hamper the implementation of LMIS at the district levels.
5. All districts of Pakistan will receive hardware and software support for regular reporting of commodity consumption data in the web-based LMIS.

Conclusion

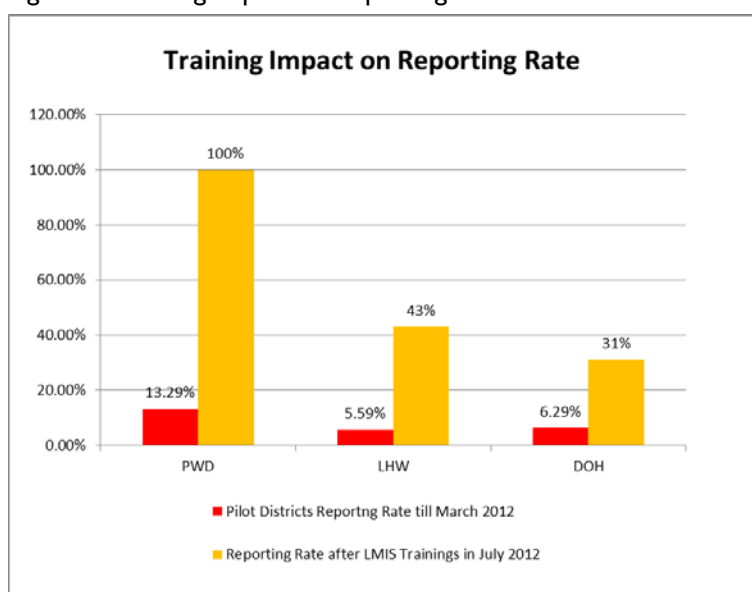
The USAID-supported supply chain strengthening efforts by the GOP and the USAID | DELIVER PROJECT have so far resulted in a significant increase in the reporting rate of logistics data for decisionmaking across the country (see figure 1), and even more so in the 19 pilot districts that encompass the three main programs for contraceptive supply (see figure 2). As other districts adopt the new LMIS system and receive training, it is expected that the reporting rate will

Figure 1. National Reporting Rate



Source: Pakistan Logistics Management Information System
<http://www.lmis.pc.gov.pk>

Figure 2. Training Impact on Reporting Rate



Source: Pakistan Logistics Management Information System
<http://www.lmis.pc.gov.pk>

continue to increase.

To further improve the visibility of commodity data within the country, the project is working closely with the NGO partners to also report disaggregated consumption data for NGOs by district, just like the GOP.

The USAID | DELIVER PROJECT, in partnership with the GOP, is committed to improving access to important health supplies, especially contraceptives, to benefit the Pakistani population at large.

References

Website for the Pakistan Logistics Management Information System: <http://www.lmis.pc.gov.pk>

The USAID | DELIVER PROJECT, Task Order 4, is funded by the U.S. Agency for International Development, and implemented by John Snow, Inc. The project improves essential health commodity supply chains by strengthening logistics management information systems, streamlining distribution systems, identifying financial resources for procurement and supply chain operations, and enhancing forecasting and procurement planning. The project also encourages policymakers and donors to support logistics as a critical factor in the overall success of their health care mandates.

The authors' views expressed in this publication do not necessarily reflect the views of the U.S. Agency for International Development or the United States Government.

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