

## CASE STUDY - MONITORING & EVALUATION

# Nam Theun 2 Power Company

Digital Divide Data provides Survey Manager Software and Data Entry Services to support landmark Monitoring & Evaluation project for NTPC in Laos.

### Business Challenge

The Nam Theun 2 Power Company (NTPC) is a \$1.4 billion international hydro-electricity project in Laos. As part of the Funding Concession Agreement underwritten by the World Bank, Asian Development Bank, Lao Government and others, NTPC made remarkable commitments to remediate and mitigate the environmental and social impact of the project's construction. DDD's client, NTPC's Environmental & Social Division, is charged with implementing all social and environmental programs, and conducting extensive Monitoring & Evaluation surveys to assess the progress of resettlement and economic development targets. The Environmental & Social Division administers hundreds of surveys over a huge and remote area in Laos. The primary survey instrument is a landmark implementation of the World Bank's "Living Standards Measurement Study" tied to the Bank's Millennium development goals. This survey will be administered over at least 5 years. The LSMS survey is 80 plus pages, with thousands of data points. The data must be shared with stakeholders in Laos, an independent International Monitoring Committee and NTPC's investors. The survey must be administered in Laotian, but the key decision makers and data analysis team view the data in English.

### DDD Solution

We customized and implemented DDD's Survey Manager software to manage the data entry and data warehousing for the LSMS survey. Beyond the complex data structures required for the LSMS, the Survey Manager includes a complete workflow for highly accurate data across multiple survey instruments as well as support for data and labels in multiple languages.

- Associating scanned copies of the paper surveys to support auditing requirements.
- A survey creation module to create new surveys and link data across surveys.
- Multiple language support, enabling a user to display a "library" of data labels in either English or Lao - with the option to support any Unicode character set.
- A Double Key data entry process built in to the software workflow, ensuring the highest possible data entry accuracy.
- A Quality Assurance module with automated quality reporting and data entry tracking.
- User-level security and rigid "check in/check out" ensuring data integrity and avoiding duplicate data entry.
- All of the Survey Manager modules are built on native Internet software technology to enable web-based access for data entry and the potential for reporting in the future.
- The Survey Manager can scale over time - both year after year, and as more data is collected - with the potential of linking new surveys to the master database.

### Impact

DDD's Survey Management solution enabled NTPC to meet its data gathering requirements and accurately present the survey data to its stakeholders. Households are tracked year to year, with updated data after each round of surveys. All data can be exported directly to statistical analysis software reporting with time series analysis. Moreover, data can be reported in English and Lao to ensure the project's transparency. Scanned copies of the physical surveys are linked to the data to meet auditing requirements. The Survey Manager preserves NTPC's unprecedented and expensive investment in data collection.

Find more about our services here: <http://www.digitaldividedata.org/services/survey-digitization/>

Digital Divide Data powers the data entry, XML conversion and digital preservation needs of publishers, libraries, content hosts, academic researchers and businesses world-wide. We deliver these services on the foundation of a socially responsible model that creates opportunity for the world's poorest citizens to earn competitive wages, complete their education, and achieve upward mobility through working in our business.

#### DIGITAL DIVIDE DATA

WEB [www.digitaldividedata.org](http://www.digitaldividedata.org)  
EMAIL [sales@digitaldividedata.org](mailto:sales@digitaldividedata.org)  
PHONE +1.212.461.3700