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MONTHLY NEWSLETTER
JANUARY, 2013

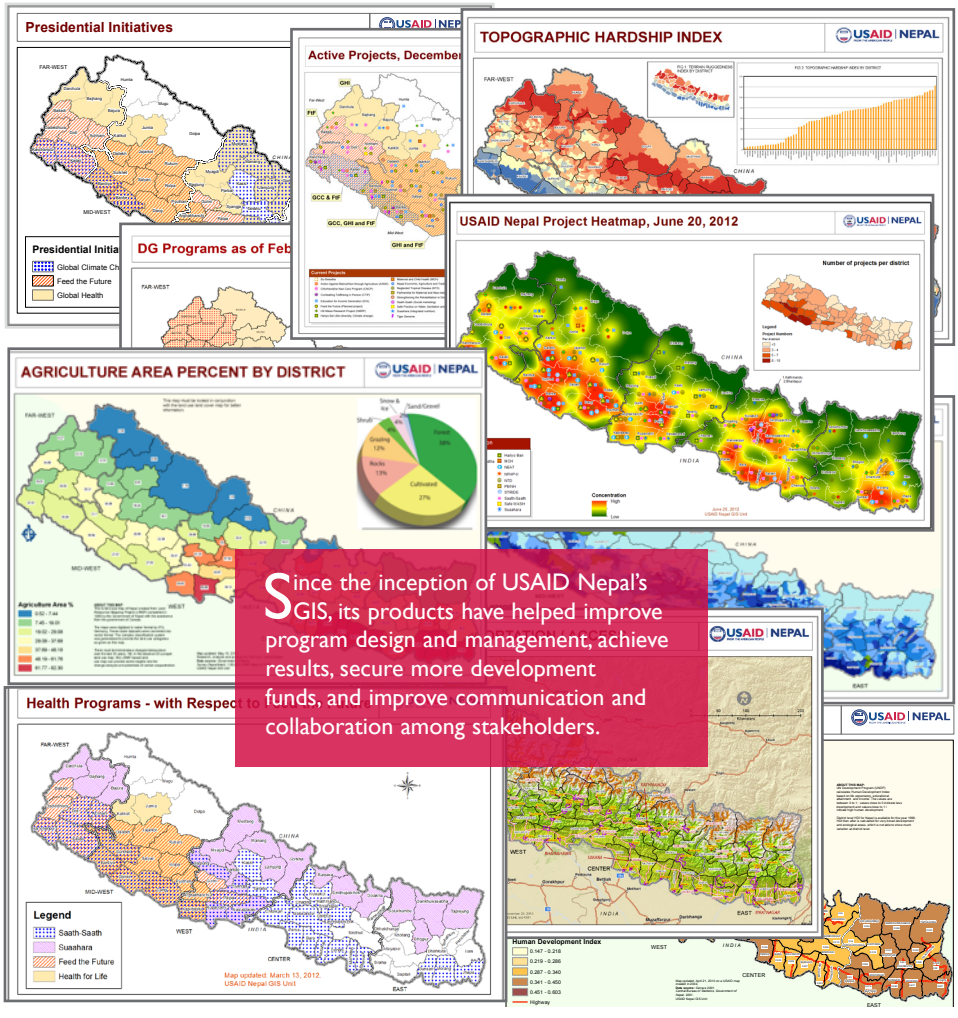
IN FOCUS: GEOGRAPHICAL INFORMATION SYSTEM

MAPPING FOR BETTER RESULTS

Geographic Information Systems (GIS) are used by organizations, development projects, academic institutions and citizens throughout the world to share and analyze information using maps and images; however, at USAID Nepal, GIS contributes to more than that. Since the inception of USAID Nepal's GIS, its products have helped improve program design and management, achieve results, secure more development funds, and improve communication and collaboration among stakeholders.

USAID Nepal's policy requires its projects to embed GIS processes during implemention to measure and record performance and results. GIS products can be used as a monitoring tool to determine whether or not the planned outputs and outcomes are being achieved. For example, *Saath-Saath* project is mapping all the services it provides to the people in communities of 33 districts, per USAID Nepal's Geospatial Performance Management Data Policy Guidance. Data such as baseline values, beneficiary details, input resources, activities, outputs and outcomes are collected by the implementers and directly fed into USAID Nepal's GIS, which then processes it to produce spatial information products. The technical offices, then, identify gaps and overlaps of their programs by using this product. Furthermore, USAID project data are fed into the Nepal Ministry of Finance's Aid Management Platform, USAID's GeoCenter and AidTracker, and the World Bank's Mapping for Results Initiative. These partnerships and collaborations promote sharing of project data among relevant stakeholders in Nepal and thus enhance USAID's programming, resulting in transparency, accountability and better results.

GIS products also help assess whether foreign assistance is being used judiciously for intended purposes and goals. This maximizes program outputs and optimizes time and limited development resources. GIS products are already used by USAID program design teams to determine the districts in which a new activity may be needed. Recently, districts for the *Sajhedari Bikaas*



Since the inception of USAID Nepal's GIS, its products have helped improve program design and management, achieve results, secure more development funds, and improve communication and collaboration among stakeholders.

Maps developed by GIS unit at USAID/Nepal

GIS Specialist Explains ...

"Geographic Information System (GIS) is more than a map-making technology. It is a powerful set of tools for collecting, storing, and analyzing spatial data. As succinctly put by a representative of the Geo-Center, 'GIS can be understood as a map with a database underneath, or a database that one can display on maps'. GIS is often thought of as a technical discipline, but it is getting simpler and becoming accessible even to ordinary citizens. GIS offers two major benefits to USAID: (a) ability to integrate data from various sources within and outside the country and (b) ability to turn large spreadsheets of survey and other data scattered across institutions into visual products. These two functions of integration and visualization of data provide insights about the country not possible by any other means, and thus GIS is very crucial for strategic planning and decision making by maximizing the benefits and impacts with available resources."

Indra Sharan KC, GIS Specialist, USAID/Nepal

project, which aims to improve community development, were selected from an analysis of more than 20 different indicators (e.g., women's literacy, number of USAID and other donors' projects operating in the districts, government district performance ratings, etc.) from various sources. The Feed the Future project design team used existing data in the form of GIS maps as baseline for major indicators such as food security, hunger and poverty, food production, and accessiblity. A tedious spreadsheet showing persons with less than a dollar income in 4,000 Village Development Committees does not hold the same comprehensible clarity as the same data when coverted to a map, and the patterns that emerge from visual representations can support quick decision making.

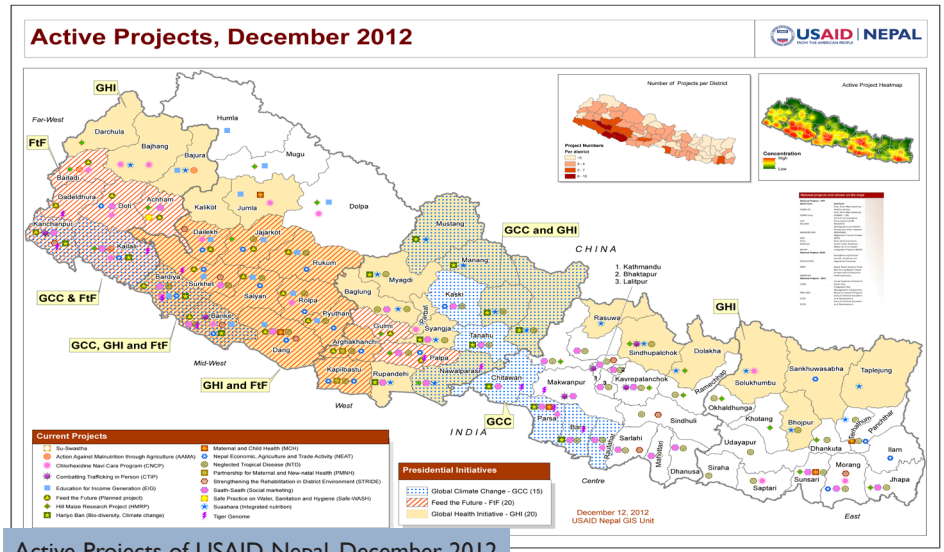
USAID's Education for Income Generation Project v(EIG), a 5-year USAID initiative to create a productive workforce addressing exclusion of disadvantaged youth, followed USAID Nepal's guidance and tracked its inputs, outputs, and outcomes in a way that allowed for learning and a strong evaluation design. For instance, geospatial performance data collected for project monitoring was used by the evaluators of the EIG project to design a sampling framework for a final evaluation. The geospatial information helped the evaluators account for geographic variation in project outcomes across 15 districts and helped them avoid oversampling.

GIS supports USAID Forward goals, serving as an example of innovation and the use of science and technology for improving the effectiveness of foreign assistance. With its GIS system, USAID has pioneered the application and integration of technological tools for good design, monitoring, communication and collaboration among the many projects occurring in the field at any given time. Once tested and proven, GIS capability exercised in the Nepal Mission since 2002 was applied regionally to USAID Missions in South Asia. In addition to benefitting from Nepal's GIS, Missions in the region received support to establish individual GIS units, leveraging lessons learned in Nepal. With assistance from USAID Nepal, USAID Sri Lanka established a system in 2006, followed by USAID Bangladesh in 2011. The technical assistance provided by USAID Nepal helped these Missions to establish efficient operations, avoid redundancies, and ultimately save scarce U.S. Government resources.

Nepal's field-based GIS team was able to support USAID disaster assistance teams during the 2004 tsunami in Sri Lanka, the 2005 earthquake in Pakistan, the 2007 floods in India, and the 2008 landfall of Cyclone Nargis in Burma.

The Mission's GIS products have helped save lives and reduce human suffering through targeted relief and humanitarian assistance in Nepal and the South Asia region. Some of the most memorable examples of GIS application in USAID occurred after the transfer of Nepal's entire GIS platform to Sri Lanka, a first in the history of U.S. Government disaster assistance, during the 2004 Asian Tsunami emergency relief work. This field transfer meant that – for the first time – disaster-affected countries could be part of the solution, providing data and other support to map the effects and impacts of disasters and help to target U.S. Government assistance more directly. Nepal's field-based GIS team was also able to support USAID disaster assistance teams in Sri Lanka during the 2004 tsunami, in Pakistan during the 2005 earthquake, in India during the 2007 floods, and in Burma during the 2008 landfall of Cyclone Nargis. Knowing the extent of the disaster-affected area and the impact of the disaster in terms lives lost, internal displacement, injured population, infrastructure damage, etc. helped USAID disaster responders make critical decisions quickly.

To date, lessons learned from GIS implementation in Nepal have been shared widely with USAID Washington as well as other regional and bilateral missions on multiple occasions, formally and informally. With the establishment of GeoCenter as a USAID focal point on matters concerning GIS and their support to the field missions, USAID will definitely be a leading agency in the use of geospatial information technology as an integrated development tool for strategic decision making. USAID Nepal is excited to continue to work together to make U.S. assistance more effective in Nepal.



Active Projects of USAID Nepal, December 2012

HISTORY OF GIS IN USAID NEPAL:

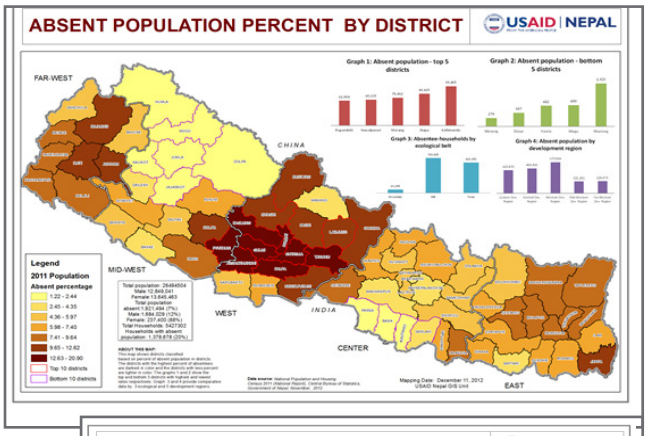
The USAID Nepal GIS unit was created in 2001 by a joint decision between the Mission and Office of Foreign Disaster Assistance's Kathmandu Regional Office. The objective at the time was to conduct a needs assessment on the potential of using GIS technology and data to assist in designing programs during the peak of the Maoist insurgency. The GIS unit was initially called the Humanitarian Response Forecasting Unit and was essentially a policy resource unit that gathered and analyzed information related to humanitarian assistance, later expanding its coverage to the ongoing conflict reconciliation process, political and economic developments, socioeconomic indicators, and all USAID programs.

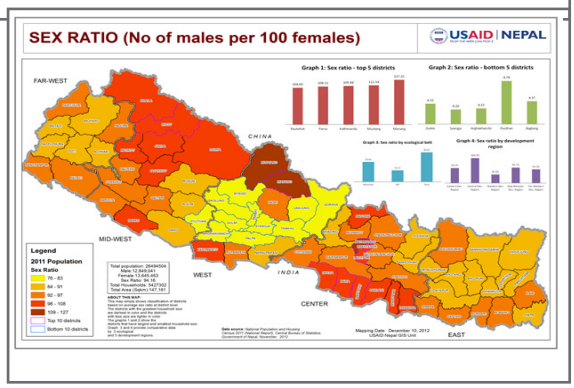
FROM THE EDITOR'S DESK

We are proud to have such technical expertise - that is, Indra Sharan KC - at USAID/Nepal. He has ensured that we are using the latest technologies to 'tell our story' about our development programs and I am always amazed at the information that we can glean from looking at a well designed map. Thanks Indra!

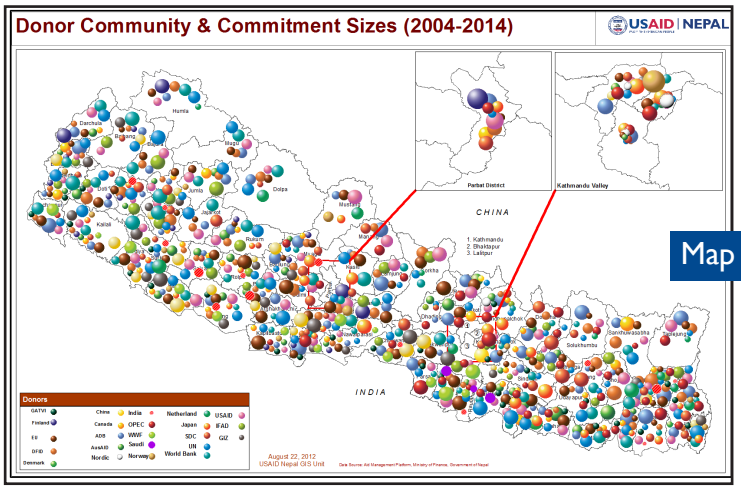
Sheila Lutjens,
Deputy Mission Director,
USAID/Nepal

A GLIMPSE: PUTTING GIS TO USE FOR BETTER AID ASSISTANCE



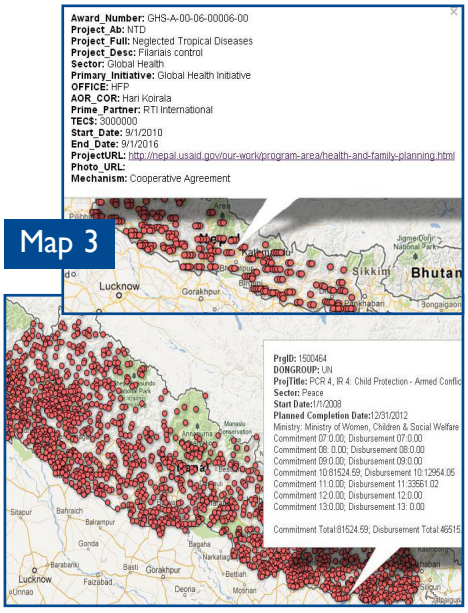


The ability to apply geospatial analysis, interpretation, and representation supports decisionmaking and achievement of development objectives. USAID Nepal analyzed the data from the Census 2011 published by the Government of Nepal's Central Bureau of Statistics (CBS) in October 2012. One of the various indicators processed from the CBS tables is the absentee population. Noticeably, seven percent of Nepal's total population, primarily youth, lives abroad. This permanent and semi-permanent migration due to Nepal's low economic growth rate and high unemployment and under-employment has created unexpected population impacts and changes in social dynamics. With one in ten Nepali men employed abroad, this demographic shift has created new opportunities and challenges for the women left behind. The male to female ratio is decreasing significantly, leading to a social phenomenon where women are increasingly playing new roles in agricultural work (See our 2013 Calendar with a special focus on women in agriculture). Considering the significant role of agriculture in Nepal's economy, understanding this phenomenon will be key to sustaining and growing the sector. Nepal is one of the 20 focus countries for President Obama's Feed the Future Initiative, an ambitious program designed to address the root causes of hunger and poverty. This initiative recognizes women's contributions to agriculture as critical to achieving global food security. Mapping socio-econ-political landscape like this example can help in effective planning and designing of USAID programs through in-depth analysis of underlying strengths, challenges, and opportunities.



Map 1

Map 2



Map 3

Map 1: The map above shows donor projects scaled by their committed amount from 2004 to 2014. (source AMP, GoN)
Map 2: Satellite maps of Trivuwan International Airport, Kathmandu taken in 1963 (Corona Satellite Image Map) and 2007(Digital Globe Image Map). These maps are useful resources for various purposes such as tracking development changes and disaster preparedness.
Map 3: The two screen shots on the right portray how project information (USAID and other partner project activity) is organized for delivery to the user.

ArcGIS, Google Earth, and Google maps serve as useful backdrops for visualization of the spatial information. Based on the history and maturation of GIS in the USAID Nepal Mission, factors such as functional technology; established data collection and information management policies; accessible harmonized and standardized spatial data; committed, knowledgeable team that understands the potential GIS impact; and a support culture that values results-based decision making based on data and analytics, have been identified as necessary conditions for GIS to be effectively utilized in foreign assistance.

At present, USAID Nepal continues to develop applications and products to support U.S. Government assistance and development work in Nepal, primarily under the following broad areas:

Program planning and geo-design: The technical offices make use of spatial information products generated by GIS unit in assessing the situation of the country at the national, district and village levels through a range of key indicators. This is followed by program design and streamlining the implementation process. In the GIS parlance, this is termed as project geo-design.

Geospatial performance-based management: GIS captures performance information of USAID projects implemented by different partners to feed into gaps and overlap analysis, and for monitoring and communication of USAID's activities. This in the long run assists in managing results of all projects at the Mission level.

Responding to disasters and providing humanitarian assistance: GIS provides mapping support with most essential data sets acquired through coordination with several agencies within and outside country, and with processes for responding to disasters. This includes direct coordination with the Government of Nepal and humanitarian organizations.

Communication and collaboration: USAID Nepal's spatial information products are shared widely within the Nepal Mission, with the Agency, partners, and the Aid Management Platform managed by Ministry of Finance, Government of Nepal. This has led to a coordinated approach to tackling multi-faceted development and humanitarian response problems.

NEWS IN BRIEF - JANUARY

U.S. Mission to Build Seismically Engineered Blood Bank Facility: On January 16, the U.S. Ambassador to Nepal Peter W. Bodde, and Nepal's Honorable Minister for Health and Population, Rajendra Mahato, jointly laid the foundation stone of a new blood bank facility at the Tribhuvan University Teaching Hospital (TUTH) in Kathmandu. This seismically engineered facility, being constructed by the United States Government in partnership with TUTH, will supply central blood transfusion services to 75 percent of the medical facilities and hospitals in the city of Kathmandu. At the ceremony Ambassador Bodde said, "An important goal for the U.S. Government's work in Nepal is to save lives and to preserve the gains Nepal has made in our sixty years of development partnership. We seek to mitigate the impact of a major natural catastrophe and shorten the recovery time through effective disaster risk reduction efforts such as this blood bank."

Also marking the 15th Annual Earthquake Safety Day, the U.S. Government in collaboration with the Ministry of Home Affairs launched an animated public service announcement, which will be used nationwide to promote earthquake awareness and preparedness messages through three major television channels (Kanitpur, Image, and Nepal).

Government to Issue Anti-Trafficking Report: The Government of Nepal's (GON) National Committee on Controlling Human Trafficking (NCCHT), chaired by the Ministry of Women, Children, and Social Welfare (MoWCSW) Secretary Dinesh Adhikari, held a meeting to discuss the 2012 U.S. State Department TIP Report recommendations. Seven key ministry representatives, civil society members, and trafficked survivors attended and discussed the GON's progress and strategies for contributing to the 2013 report. The group also decided that MoWCSW will issue an anti-trafficking report in February based on GON official data and government-led anti-trafficking initiatives. USAID has provided operational support to the NCCHT since 2012 via the Combating Trafficking In Persons program.

Talk and Tea With Mandira Sharma: In honor of the one-year anniversary of the U.S. National Action Plan for Women's Peace and Security, USAID and the Political/Economic section hosted a Talk and Tea, with Advocacy Forum Executive Director Mandira Sharma as the main speaker. She gave in-depth insight on why and how violence against women have increased post-conflict due to the prolonged transition and what steps are needed to ensure women's access and rights to justice. This is part of a series of activities planned for 2013 that aim to bring attention to the efforts of host governments and local civil society actors in the area and highlight the critical role that women and girls plays in building more resilient, peaceful, and prosperous communities.

Women's Thematic Working Group Discusses Violence Against Women and the Constitution: The Nepal Transition to Peace Forum (NTTP) Women's Thematic Working Group hosted a series of meetings from December 30 to January 5 to analyze the recent rape and violence against women cases and their implications for the new constitution. The working group of eight women political party members met with a diverse range of women politicians and civil society activists to discuss the appropriate legal framework and ensure Nepali women's dignity and safety. The agreed upon principles will guide the working group's recommendations for the new constitution. This NTTP initiative has consequently bolstered and encouraged the wider civil society movement currently pressuring the government to address violence against women. USAID has supported the NTTP Women's Thematic Working Group since 2010. The NTTP Forum has been used extensively by the parties to negotiate compromises on challenges to the peace process. This year NTTP will be registered as an independent national peace institute.

INSIDE USAID/NEPAL: **High Spirit Award** to **Pramila Dongol,** Roving Secretary, for "positive and high spirit support to all USAID teams, and above and beyond efforts in coordinating support for the people of the Terai during the cold season."

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