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A Publication of LAND INFO International, LLC - Global GIS Data & Consulting Services

### Coverage Spotlight

## NEW PEACE REFOCUSSES GIS USE IN SRI LANKA

For nearly 18 years, Sri Lanka's progress has been slowed by civil war. The country's Tamil population, which comprises 3.2 million of Sri Lanka's 18.6 million total residents, have violently demanded a separate state in the northeast section of the country. A turning point then occurred in December 2001. Sri Lanka elected a new prime minister who pledged to end the cycle of violence through resumed negotiations with Tamil leaders. Shortly following the election, a



cease-fire was announced. This past February, both sides signed a formal cease-fire agreement, and pledged to work towards a permanent peaceful resolution. Today, the country is hopeful of sustained peace, and the opportunity to focus its energy on moving the country forward.

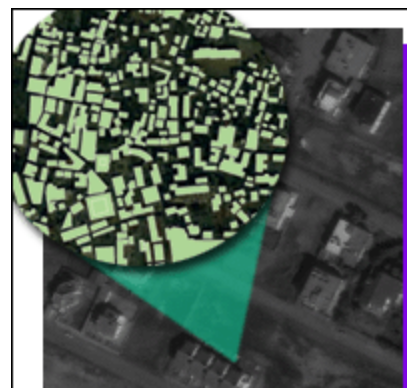
### Client Solutions

## CYPRUS EARTHQUAKE STUDY FOSTERS UNITY IN DIVIDED LAND

The population of [Cyprus](#) is primarily mixed between Greek and Turkish ancestry. In July 1974, the country underwent a military coup by Greek Cypriots. Turkey then intervened with armed forces, and Turkish Cypriots established control of over 38% of the island in the north. Many Greek Cypriots living in the north soon fled south. Since then, the country has been politically, culturally, and geographically divided. A number of international governments and organizations, including the United Nations, have continued efforts to reunite the island.

Today, the United Nations coordinates a variety of programs to foster communication, interdependency, and cooperation between Greek and Turkish Cypriots. One project involves studying the impact of earthquakes on the island. The primary goal is to better predict damages, and thus necessary precautions, to populated areas.

Cyprus lies in a seismically active region around the Mediterranean Sea. The entire island is prone to both smaller seismic events, as well as a potential devastating quake similar to the one that shook nearby



*United Nations Using GIS to  
Map Danger Zones for Quakes*

While mainly funded through USAID, the study's operations are managed through the United Nations Office for Project Services, or UNOPS. The UNOPS goal is to assess the seismic hazards and risks associated with earthquakes in the country's capital city, Nicosia. The on-site project team consists of a number of seismic experts from the USGS. The team is working closely with local authorities, two regional engineering unions, and the geological, meteorological, & mapping divisions within Cyprus.

UNOPS contacted LAND INFO International for support with the GIS data needed for the project. LAND INFO produced a vector layer displaying building footprints

Sri Lanka is an island located at the southern end of the Indian subcontinent in southeastern Asia. The country is approximately half the size of the U.S. state of Alabama. An estimated 40% of the island is covered by forests. The tropical landscape is relatively flat, with the exception of 8,000-foot mountains in the south central region.

Sri Lanka's utilization of high technologies, including Geographic Information Systems (GIS), is widespread. For example, its application of satellite and remote-sensing data in water management is seen by many as a glowing example of how GIS is helping to maximize resources in smaller countries.

Through interpretation of satellite data, government policy makers are discovering ways to better manage Sri Lanka's valuable water resources. The imagery enables scientists to evaluate the amount of water used by agricultural crops and an area's natural vegetation. They are also able to view and study the drainage rate of water flowing from the river basin to the sea. The imagery helps identify zones where agriculture can be efficiently expanded, and the best paths to develop new irrigation lines for water-deficient existing crops.

The remote sensing tools are also supporting research studies around natural wetlands. Researchers are studying the drainage impacts on wetlands due to industrial and residential use growth.

Another major use of GIS is coastal zone management. Sri Lanka's coastline consists of over 1700 kilometers of beaches, lagoons, inlet waterways, and natural forests. The country's populated centers, including the capital Colombo, lie on the coast.

Additionally, Sri Lanka depends heavily on tourism based on beach visitors. Therefore, the country relies on GIS modeling to track the impact to coastal ecosystems.

Sri Lanka is one of several smaller countries integrating GIS into its

Turkey in August 1999. Any large earthquake would affect both Greek Cypriots and Turkish Cypriots. Therefore, the United Nations proceeded with a research project that will benefit engineers, urban development planners, civil defense organizations, and municipality officials throughout the island.

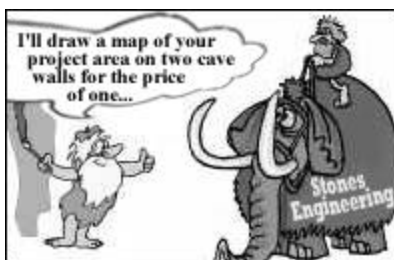
The earthquake study is funded through a grant from the United States Agency for International Development (USAID) and the United Nations Development Programme. USAID was created by President John F. Kennedy through an executive order in 1961. It is an independent federal government agency that receives overall federal policy guidance from the United States Secretary of State, Colin Powell.

for Nicosia. The buildings were extracted from one-meter resolution satellite photos. This extraction is a fully manual process of identifying and vectorizing each building separately. The vector attributes enable an end user to define layer colors, and integrate the data with geologic maps and other datasets. The result is a highly accurate, dynamic, and visual analysis tool.

"We were very pleased with the results," commented **Amelia de Coster**, Environmental Officer / Technical Advisor at UNOPS. "I was impressed with LAND INFO's speedy delivery and the accuracy of the data."

The Cyprus study is ongoing. For more information about the UNOPS, please visit [www.UNOPS.org](http://www.UNOPS.org).

## GEOdiversions



*GEOdiversions is seen exclusively in the Data Solutions Journal ([comments](#)).*

## GEOdata News

### USA DOQQ AERIAL PHOTOS AVAILABLE FOR VARIETY OF APPLICATIONS

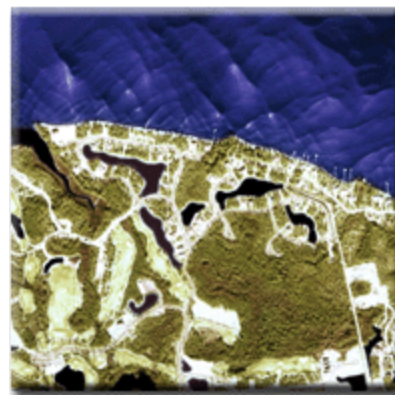
LAND INFO offers [Quick DOQQ Aerial Photos](#) for most of the United States. This is USGS aerial photography that has been scanned to a one-meter resolution and ortho-rectified. The visual attributes, combined with its ortho-rectification, make the DOQQ data an outstanding planning and modeling tool..

Engineers, land-use planners, and

national strategy planning. LAND INFO offers GIS data and consulting services for a variety of geospatial projects in Sri Lanka. It markets [satellite imagery](#) at 2-meter and 5-meter resolutions. Other GIS data is available at 1:50,000, 1:63,000 and 1:250,000 scales. This includes geo-referenced [topographic maps](#), [digital elevation models](#) (DEM), [roads](#) layers, [hydrography](#) layers, and other [map feature](#) layers. LAND INFO can also provide consulting services, including [data needs assessment](#), custom [data production](#), [data integration](#), database management planning, and general GIS data planning. [Contact](#) your LAND INFO representative for more information.

other professionals, are increasingly integrating aerial photos with vector and raster datasets to create a dynamic planning database. For example, in the Oil & Gas industry, geophysicists are merging topographic maps, well production data, and pipeline information with the aerial photos.

LAND INFO markets the aerial photos at discounted pricing, and offers a full suite of value-added services. Quick DOQQ Aerial Photos are priced at \$7 for black-and-white images, and \$14 for color infrared photos. Standard orders are shipped within five business days. Color enhancement, tonal balancing, feature extraction



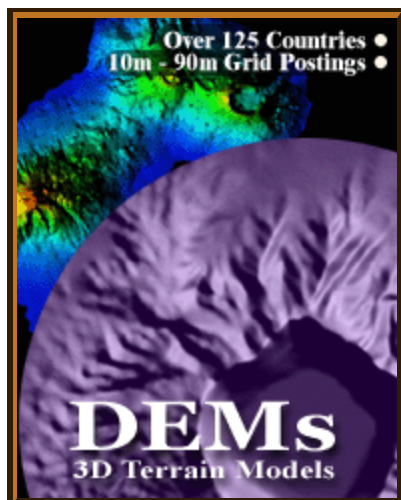
**Feature extraction, color enhancement & other value-added services now available**  
(i.e. roads, buildings, rivers), and mosaic services are also available through LAND INFO.

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- **Data Subscriptions...**

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