PEACE AND STABILITY IN MINDANAO

Mapping the "Land of Promise"

Mindanao is rich in fertile land and precious minerals.
Yet much of its natural wealth is untapped, and many of its people have not reaped the benefits of development.
Updated maps of the island could change all that.

21,000,000
100,500
100,500
1:50,000
Total number of square kilometers that will be surveyed in Mindanao
The scale to which the digital maps will be drawn

Obsolete maps have kep resource-rich Mindanao, and its people, poor. M indanao, the second-largest island in the Philippines, is known as the "Land of Promise." The island has an area of 102,043 square kilometers, most of which is fertile soil. It enjoys generally fair weather throughout the year. As a result, Mindanao grows most of the country's major crops. All of the rubber, 91% of the pineapples, 90% of the cacao, as well as half of the banana, coffee, corn, and coconut produced in the Philippines come from the island.

Mindanao also has rich mineral resources. Its metallic deposits include lead, zinc, ore, iron, copper, magnetite, and gold. The gold mined in Mindanao accounts for nearly half of the national gold reserves.

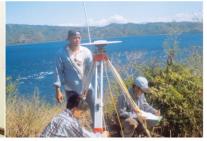
Yet, despite its natural wealth, much of the island's resources remain untapped. As a result, the people of Mindanao have not reaped the benefits of

development. The island is where Filipinos suffer the worst poverty. Seven out of the ten provinces in the Philippines with the lowest quality of life are in Mindanao, according to the 2008/2009 Philippine Human Development Report. The Filipinos in these provinces live short lives, have little access to schooling, and barely make ends meet.

Continuing armed conflict has disrupted the delivery of education, health, and social services to Mindanao. It has also hampered economic development on the island.

Many government agencies and national and international nonprofit organizations have rushed to Mindanao's aid. But their initiatives have been hamstrung by a lack of precise and up-to-date maps of the island. The existing maps are based on aerial photographs taken by the US Geological Survey department from 1947 to 1952. Over





(left) The National Mapping and Resource Information Authority and JICA are working together to produce 205 updated map sheets and six regional maps of Mindanao. The mapping project will require many days of fieldwork (right), often in hot, hard-to-reach areas.

the years, widespread urbanization and natural disasters have changed the terrain and rendered these maps obsolete.

Clearly, an updated map will help pave the way for economic progress and meaningful reconstruction in Mindanao. The National Mapping and Resource Information Authority (NAMRIA) surveys the land and water resources of the Philippines. However, NAMRIA's efforts to map the island have been restricted by a lack of funds and human resources.

In response to a request by the Philippine government, JICA has agreed to fund the "Topographic Mapping for Peace and Development in Mindanao." JICA supports the project as part of its commitment to contribute to the peace process and development in conflict-affected areas in the Autonomous Region in Muslim Mindanao. JICA and the Embassy of Japan launched the Japan-Bangsamoro Initiatives for Reconstruction and Development in 2006.

The project will produce 205 map sheets and six regional maps of Mindanao. These digital maps will contain useful information including river systems, vegetation, transportation networks, populated areas, and administrative boundaries.

Such information is crucial in the preparation of land use, environmental management, development assistance, disaster prevention, and tourism development plans. The data will also help planners design facilities for vital services such as education, water, and health.

Luwalhati Antonino, chair of the Mindanao Development Authority, said the updated maps would help guide development and investment planning in the island. The maps, when completed, could help provide livelihoods, stimulate commerce and industry, and enhance governance in Mindanao. The precise maps could unlock the island's rich resources and help Mindanao finally achieve its full economic potential.

TOPOGRAPHIC MAPPING FOR PEACE AND DEVELOPMENT IN MINDANAO

PROJECT SITE:

The entire island of Mindanao, which is in the southernmost section of the Philippine archipelago

OBJECTIVES:

- To update 205 map sheets, or about one-third of the existing 1:50,000 scale topographic base maps
- To support the wide and effective use of the digital maps and geographic information system

DURATION: 2010 to 2012

IMPLEMENTING AGENCY:

National Mapping and Resource Information Authority and Mindanao Development Authority





The maps will contain information such as river systems, populated areas, and administrative boundaries. Such information will help decision makers plan where to put roads (above) and bridges (below).

9 A Pattern for Development 10 JICA Philippines Office 2011