

**STUDY ON URGENT ESTABLISHMENT OF TOPOGRAPHIC
MAPPING IN EAST TIMOR**
– **CREATION OF TOPOGRAPHIC INFORMATION FOR
ESTABLISHING CADASTRE IN EAST TIMOR**

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ABSTRACT

- First digital topographic mapping in East Timor after the violence following the independence vote in September 1999.
- Cadastral and other necessary data for mapping were lost by the violence.
- Many houses and buildings were destroyed and burned out.
- Complicated land ownership and form of use of public facilities and buildings.
- Public facilities data using GIS.

BACKGROUND OF THE PROJECT

In response to a request from the United Nations Transitional Administration in East Timor (hereinafter referred to as “UNTAET”), the Government of Japan decided to conduct “The Study on Urgent Establishment of Topographic Mapping in East Timor” (hereinafter referred to as the “Study”).

This Study was carried out by Japan International Cooperation Agency, the official agency responsible for the implementation of the technical cooperation programs of the Government of Japan. Asia Air Survey Co., Ltd. sent the Study Team to East Timor under the contract with JICA and executed field work and office work in Japan.

The Study area covers Dili City and its surrounding area in East Timor and the total study area is 107 km² for 1:2,000 scale digital topographic mapping and digital GIS data preparation. The Study was started from February 2000 and ended September 2000 and was the first digital topographic mapping in East Timor after the violence following the independence vote in September 1999.

PROBLEMS IN DILI CITY

East Timor and Dili City have the following serious problems in the field related to topographic maps at present:

- 1) Since the cadastral data was lost by violence in September 1999, many disputes have arisen in connection with land ownership within Dili City. In order to settle these disputes, it is required to develop a large scale of topographic maps, to make a land use survey to be properly arranged on the newly developed topographic maps of large scale.
- 2) The facilities and building owned by the former Indonesian Government will belong to East Timor after its independence, but what facilities and buildings in what areas

are not grasped exactly. Therefore, it is required to define these unclear facilities and buildings to become the national properties of East Timor, before UNTAET turns over its reins to the future Government of East Timor.

- 3) A number of public facilities, buildings and houses within Dili City were damaged by violence in September 1999, but it is required to make a survey of what levels of damages those buildings and houses in which areas were subjected to and to prepare the survey report promptly as the basic materials for the reconstruction plan of Dili City.

FORMS OF USE OF PUBLIC FACILITIES AND BUILDINGS

Many houses and building in Dili City were destroyed and burned out after the violence following the independence vote in 1999 and most of them remained as damaged at the time of map creation. The ownership and forms of use mainly of public buildings and facilities are complicated having the past background compared with those in other areas, and the form of use of public facilities and buildings are classified into three types as follows:

- 1) Public facilities and buildings in the Indonesian period that remain damaged and unused since they were damaged by violence following the independence vote in September 1999.
- 2) Public facilities and buildings in the Indonesian period that were damaged or undamaged, but restored by and UN organization and so on, being in use.
- 3) Public facilities and building in the Indonesian period that were damaged or undamaged, but are now used for the same purpose as in the Indonesian period.

CHARACTARISTIC OF DIGITAL TOPOGRAPHIC MAPS CREATED

In the background described above, the Study Team determined that the 1:2,000 scale digital topographic maps and GIS data to be created in this Study should be different from the general topographic maps and GIS data created for other areas and created those maps and GIS data under the following ways:

- 1) Damaged and undamaged buildings and houses on the 1:2,000 scale digital topographic maps to be created will be classified in the following way.
Ordinary houses with roof: Undamaged house --- drawn by full lines
Ordinary houses without roof: Damaged houses ---- drawn by broken lines
- 2) In addition to the ordinary field identification, inventory survey for public buildings and facilities to obtain the further detailed data and information including the former (Indonesian Administration) names of buildings and facilities, their present names, locations or addresses, conditions of damages and usability and so on will be executed, and inventory survey data sheets will be prepared for GIS data.
- 3) The inventory survey data sheets will be attached to each public buildings and facilities as attribute data on 1:2,000 scale digital topographic maps by using GIS.

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