

The program 'Wastewater and Solid Waste Management in Provincial Centers' contributes to improved environmental conditions in, at present, six provincial cities through the development of comprehensive wastewater and drainage management, comprising the enhancement of existing wastewater and storm water collection systems and the construction of pumping stations and new wastewater treatment facilities.

The lead agency for the technical cooperation (TC) component is the Ministry of Construction (MoC). The Vietnamese partner cities/provinces include: Bac Ninh, Hai Duong, Vinh/Nghe An, Can Tho, Tra Vinh and Soc Trang. The German partner institutions include KfW (German Development Bank) for Financial Cooperation (FC) and GTZ (German Technical Cooperation) as well as DED (German Development Service) for Technical Cooperation (TC).

Asset documentation is an essential support for proper management of the wastewater operators' assets, including the documentation of (a) type, location and condition of the operators' fixed and mobile assets, (b) operation and maintenance schedules, and (c) records of executed operation and maintenance works, including actual operation and maintenance costs and required resources.

The WWM project supports all participating wastewater operators to set-up 'asset documentation units' (ADU), provides hardware, software and implements training for ADU staff for the application of geographical information system (GIS) based software for data management and the use of geographical positioning systems (GPS) for the acquisition of field data.

ADU establishment and training courses are so far implemented in the Bac Ninh Water Supply and Sewerage Company (BN-WSSC) and the Can Tho Water Supply and Sewerage Company (CT-WSSC) through VIDAGIS, a WWM subcontractor.

The purpose of the training is that ADU staffs acquire the skills and knowledge for planning and consistent implementation of field surveys and continued data management; hence, ADU staffs understand how to use and control GPS devices (Trimble R3) and to manage GIS based data structures and applications.

During the training course, all participating ADU staffs had to study data acquisition procedures and the

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PERSPECTIVE:	Asset Management
ACTIVITY:	Sub-Component: Asset Documentation
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LOCATION and DATE	Can Tho Water Supply and Sewerage Company 15. — 30. May 2008

data management system in their newly established ADU office before practicing



GPS Training in Bac Ninh

with the GPS device in the field to understand the practical applications, advantages as well as limitations of the system.



GIS and WWM Training in Can Tho

After that, they brought gathered asset data back to the office and entered these field data into the computer in order to prepare clean

asset data in numeric and graphical forms. These data are, eventually, made available for other related departments, such as operation and maintenance (O&M) department, technical department and financial department. Ultimately, more appropriate and comprehensive asset data enables managers to draw better management decisions.

Tentative recommendations, after the finalization of the training courses for ADU staffs, include the following:

- All trained participants expressed that they need more intensive on-the-job training to assure proper implementation of assigned tasks.
- Continuous application of all agreed ADU tasks, as well as the proper development of operational linkages to other relevant departments, is yet the biggest challenge; hence, the WWM team is required to provide continuing support in organizational and management aspects to get the best possible benefits from future ADU data. Particular efforts should be made by the Institutional Advisor, the O&M Advisors and the Financial Advisor to facilitate close internal cooperation between all concerned departments and the team of the operators' managers.