

# Attitude change — in young minds, in the community

**T**he School of the Future in Sagay City has won environmental prizes every year. The reasons take place daily.

The 180 pupils in the special school for high achievers in a public elementary school in Sagay, in Negros Occidental province, do more than learn the ecological lessons that teachers integrate into all their subjects. After segregating solid wastes, they convert the recyclable materials into things useful if not also decorative. They turn wastepaper into balls of cooking fuel. They shred plastic wrappers with scissors to make pillow stuffing, and craft used drinking straws into pastel-colored flowers.

Before classes begin, as part of their environmental education, the students help to clean the campus and its gardens.

At the vegetable garden, the school uses African crawler worms to turn wastes into compost, and collects the liquid they excrete for use as fertilizer. (It gives away African crawlers to all who are interested.)

Parents bring used bottles and other household refuse to the school, which sells them to junkshops. Some of the proceeds have been used to buy library cabinets.

Part of the credit for the school's achievements goes to experts from JICA who "instilled consciousness" and brainstormed with teachers on solid waste management, says Nenita Gamao, who was the principal until her recent promotion to supervisor at the city division of the Department of Education.

One result of the brainstorming is a student primer titled Program to Reduce Solid Waste for Better Life, which JICA has helped to publish and which the city government helps to circulate.

Ecological awareness and practices in schools have proven to be an effective means by which the Sagay city government and JICA foster ecological solid waste management throughout the community.

"Attitude change" is the key, says Takashi Goto, chief advisor to a project in which JICA serves as the Philippine government's technical partner in implementing a national law, the Ecological Solid Waste Act.

The project, running from October 2007 to October 2010, has set up solid waste management systems in three cities — Sagay, Calbayog, and Davao — with a view to replicating the knowledge and experience in other local government units.

After surveying the baseline situation in the three cities, the project organized teams within the local governments, and conducted on-the-job training, workshops, and technical seminars to strengthen their capability for solid waste management planning. It also sent individual trainees to Japan.

To help improve their "waste diversion systems" — methods of reducing the volumes of waste materials that should go to the final disposal sites, such as reuse, recycling, and composting — JICA provided a pilot Materials Recovery Facility in each of the three cities.

The objective is a 50 percent reduction after 10 years, says Mr. Goto. He points out that the Philippines has 900 sites for final disposal of solid waste, and almost all are open dumps. There are only 20 sanitary landfills operating, while five are under construction, including those in Calbayog and Sagay, he says.

In Sagay, using the JICA-provided pilot Materials Recovery Facility as model, the city government has constructed and operates its



own facility to make compost for farmers, says Engr. Manny Lopez of the city's solid waste management project team.

The city government also uses its own funds to set up the sanitary landfill, based on a technical study provided by JICA.

"Sagay has given very good cooperation and makes very good effort," says Mr. Goto, whose consulting work has brought him around the Philippines and to various countries. "Without Sagay's cooperation, we cannot proceed."

Environmental awareness had roots in Sagay long ago, says the mayor, Alfredo Marañon Jr., a former congressman who chaired the agriculture committee of the House of Representatives.

With JICA's involvement, says Engr. Rodnel de los Reyes, city planning and development coordinator and project team member, "our environmental capability has been strengthened."

JICA "has given us an opportunity to learn more, technically," Rodnel says, and its efforts at information, education and communication have "provided the drive for the environment on the community level."

At that level, among the most active participants are the young students, such as at the School of the Future. As ecological awareness and practice are developed in the minds of the young, they can become integrated into the community's culture over the long term.



(left) **Manny Lopez** of Sagay solid waste management project team with chief project advisor **Takashi Goto**