

**Linis-Ganda: The Story**  
By Leonarda N. Camacho  
*executive vice-president*  
Metro Manila Linis-Ganda

Metro Manila Linis-Ganda is the only group in the entire country that has been assiduously collecting and bringing recyclable garbage such as paper, plastics, bottles, cans and metals back to the paper mills, plastics and glass factories and steel mills since February 12, 1983 to the present, on a house-to-house basis.

Not a mean feat – 20 solid years of patiently encouraging households to separate their garbage.

Linis-Ganda is a pioneer in economic change and environment protection.

From quiet beginnings on February 12, 1983 the quiet town of San Juan, Metro Manila, Linis-Ganda started to collect and buy from each household in San Juan all paper, plastics bottles, cans and metals.

We conducted seminars among housewives and organized the 10 junk shops whose respective eco-aides went around the town. At that time, we borrowed a measly P15,000.00 from the Technology Resource Center to finance the capital of the junk shops. A little bit later, we borrowed P150,000.00 from the Department of Trade and Industry. Today, our loans from the Land Bank amount to more than P10 million.

Linis-Ganda harnesses human resources (eco-aides, bodega helpers and drivers and junk shop owners) and in the process reduce consumption of natural resources and energy through re-use of garbage. It is getting the maximum return from a shrinking supply of virgin resources.

Garbage and The Underground Economy

Linis-Ganda contributes millions of pesos to the underground economy annually.

Consider 3,700 eco-aides, bodega helpers and drivers who each earn at least P200.00 or P740,000.00 daily that is spent to buy rice, food and other household expenses – a perfect example of the new paradigm of eco-economy. Economic growth can not be attained without environment consideration.

In 1997, Linis-Ganda collected 69,406 tons of paper, plastics, whole and broken bottles and paid the households P95,231,700 million.

In 1998, Linis-Ganda collected 78,601 tons at a cost of P105,811 million.  
In 1999, it was 95,569 tons at cost of P124,631 million.

In 2000, it was 101 850 tons at a cost of P132,530,500 million.

In 2001, 120,162.37 tons at a cost of P157,188,155 million.

In 2002, 182,051 tons at cost of P231,612 million.

In 2003, 209,770 tons at a cost of P 267,701,000.

## Garbage and the Environment

Linis-Ganda preserves the environment because separating the garbage in the kitchen in to: compostable, recyclable and residual.

1. Reduces air, water and land pollution, especially in the dumpsites.
2. Reduces the demand for water and energy used in processing paper, plastics, bottles and metals.
3. Saves the trees in the forests, the oil under the sea, iron ore in the mountains and sand on the beach.

### Comparison of Resources Used for Products made from Raw versus Recycles Materials

#### **1 TON OF PAPER**

##### *From raw materials*

17 trees  
24,000 gallons of water  
28 million of Btu of energy  
1,255 pounds of CO<sub>2</sub> to atmosphere  
1.5 cubic yards landfill space

##### *From recycled materials*

No trees  
10,080 gallons of water  
19.6 million of Btu of energy  
890 pounds of CO<sub>2</sub> to atmosphere  
No landfill place

#### **1 TON OF GLASS**

##### *From raw materials*

1,330 pounds sand  
15.2 million Btu of energy  
441 pounds of CO<sub>2</sub> to atmosphere

##### *From recycled materials*

No sand  
2.3 Btu of Energy  
1.03 pounds of CO<sub>2</sub> to atmosphere

#### **1 TON OF ALUMINUM**

##### *From raw materials*

4.5 tons bauxite  
1,000 pounds of petroleum coke  
200 million Btu of energy  
2,900 pounds of CO<sub>2</sub> to atmosphere

##### *From recycled materials*

No bauxite  
No coke  
9.85 million Btu of energy  
145 pounds of CO<sub>2</sub> to atmosphere

### Other Benefits

An additional bonus is the savings of the Department of Public Works and Highways in its yearly expenditures of P18 million just to unclog canals and rivers of plastics and cans.

Another bonus is the savings from the yearly billion spent by local government just to haul garbage.

Thirdly, it reduces cost of health care.

### The Origins

In 1974, we attended an international conference in Geneva, Switzerland and noted that the streets were spic and span; that Lake Zurich was blue and absolutely clean. We were told that the government mandates the separation of garbage in the kitchen and collects garbage separately on specific days.

In 1975, we tried to persuade the residents in Highway Hills, Mandaluyong City to separate their garbage, with the help of the barangay captain. The place became clean and the residents earned money. Unfortunately, the politicians thought we were running for office and torpedoed the project. End.

In 1978, the Metro Manila authorities decided Linis-Ganda was cute and so released P1.8 million to the then Ministry of Human Settlements for implementation and to establish collection centers and hire eco-aides. However, the funds disappeared even before any garbage was collected. End.

In 1983, we were able to persuade the Metro Manila Council of Barangay Captains president to take on the project. We started in San Juan, Metro Manila and eventually organized junk shops (572) in the 17 cities and towns of Metro Manila into environment cooperatives and later into the Metro Manila Federation of Environment Cooperatives, now a multi-million set-up, thanks to Land Bank and Senator Gregorio B. Honasan.

### Republic Act 9003

While these activities were going on, we diligently researched on garbage at the Department of Health, Department of Trade and Industry and the Department of Science and Technology. There was not a single law or ordinance on garbage, except for an order by health officials to keep the streets clean.

In 1990, we came up with a simple bill that mandates the segregation of garbage in the kitchen no legislator wanted to take it up.

In 1996, we gave the bill to Senator Gregorio B. Honasan who polished the 15-page bill which we called the Solid Waste Management Act. The bill was presented on the floor 1997 and subsequent technical hearings were conducted by the Senate environment committee with the paper, plastics, glass and steel industries, as well as with the tire industry and non-government organizations.

Nothing happened – the legislators were indifferent to the bill.

In 1999, by a stroke of fate, the Payatas dumpsite collapsed and killed hundreds of scavengers.

The politicians woke up and approved the bill. It was signed into law by President Gloria M. Arroyo.

Unfortunately, the original 15-page bill became a 100-page law because the politician and some inexperienced environmentalist made terrible provisions such as the setting up of the materials recovery facilities center which confused and are still confusing the Filipinos. The original bill sought the establishment of ecology center in all towns and cities.

The stupid MRFC are just like the existing dumpsites where all kinds of garbage are dumped and people are hired to separate the garbage into wet and dry, thus exposing the hired help to bacteria and creating foul odor in the vicinity.

The Las Piñas transfer station and the MRFC in Guadalupe Nuevo, Makati City and Pinagbuhatan, Pasig City were closed because the people around the vicinity complained of bad odor, abundant flies, rats and cockroaches. The P100 million MRFC in Smokey Mountain with its P10 million composting equipment is gathering dust to this day.

Linis-Ganda is trying its level best to save the situation.

Linis-Ganda printed 100,000 copies of a Manual on Solid Waste Management. We are going around the country conducting seminars and setting-up buying stations in Mindanao, Visayas and Luzon as well as organizing junk shops into cooperatives.

Linis-Ganda has been trying to set-up the National Ecology Center in the grounds of the Department of Environment and Natural Resources for three years now but government bureaucracy is delaying the center.

Linis-Ganda and its benefactors are financing the entire center including a hydromex machine for residuals; composting machine for all organic wastes and a tire shredder that will shred 300,000 unusable tires yearly.

Linis-Ganda persuaded the four major industries – paper, plastics, glass and steel to set-up display pavilions which will describe the sources of their products so all who will go there will have a clear idea of garbage.

Since 2001, when the President signed Republic Act 9003, the National Ecology Center is still at a stand-still, and all because the brilliant legal officers of the DENR refused to remove the 31 dilapidated vehicles in the area, allegedly because of some legal matters.

But we are not discouraged.

Because, like Dr. Martin Luther King, we have a dream.

That in the very near future, the Philippines will be clean like Switzerland and be very prosperous with a healthy and vibrant citizenry. What do you say?