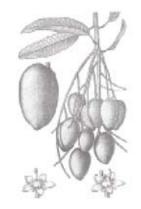


BEATRIZ DE JESUS, 13 DANIELLE MARIE DE JESUS, 12 JOLEENA LOUISE RAMOSO, 11



The three girls are students in Miriam College Grade School. Bea is in Grade 7, while Dani and Joleena are in Grade 5. They live in Marikina City, a valley of eastern Metro Manila where air pollution is high. We spoke with them after school and started off the discussion by showing them a map of the Philippine forests in 1999, and we asked what their impressions were.

They would prefer the map to show more green areas, more forests. This means there would be more fresh air. The forests are disappearing because there are more areas being cemented over, and because trees are used for paper. They also fear that many animals that used to live in these forests are now extinct, having lost their homes or been hunted down and killed.

This situation came about due to business development where forests are turned into cities and where plants are replaced with infrastructure and buildings.

In school, they learn that if trees are cut, these should be replaced. There is also a mini-forest in their school, with lots of trees and plants. They are taught waste management and the need for recycling and segregation. There are trash cans labeled for biodegradable and non-biodegradable wastes. When they buy and drink iced tea, they throw their used plastic cups in a

separate trash can. At home, they also practice waste segregation. Old newspapers are also bundled up and brought to newspaper drives in school.

Bea and Dani are familiar with the Green Thumb, a tree-planting club in school where Joleena is a member, but so far she has only planted tomato. They also recall going on a field trip to Tagaytay where they visited an ecology center.

We went around the grounds of a school and we tried to name all the trees. They were mostly fruit trees, and the girls were not familiar with the trees and the leaves, but did know the fruits and the fruit shakes: mango, avocado, papaya, gauava, santol, *gyubano, atis, chico, kayamito...* over 20 trees in all.

Bea and Dani recalled going to Cebu City where they said it was very hot and there were not too many trees. They said that if the trees are gone, the "cycle of life is broken." There will be not be enough oxygen and birds will die. They learned from school that trees absorb carbon dioxide and give off oxygen.

"We like a green, not a brown earth and we'd like to see more fruitbearing trees that can give us healthy food. If the environment is not well, we will all be affected."

If they were to meet President Arroyo, they would ask her why if there are laws to protect the environment, these are not followed? Why do grown-ups say don't cut trees, but they continue to cut? Why do grown-ups say don't litter, but nobody follows?







BOYET and NINIA OLANGO Siblings of Seedling Growers



Along the highway in Barangay Cugman in Cagayan de Oro City, seedling growers and their stalls line both sides of the road. They occupy the road shoulder extension, and the local government is asking them to move out. There were previous attempts to demolish their stalls, as they are considered illegal occupants.

Due to the limited area, they grow their seedlings at home and haul them in a *tri-sikad* (a three-wheeler pedaled vehicle) for 15 minutes to the display stalls. Buyers are usually from the nearby provinces of Bukidnon, Misamis Oriental, and Misamis Occidental, and will only stop when they see the nursery by the road. The growers tried to move their stalls on to unoccupied private property by the road, but they were also asked to move out.

While there are many families involved in the business, a prominent group is the Olango siblings, five brothers and a sister. In the early 1990s, a DENR employee put up a small tree seedling business on the site. He hired local residents as paid laborers and one of them was the father of the Olango siblings. Eventually, the entire family found themselves involved in the activity. Along with the tree plantation seedlings, they also sell a variety of fruit trees. It was the sister who linked up with a local financier, who then provided them with the fruit tree seedlings and the other investments needed.

The siblings operate independently, but it is the sister who provides the financial needs of the operation. The sharing of benefits is equitable. For instance, a member of the family who provides the labor gets their share through a percentage (20%) of the sales. For every fruit tree seedling sold, they get a PhP 5.00 share. The highest sales are during the rainy season from May to December. Most of the buyers are government offices that order by bulk at a minimum of 5,000 seedlings. Commonly-ordered seedlings are mahogany and falcatta for tree plantations, and mango and durian for fruit trees. The soil used is hauled at a cost of PhP 1,500.00 per truckload. The growers dig an open well on site for water needs.

Boyet Olango is 28 years old, married, with two young children. He reached the fourth year of high school but did not finish the term. None of the Olango siblings finished college.

Ninia Olango is 30 years old, married to the brother of Boyet, and has two daughters (aged 11 and 3). Ninia's father is of Waray origin who married a Lumad (Dinlayan) from Malaybalay City in Bukidnon. Their family left Malaybalay City when she was 8, after her father got involved in the illegal cutting of pine trees and treasure hunting. The family moved to Maluko in Manolo Fortich, also in Bukidnon, where Ninia finished her elementary schooling. She never had the opportunity to pursue further studies and worked instead as a house helper in Cagayan de Oro City and also in Marawi City. In Marawi, she worked in a Muslim household, where she realized that just like Christians, there are good and bad Muslims. In the seedling production, Ninia provides occasional assistance, as her primary source of income is providing manicure and pedicure services.

For people on the margins of the road there is always greater opportunity but little security. The forest industry edges them along but assures no permanence.







"When I was growing up in Dapitan in the 1950s, I knew that the forests were all around us," George recalls. Returning in the 1990s after spending many years abroad, he was "struck with the barrenness of the places" he saw and the amount of structures that had sprouted.

He learned that there were many illegal logging activities in Zamboanga del Norte, the province that Dapitan belongs to and where most of the forests have disappeared. Upon his return, he wanted to do something in agriculture with some friends and non-government groups. "It was a discovery of something that was already missing. I had a deep sense of loss. It is now difficult to penetrate forests areas that used to be within reach. There were efforts by the World Bank to reforest, but they were not really serious. And it bothered him that the "sites offered as cornfields were actually forests."

There are remaining forest areas in Mount Malindang, and he attributes this to the protection provided by the New People's Army (NPA), the armed rebel group. Mangrove forests are also growing largely due to the government declaring a huge area as protected.

As a development planner, George views Dapitan's historical "underdevelopment" in relation to Dipolog, the adjacent city and provincial capital and the commercial and bureaucratic center. People from Dapitan used to feel inferior and backward, as development was more actively pursued in Dipolog. "But now, nobody's complaining," George smiles. With Dapitan's landscape characterized by mountainous terrain and



Town of Dapitan

Endless shades of green viewed from the sea and air provide a "distinctive beauty and attraction" and now Dapitan is a residential and tourist zone. However, George clarifies that this is not because "we took care of Dapitan, but that the landscape is simply formidable. This was not planned, it just happened this way."

flat wetlands, "there were no large valleys to invite development to destroy." Endless shades of green viewed from the sea and air provide a "distinctive beauty and attraction" and now Dapitan is a residential and tourist zone. However, George clarifies that this is not because "we took care of Dapitan, but that the landscape is simply formidable. This was not planned, it just happened this way."

Because development was not forced, Dapitan was "able to survive and preserve itself" in the 21st century and this was reinforced when the tourism industry started developing in the 1980s and 1990s. Dapitan's potential for development is hinged on its historical and ecological attractions. George regularly brings over businessmen, scientists, and experts to Dapitan, "and they fall in love with the place. Dapitan will now continue to attract these sensitive people, and the town will benefit from it."

"Dapitan's case may not be replicable because a century passed with very little development – and not many places can escape that. In the general scheme of things, you can plan it that way, but I don't know if it can still be done elsewhere. Economic development and wealth creation took place in other areas – we in Dapitan produce professionals. There are no factories. All we have are our schools that produce professionals who migrate to urban centers, and money comes in through them. So money is not internally generated. From the development economic perspective, Dapitan is not viable because it cannot sustain itself. Tourism has good potential but it is momentarily affected by the Mindanao image. In the 1990s, before the Abu Sayaf, there were many foreigners in Dapitan."

Growing up in Dapitan, George was inspired by Jose Rizal, the Filipino hero martyred in 1896, and who previously spent four years in Dapitan where the Spanish authorities put him in exile. For George, "there was the spirit of Rizal who was the first Filipino ecologist. It was not a romantic thing for him. He was trying to make a living out of the land. Rizal's life in Dapitan was an interaction

between the coastal areas and the forests. He explored the coastline by boat. He purchased 40 hectares and started to glean some areas with his students, one of whom was my grandparent."

Rizal's years in Dapitan and its forests is a significant contribution to Philippine history and is a source of pride and inspiration. The poems and stories that emerged about Dapitan's forests, wildlife, rivers, and brooks are encouraging and challenge George and his family to ensure that these areas are kept alive by preserving the ecosystems.

Other forest faces that George wants to understand more are the Subanen people, the indigenous communities in the northern Zamboanga area. He recalls hearing stories from the Subanen people he knew when he was young about the forest and the other lives in the forest. They were told scary tales about the forest and the witches that would come to take children away when they do not behave. The birds at night made scary noises and George and his friends called them "wakwak" and as kids, the wakwak was the witch.

When he returned, many of the Subanen were also gone. "We in Dapitan want to learn more about the Subanen, maybe have an anthropological museum. Dapitan was Subanen before it became Visayan. Rizal was also eager to learn about the Subanen especially the way they interacted with nature. I have yet to see a good anthropological study of the Subanen. I am not sure if the Subanen language is still spoken."

Another face he strongly attaches to the forest is a hunchbacked man who lives in the Rizal-Talisay area and who is a walking encyclopedia of herbal medicine. "The heritage we talk about are physical structures, but there is also the heritage of knowledge, folklore – it might disappear! How do we preserve the knowledge of this man?" asks George. There was a re-publication of a classic book on Filipino herbal medicines and George feels these publications



Dapitan River

"Dapitan was Subanen before it became Visayan. Rizal was also eager to learn about the Subanen especially the way they interacted with nature. I have yet to see a good anthropological study of the Subanen. I am not sure if the Subanen language is still spoken." "Using folk medicine, we gave my wife a plant that was boiled in water that reduced her fever. These really have to be recorded. I have been trying to get a local doctor interested. There are very few of us who have that kind of exposure to forests."



are much needed today, as there is often a scientific basis for most of these herbal medical applications that can also be further understood and studied.

George had a recent experience when his wife had dengue fever last month. "Using folk medicine, we gave her a plant that was boiled in water that reduced her fever. These really have to be recorded. I have been trying to get a local doctor interested. There are very few of us who have that kind of exposure to forests."

The Dapitan that George sees now may have been a result of its past "underdevelopment" but for which he now envisions a stronger basis to re-connect with its historical significance and a more sustainable green future.





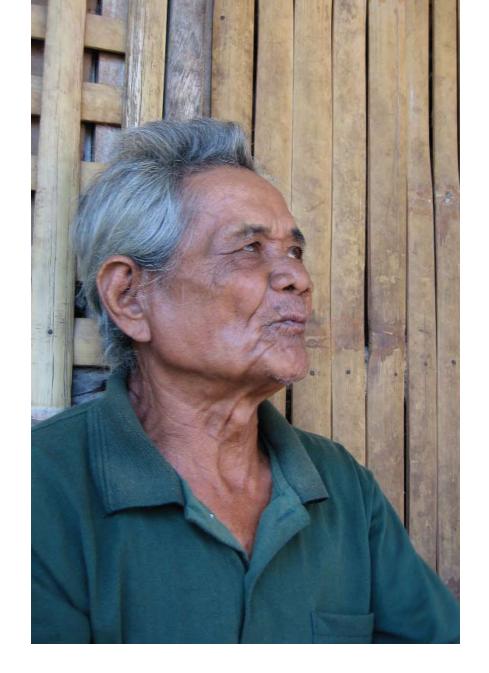
TIMBANG TUNGKAY T'Boli Leader

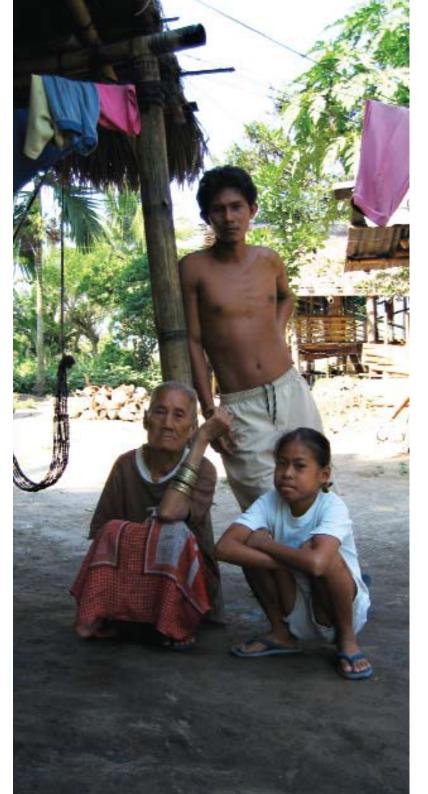
Timbang Tungkay was born in Maculan village by the Allah River in the province of South Cotabato, Mindanao, over 50 years ago. He lives here with his wife Unay Si-mang and the extended family. They plant a seasonal crop of corn in the fields.

People draw their names from the character people perceive in them. *Timbang tunkay* means "most weight" referring to his value as a *datu* or leader of the local T'Boli tribe. As a chieftain, he mediates the problems between the T'Boli. If a T'Boli and another culture differ, the government village leader will mediate.

Before agriculture, the forest sources of living were cassava, sweet potato, banana, yam, and a little maize in the swidden patches. In those days they cut some trees, and use a little dipstick in planting. It was hard work.

In the forest, they hunted deer, pigs, monkeys, hornbills, and small mammals. The relationship with the forest was difficult. There was no salt and the only cloth they had was their own woven *tinalak*. Tinalak comes from abaca fibers or *dungul* drawn from banana sheaths and softened through pounding, then dyed and woven into striking patterns that are unique to the women in the area.





The T'Boli who used the mountain forests down to the river continue to live in the upper village. Outsiders obtained the land and the trees were cut around 20 years ago. Landless Ilonggo migrants from neighboring islands came to settle. They did not have money to spend so the T'Boli let the migrants use the land, which the migrants now claim as theirs. The position of the village government is they cannot do anything with this land grabbing because the migrants are already there, occupying some of the traditional areas. The only thing the T'Boli can do is continue cultivating the remaining areas that are not occupied by migrants.

Timbang Tunkay feels that the shift from swidden to ploughing permanent fields is better. Before, they needed to cut trees in the forest and it was difficult. There are some in the community who experience difficulties as they no longer have any land and are now dependent on seasonal labor offers.

There were 14 families living here before the titling started. They came from the upper T'Boli village. The local church bought a little land and subdivided this land into half-hectares for each of the 14 families. Thus, the lot was subdivided among the families who were already staying or living in the area around 1985. The arrangement was through a loan where they paid PhP1,500 per half-hectare (about US\$45). The effort was to support self-sufficiency.

At the same time, a school was started, but the community was not able to generate enough cash to begin to pay the teachers and make the school operational. They were provided with chickens for the farm to generate income, but they instead sold the fowl to pay the loan. Most of the families were not able to make the returns. The school taught them to continue making tinalak, but after about 10 years, the program moved up to Upper T'Boli. Now the school is closed and all that is left is the water system. Each family gives PhP10 per month. Officials in the community do the repairs. There is plenty of water and there is electricity.



Economic returns of weaving abaca fiber for "tinalak", a traditional T'boli cloth

When reflecting upon what was the most significant event or change that had an impact in his life, his answer is gutom (hunger). Before there were many months that they were hungry, now it is seasonal.

In 1995, there was a massive flood when a volcanic lake (Mount Maugham) emptied. The migrants suffered most as they lived beside the river. The T'Boli are not river-based, only using the river as a way to walk. They live on higher land and the few families by the river relocated after the flood. In subsequent floods, migrants lost their rice fields they cultivated on the shallow floodplain and they are now covered with boulders and gravel.

His first wife was Ilongo. He has 24 children but many died from coughs, fevers, and poor stomachs. Now they can go to a city hospital in just three hours. When reflecting upon what was the most significant event or change that had an impact in his life, his answer is *gutom* (hunger). Before there were many months that they were hungry, now it is seasonal.

What he wants to impart to the children and future generations is the need for them to go to school and to seize opportunities where schooling can be provided. How the community will continue as a T'Boli culture is not clear, with their own capabilities and capacities. There is little system in gathering people, yet he sees the need for them to realize and be conscious that they are T'Boli.

He takes great pride in a woman who has come from the village further up in the valley. The children can see again how the famed tinalak cloth is woven. In the present community, no one weaves and dyes cloth except for this lady. The threads of this cultural community hang loose, yet hopeful of new leadership and a more responsive government.