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bantay

Kinaiyahan



Bantay Kinaiyahan is a regular publication of the Interface Development Interventions for Sustainability (IDIS) Inc. to provide the public with relevant and concise information on pressing watershed issues.

Watershed Issues in Brief

YOUNG PEOPLE AS LEADERS IN ENVIRONMENTAL ACTION

Lack of Youth Involvement in Environmental Protection

The low interest and involvement of the youth in tackling environmental problems has been a recurring concern raised in the meetings of the Sustainable Davao Movement. University of Mindanao's Institute of Popular Opinion's Davao Youth Situationer in 2017 revealed that only 1.1 percent of students are affiliated with environmental groups. While the youth of today are often accused of being a "selfie" generation, self-absorbed and with less to non-involvement to social causes, the youth in Davao City has shown that this may be a faulty-generalization, with their efforts not always recognized and their potential underestimated.

IDIS' longest running initiative on community-based water monitoring relies on youth volunteers known as the Bantayo Aweg, and recently Sangguniang Kabataan in Baguio District and other schools from downtown have joined. The Lunhaw Awards started in 2012 also provides opportunities for schools and initiatives from the youth to be recognized. In 2018, IDIS also launched SDG Research Symposium to encourage and recognize students engaged in environmental research.

Environmental Issues Affecting the Youth

IDIS conducted a series of environmental journalism trainings to over 75 students from 12 schools in three districts. The training aimed to stir up interest among student journalists and equip them to produce impactful environmental stories for their school papers. Outputs of the training consisting of environmental issues, story ideas and story plans revealed that students are aware and are directly affected by unresolved environmental issues, whether in their schools or in their communities.

There are distinct issues for each district such as environmental and health effects brought about by chemical spraying in plantations for those living in rural communities of the third district or the lack of greenery in schools within the urban district. There were also cross-cutting concerns from upland to downtown Davao City - improper waste management and climate change.

#DISTRICT 1

- Flooding
- Unresolved canal/drainage problems causing flooding and health effects
- Garbage: improper waste segregation, problem of plastics
- Lack of greenery in the campus
- Climate Change

#DISTRICT 2

- Quarrying: dusty road/air pollution, river destruction
- Waste: compost pit, piled up chairs becoming health risks, improper solid waste disposal
- Sanitation issues and lack of comfort rooms in schools

Good stories

- Protection of Green Spaces
- Use of rainwater harvesting
- Students use bicycles going to school
- Recycling initiatives: Alternative flower pots from recycled plastic waste, recycling of plastic bottles as ecobricks, recycling of old tires as materials to prevent dengue

#DISTRICT 3

- Improper waste disposal, spread of pests and sanitation issues of poultry and piggery operating in watershed areas
- Improper solid waste disposal dumped in canals and burning of plastics posing threats to health and flooding
- Chemical spraying in plantations (both boom and aerial spraying): strong smell felt by students, potential health effects caused by air pollution
- Lack of water supply or water shortage
- Landslide caused by deforestation
- Soil erosion from plantations when it rains
- Drainage canals non-functioning: issue of soil erosion and flooding when it rains
- Climate change



Youth Speak Up on Environmental Issues

"Ang basura bilang isa sa mga problemang pangkapaligiran, kapag nakontrol at maayos na naitapon ay malaking tulong sa kalikasan at mamamayan. Liliit ang tyansa para sa mga trahedya tulad ng pagbaha at iwas sakit para sa mga tao lalo na sa kabataan."



Jennilyn Cedeno, Catalunan Pequeno National High School

"The heartbreak of showing the generation after us photos of wildlife I once saw but will be wiped out due to plastic garbage. It's time to take small steps to change our daily routines because I still want to experience more of life. I want to see the wonders of this unique planet we live in — the beautiful skies, the crystal-clear lakes, the graceful back-and-forth gushing of the sea water at the beach without a piece of plastic being washed ashore. I want my children to also see that."



Ornella Saavedra, Holy Child of Davao, Mintal Campus

“The sky crying, clouds screaming, brave, furious water flowing. My first day as a student here was terrifying but I have gotten used to the hassle caused by flooding. My school is prone to flooding due to its location and environment. The school struggles not just with our pathwalks filled by water when it rains but also from the subdivision at the back of it. We need to clean the muddy pathwalks. It is time consuming to travel from our classroom to the canteen when the water is overflowing. At some point, some students come to class late because of the rain and want to go home early to avoid the rain. I have seen some improvements such as when the school advocated for the maintenance of vegetation surrounding the school since cutting the trees increase the probability of flooding. Due to recent building construction, the area has become crowded while the space of the school is no longer spacious. This also contributes to flooding. Water remain stagnant in some areas and is prone to mosquitos building up. And then there’s garbage...”



Rena Jay Sevilla, Maa National High School

“I notice some of the changes in our community. With development come disadvantages. Trees are cut and replaced with buildings and facilities.”



Norhainie Labawan, Waan National High School

“Our barangay is flood-prone and if we don’t have trees, we will suffer the consequences. Trees protect us from the strong impact of water. We should know the importance of trees in our daily lives. “



Vainor Andres, Waan National High School

“With the overbearing heat of the sun on a tropical country like the Philippines, it is no surprise that any form of shade is appreciated. Though it may seem trivial and cliché, planting more trees can address the lack of greenery in our school and can be the solution to other issues.

When the heat is unbearable, students complain of difficulty in breathing and other problems. Trees help regulate the temperature and studies show they lower blood pressure, help with our lung activity and relax brain wave patterns that help in concentration and better analytical skills.

Greenery in schools helps reduce eye strain and stress levels, helping not only the students but the teachers as well. Trees also absorb and block sound, reducing noise pollution by as much as 40 percent. This creates a better and ideal learning environment and helps both the faculty and learners to be in a good psychological state to educate and be educated.

The problem is that, people often undermine the importance of vegetation around us, not realizing that giving more value to it is more advantageous in the long run than not. They prioritize building concrete infrastructures then frequently ignore the condition of the land. Vegetation and greenery, included in the long list of its merits, also stabilizes the soil and help strengthen it in times of natural disasters like earthquakes and landslides. A building, no matter how hard the blocks of cement are, can still be easily reduced to rubbles by the earth.”



Mary Frances Gambong, Catalunan Pequeño National High School

ROLE OF THE YOUTH IN SUSTAINABLE ENVIRONMENTAL MOVEMENT

1 Young people can help educate and think of solutions to environmental problems



Junior high students from twelve schools all over Davao City joined were tested and proved they are knowledgeable on marine and terrestrial biodiversity, environmental laws and sustainable living. The Environmental Quiz Bee was conducted in celebration of the Philippine Environment Month in June 2019 with the following schools as the top three: Champion – Assumption College of Davao, 2nd place – Ateneo de Davao University, 3rd place – Catalunan Pequeno National High School.

Young researchers from Davao City high schools and universities likewise convened in October 2018 to give their share of solutions to the city's environmental problems including pollution in Davao river and crop loss in banana plantations. The Sustainable Davao Movement (SDM) organized the event to gather researches in Davao City to be used by the network in its advocacy to localize the United Nations Sustainable Development Goals as well as by the City Government in the updating of its Comprehensive Land Use Plan.





ZERO WASTE CATEGORY

Reduction of Coliforms and Escherichia Coli Using Saluyot (*Corchorus olitorius*) Leaf Extract as Flocculant in Turbid Water of Davao River

By Hannah Sheen T. Lopez, Davao City National High School

Researcher introduced a common plant-based organic flocculant made from saluyot leaf extract that she found to have successfully reduced the coliforms and *E. coli* in the turbid water of Davao river.

The solution is cheap and readily accessible to the public so that water can be treated for household and farm use, especially in a time when water supply can be limited.



HEALTHY WATERSHEDS

Inventory of Butterflies in Davao City, Philippines with a new locality record: An Urban biodiversity

Harvey Salaga, University of Southeastern Philippines

Researcher confirmed the city's urban biodiversity upon sharing that a new locality record for butterflies in the city has been documented. Based on inventories conducted in 2016-2017, of the 1,027 species of butterflies found in the Philippines, Davao City had 45 species, including 12 endemic species and two new locality records found in Matina riverbank.



SUSTAINABLE AGRICULTURAL PRACTICES

Characterization of the Antagonistic Activity of *Trichoderma aureoviride* Against *Fusarium oxysporum* f. sp. *cubense* Tropical Race 4 by Jorrico Suelto, Philippine Science High School and *Ceriops tagal* (Yellow Mangrove) Bark Extract Against *Fusarium oxysporum* f. sp. *cubense* Tropical Race 4 (*Fusarium* Wilt) in Cavendish Bananas (*Musa acuminata* AAA Cultivar Group) under in vitro Conditions by Bea Bustamante, Philippine Science High School

Researchers were concerned about the damage caused by fusarium which affects banana production in Davao City and the rest of Mindanao. Jorrico Suelto II presented two new species of trichoderma as biological-control agents which he recommended to be integrated in fertilizers so it can act as preventive measure against fusarium. On the other hand, Bea Bustamante offered a low-cost alternative by using yellow mangrove bark extract to inhibit the growth of the fusarium.

2 Youth can mobilize and call for action



More than 500 students joined the global climate strike last September 27, 2019 in the call for governments to take urgent actions to address pressing environmental issues that contribute to increase in greenhouse gas emissions. Davao city youth recognized the importance of the Paris Agreement and that we should do our part to keep our commitments to stay below the 2 degree warming target and reduce the risk and effects of climate change.

Students' demands include:

- Yes to declaration of climate emergency in the Philippines
- Yes to banning of single use plastics
- No to coal fired power plants
- No to waste-to-energy
- No to over-extraction of natural resources

The student climate strike was organized by the Students' Environmental Alliance of Davao composed of 11 schools with a goal of strengthening member schools' connection to the environment through dialogues, interventions and eco-friendly activities. SEAD is a member of the Sustainable Davao Movement and has participated in Ban Single Use Plastics forum and Lunhaw month promotional activities.

SEAD Members: Ateneo de Davao University, Brokenshire College Toril, Davao Doctors College, Davao Medical School Foundation, Holy Cross of Davao College, Malayan Colleges of Mindanao, Philippine Women's College, San Pedro College, St. Paul College of Davao, University of Immaculate Conception, University of Mindanao, University of Southeastern Philippines.

3 Youth can volunteer in environmental activities



Panigan-Tamugan river quality has been monitored by our communities for more than a decade, particularly led by a group of youth volunteers called Bantayo Aweg (water guardians). Over the years, schools and SK officers from third district and from downtown Davao have gone to Panigan-Tamugan river for water monitoring along with tree growing activities and clean-up drives in the riparian areas.

Sangguniang Kabataan officers from all over South Cotabato met for the 1st Youth Environmental Summit in 2018 to strategize how to contribute in environmental initiatives for their province. In Koronadal City, youth volunteers from NGOs Kidlikasan and BMCH consultancy underwent the Bokashi training to rehabilitate and help improve the water quality of the B'lok creek.

4 Youth can inspire through their initiatives



School-based Green Initiatives recognized in Lunhaw Awards

School	Area	Category
Dacudao National High School	Brgy. Dacudao, Calinan District	Forest-based Initiative
Marilog High School of Agriculture	Brgy. Datu Salumay, Marilog District	Organic Agriculture
Pamulaan Center for Indigenous People's Education - USEP	Brgy. Mintal, Tugbok District	Education & Advocacy
Holy Cross College of Calinan – High School	Brgy. Calinan Proper, Calinan District	Education & Advocacy
University of Mindanao	Brgy. Matina, Talomo District	Green Building/ Urban Greening
Cadalian Elementary School	Brgy. Cadalian Proper, Baguio District	Education & Advocacy
San Roque Central School	Brgy. Obrero, Poblacion District	Education & Advocacy

Schools with Good Zero Waste Practices

San Pedro College, Ateneo de Davao University, F. Bangoy National High School, USEP-Obrero Campus, University of Immaculate Conception, Assumption College of Davao



Julito Dalagma – Green Champion for the Youth

“Siguro sa batan-on nga naay pagpangga sa kinaiyahan magsugod sa simple nga adbokasiya, kabalo ka sa ginadili sa kinaiyahan, kabalo ka nga ang plastic dili isuksok sa lingkuranan sa bus.”



Paul Ebon – Green Champion for the Youth

“Ang importanteng papel sa mga kabatanunan sa kinaiyahan sa pag-protakta ug pag-palambo sa malahutatyong organikong pamaagi sa pag-panguma ug mananom og klase-klaseng kahoy. Arun sa pagpugong sa pagpanahiling yuta ug ilabina ting baha. Mananom og mga gulayun arun makasustina og pagkaon nga taas og protina luwas sa mga nagkalain-lain nga sakit ug makahatag pud og income sa pamilya.”

A Better / Worse Environment for the Next Generation?

Reflection on 20 years environmental-advocacy and value of youth involvement in moving forward.

As I reflect on IDIS' 20th year anniversary which is also my 17th year of doing environmental advocacy work, I've been trying to answer questions like what are the things that make me worry about the future? What are the things that give me hope? And how do I see the role of the youth in making this country in a better or worse situation in the future?

Let me start by answering the question, what are the things that worry me about the future. Last June 2017, the University of Mindanao issued the results of their IPO survey called "Davao Youth Situationer" which surveyed 264 youth in Davao City from May 24 to 30, 2019. The study showed that only 1.1 percent of them are affiliated with environmental groups, the lowest among those engaged in sports and recreation (49%), church and religious groups (29%), civic organizations (20%), and socio-political activities (1.2%). The 1.1% of 264 is quite alarming. Honestly, I was sad and alarmed by the said study results and been contemplating on how IDIS can address such problem. I posted a challenge to schools, colleges and universities to enhance their education and awareness-building by not just doing one-time tree planting activity but to develop environmental programs.

It was also an eye opener for us in IDIS and as I have said before, we always take it as a challenge. IDIS has been doing environmental advocacy work for twenty years already and yet we are seeing minimal response and participation of the youth in various environmental activities and programs. I am always questioning myself, how can we improve youth participation? And what more can we do about it? And more questions like - where did we and our institutions fail? Or did we really do something to make our children and the youth environmentally conscious? The realities we continue to witness will answer these questions and the answers make me more and more worried each day.

With the increasing impacts of climate change, I am horrified on how the future will look like a hundred years from now or maybe less. I will not be alive by that time but my son will. Will he survive? Will he be having his own family and will they survive? I worry that if not minimized or prevented, climate change and the unprecedented loss of biodiversity and ecosystems, will continue to threaten the delicate equilibrium of our living planet, and the future generations will not survive.

What is more worrisome is upon realizing that sometimes people lack respect, mindfulness and connection to each other

and the environment. Our lack of presence, mindfulness and interactions will increase the threats of losing our community, biodiversity and ecosystems which if not acted upon, will also threaten the well-being of this planet and our survival.

HOWEVER, we are in a situation when we can still do something about our worries. We are in a situation when young leaders are emerging and leading in calls to address climate change. We are in a situation that is not hopeless so I continue to hope as I see young people standing up for their right to inherit a livable planet and demanding the government leaders to act on it.

Earlier this year, IDIS conducted several activities such as Environmental Journalism workshops and Environmental Quiz Bee involving the students / youth of Davao City. As I witnessed their participation, I saw hope, inspiration and motivation through their eyes. The youth have shown how they are more creative, imaginative and determined to be part of the movement that is responsive to the calls to protect and care for the environment. They have fresh ideas and unintimidated with complexities. As I worry, I also keep in mind the faces of those young people then hope replaces my worry.

Yes, there is hope in our young people and IDIS will continue to work and will engage them to address the challenge of other young people's limited participation and turn it into a rage of young people's action.

Then, there is Greta Thunberg, the young environmental activist who started the school strike in Sweden against climate change and eventually influence more students, young and old people around the world to join and call for stronger and concrete actions against global warming. She has shown the world how an individual with so much passion and commitment can ignite the environmentalist within the heart of more and more people. Greta and other young people in Davao who also organized the local climate strike, the young members of the Sustainable Davao Movement, other young people in other areas in South-central Mindanao and the hardworking and committed young IDIS staff whom I have seen participating in environmental activities and been working with, make me hopeful and more optimistic that somehow this world will have a better not a worse environment in the future.

Chinkie Pelino-Golle
Executive Director

¹ <https://www.mindanews.com/environment/2017/06/youths-low-interest-in-environment-alarms-group/>



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2nd Floor, ALMACEN Building, Km. 11, Davao-Bukidnon National Highway,
Catalunan Pequeño, Davao City

☎ 299-4552 ✉ interfacedvo@gmail.com 🌐 www.idisphil.org

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