EXCEPTIONAL ZERO WASTE WOMEN
IN THE ASIA PACIFIC REGION

VISION & GRIT
VISION & GRIT: Exceptional Zero Waste Women in the Asia Pacific Region

GAIA (Global Alliance for Incinerator Alternatives) is a network of grassroots groups as well as national and regional alliances representing more than 1,000 organizations from 92 countries.

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WRITERS
Sherma Benosa
Doun Moun
Marco Sumayao
Marlet Salazar
Eric Michael Santos
Johanna Poblete

LANGUAGE EDITOR
Felicia Dayrit

MANAGING EDITOR
Sherma Benosa

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FOREWORD

There is no dearth of women environmental leaders in Asia Pacific. In the past decades, the region has become host to many impactful environmental initiatives and campaigns spearheaded by women leaders who not only dared to dream of a better future, but also rolled their sleeves up to ensure that the better future they dreamed of would become a reality.

But while there is general awareness that women play crucial roles in driving societal changes, exactly what they have done, and how massive their impact has been are often told sparingly, if at all. The spotlight is seldom shone on women leaders. And when it is, they are either made to share it with their male counterparts, or the spotlight shone upon them does not shine bright enough to adequately highlight their impact.

Hence, this publication.

Vision and Grit: Exceptional Zero Waste Women in the Asia Pacific Region was conceived out of the realization that we have yet to truly take stock of the invaluable contributions of women leaders in Asia Pacific, particularly in the Zero Waste movement. It features 14 women leaders across the region whose initiatives have made a huge impact in their communities and have served as an inspiration for others to do the same. Because of their work, thousands of lives have been changed for the better, progressive policies and regulations have been instituted at various levels, enabling conditions for more sustainable options have been jump started, and Zero Waste models have been developed. Admittedly, so much still needs to be done at various fronts, but so much has also been achieved. Change is actually happening, and it is hugely thanks to our women leaders.

Pore over the pages of this book and learn about some of the women who have helped make the world we live in a better place, and be inspired by their compassion, determination, and grit. Read their stories and understand their motivations, and be amazed and grateful that they stood up for what they believed in when they did, and continued the fight even when things were difficult. Our current realities may still be filled with challenges, but it is less so because women of character and strength live among us.

May these stories move us all to also do our part.

Sherma E. Benosa
Managing Editor, Vision and Grit
Sr. Knowledge Management Officer, GAIA Asia Pacific
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Women DERS
Contextualizing Zero Waste

BY MARCO SUMAYAO

On quiet days when she isn’t busy championing Zero Waste policies in Japan, you might find Akira Sakano on a secluded mountaintop, on the lookout for rare birds. She’s had a lifelong fascination with the creatures, and these small trips to see them help her reconnect with nature, as well as with herself. They were one of the first reasons why she started caring about the environment. After she’d learned at an early age that the Kakapo, the world’s biggest flightless parrot, was an endangered species, she became aware of the need for conservation efforts.

When it comes to her environmental work, however, it’s all about the people.

Akira is the founder of Zero Waste Japan, and a former Chair at the Board of Directors of Zero Waste Academy. Through Zero Waste Japan, Akira and her team help local governments and businesses develop Zero Waste policies within their respective areas of responsibility. Instead of recommending “one size fits all” solutions, they specialize in crafting policies tailored to each of their partner communities’ unique personalities. Their grassroots projects are then treated as case studies that other communities can model themselves after, and in which policy-makers can find inspiration.

It’s an approach she learned during her time with Zero Waste Academy, where she spent five years helping the small town of Kamikatsu establish itself as Japan’s first Zero Waste municipality.

Kamikatsu is a remote mountain town, and its location presents several issues when it comes to waste management. Incineration can’t be done without going beyond emission limitations, while transporting trash to better-equipped towns is both inefficient and costly. Pursuing a Zero Waste policy was Kamikatsu’s most logical course of action, and so the local government had declared their ambition...
to go Zero Waste in 2003. By the time Akira had arrived in 2015, however, the town’s progress in this effort had plateaued.

“Kamikatsu was already very good at waste segregation and recycling, and then they started implementing reusing and trying to circulate things within the community. But the amount of waste produced hasn’t changed. They were at a stage of feeling a bit stuck in their Zero Waste activities,” she shared.

“How can we go beyond that? Generally, people achieve maybe 70% [waste reduction], but if you think about Zero Waste, then we might be able to achieve 90%. That’s the kind of mentality that I see in the concept of Zero Waste, so ‘How can we actually create that mentality into reality?’ was the very key question,” she added.

Based on her experience, Akira estimates that only 10% of a community’s population starts out very engaged in sustainability. Another 10% is either against the idea, or finds it a bother. What Akira learned, however, is that reaching out to the 80% of people who are generally ambivalent about the matter can do wonders. In order to do that, one needs to feel the pulse of the community.
“It’s more about how we can create the right followership within the community,” she said. “When we only speak about the environment, and say ‘this is important,’ it doesn’t reach them. In the case of Kamikatsu, at least, community engagement is a totally different topic from Zero Waste or environmental engagement.”

“People have more motivation or ownership in contributing to their own community, or contributing to their own daily life baselines. That’s why we shifted towards engaging them on the topic of ‘What does it mean to actually do segregation in your daily life?’”

Communicating the importance of Zero Waste was only half the equation in Kamikatsu. In order to reach their goals, Akira and her team needed to help them contextualize the value of Zero Waste policies on a personal level.

For Kamikatsu, that meant showing residents the direct economic benefits of waste segregation. At the town’s segregation centers, each sign that labels a segregation bin also shows you how much money the local government saves for each waste item you sort properly. In the case of recyclables and reusables, the signs also tell you where they go and what each item will become.

Seeing things like the monetary value of a recycled aluminum can, for example, ended up having a surprisingly profound effect on the townsfolk’s motivation. Their recycling rate jumped up to 81%, even with an astonishing 45 different waste segregation categories for them to sort their trash into. The main waste collection center became a place for gatherings, where the elderly could connect with each other over their daily routines. Zero Waste wasn’t just a lofty goal anymore; it was a collaborative social effort in uplifting their town.

Kamikatsu quickly became one of the Zero Waste movement’s most inspiring stories. International news agencies traveled to Japan to find out how a small mountain town was able to achieve such startling results. And for Akira, all this newfound attention presented a world of opportunities.

“Doing something very special, and then having it as a star in the dark sky is important, which was kind of what Kamikatsu was trying to do. It was a star [that inspired] others to say, ‘We can actually do this, you know?’ Akira said.

“But that wasn’t enough to actually get everyone to start doing things,” she continued. “That’s why I thought, okay, my challenge definitely is to first actually create more case studies
Akira learned that people were more willing to adopt Zero Waste policies if they felt they were customized to their communities’ needs. It was more important to have multiple case studies with practices people felt they could copy, rather than a single study that prescribed a solution they couldn’t imagine working for them.

Akira founded Zero Waste Japan to help develop more of these case studies. The idea was that, if more and more towns could be living proof that Zero Waste is both feasible and effective, the different lessons learned from these towns could impact policy on a national scale. Her efforts don’t just stop there; Akira is currently working on a multi-pronged approach to realizing Zero Waste Japan’s goals. And as with Kamikatsu, it starts with people.

“There are two things I’m doing right now,” she shared. “One is to develop people who can take my role in different communities. That’s what I’m doing with our current new organization called Green Innovation. We are running Green Innovator Academy as a four- to six-month program to educate young professionals and students, to go through all this basic knowledge, actually letting them experience how to craft policy, how to craft business models. Then they can be trained afterwards to be sent to rural communities in certain locations. They can be the leading person to bridge the gap with someone supporting from outside, and to actually start moving things on the ground.”

“At the same time, I’m also creating a platform for different organizations to pitch the results or successes or outcomes we already have, to be built up as clear numbers of the impact [of Zero Waste policies]. We’re now engaging small and larger groups in the various locations here in Japan who are doing organic waste diversion from incineration. We are collecting all the data. In fact, we can actually talk to national government policy-makers on how we can hasten the impact of the diversion of organic waste,” she said.

All these efforts, Akira said, are meant to contribute towards a long-term movement for Zero Waste in Japan. She understands that policy changes take years, even decades, to be established, and that Zero Waste Japan’s goals may not even be realized within her lifetime. By building up people who can push the movement forward alongside her, the number of communities adopting Zero Waste policies can grow exponentially, becoming more stars to inspire others. Together, she believes that they can build the foundations of a truly Zero Waste future for their country.

In that future, perhaps, Japan’s birds will be flying in cleaner, starlit skies.
When Jane Bremmer and her partner Lee bought a weatherboard cottage in the outer suburban area of Perth called Bellevue, they had plans to build a ceramics business from home. This was the '90s, and the young couple were the proud owners of a backyard filled with fruit trees that seemed an idyllic play space for their four-month-old son, and an outdoor shed that could serve as their ceramics workshop. However, their dream died the day Lee dug a hole in the backyard and suffered acid burns to his arms due to soil and water contamination from a nearby toxic waste dump.

"Unbeknownst to us, we had just bought a house next door to Western Australia’s worst toxic site. An American waste oil company [Omex Petroleum] had been operating across the road and had, for 50 years, been dumping their waste oil in a clayhole in the ground. It had regularly caught fire, it regularly overflowed, the whole community had been contaminated for years, but no one talked about it," Jane said.

**BECOMING A VOICE FOR THE VOICELESS**

An environmental crusader since her university days who has campaigned for nuclear, peace and disarmament, and for protecting forests and oceans before climate change became a byword, Jane co-founded the Bellevue Action Group (BAG), together with her partner and their neighbors following her firsthand experience of the impacts of toxic waste dumping in her own backyard.

The group had no problems with recruitment, particularly among mothers. "Most petrochemical-based pollution contains endocrine-disruptive chemicals, which is the type of pollution that impacts women and children disproportionately because of their physiology. Women and children are more likely to be exposed to contamination in their..."
home and gardens. I started to hear the stories about the women and the kids that were sick — the unexplained illnesses. So it was women talking to women,” Jane said.

The BAG became a platform for sharing experiences — to validate the truth about the situation and make it available for other people, particularly authorities, to hear and to highlight the problems that needed to be addressed. It became a mouthpiece for the residents who were unable to speak out.

“There are many reasons people don’t speak out in our community: for cultural, religious, or social reasons including fear of retribution, [because of] their histories. We understood that there were a lot of Polish immigrants that did not want to be identified, but they still had relevant information to contribute and were entitled to environmental justice. So that was a platform to help represent those communities,” Jane said.

The group effectively lobbied for the government to have the contaminated clayhole capped, the toxic vapors extracted, the most affected residents relocated, and the dumpsite remediated—but not without costs to themselves. Residents were subjected to bullying and intimidation. They also suffered from ill health and personal financial loss. They could not in good conscience offload their devalued property onto unsuspecting buyers. After seeking legal counsel that resulted in zero compensation, Jane and her family abandoned their home rather than prolong their exposure to health hazards.

FORMING ALLIANCES FOR COLLECTIVE ACTION

The BAG attracted the attention of communities in similar situations. Banding together, they formed the statewide Contaminated Sites Alliance (CSA), which dedicated itself to educating the broader community about the risks associated with contaminated sites. They pursued legal groundwork for transparency on the location and management of these sites and played a crucial role in the passage of the unprecedented Contaminated Sites Act, under which “known or suspected contaminated sites must be reported to the Department of Water and Environmental Regulation (DEWR), investigated and, if necessary, cleaned up (remediated).”

While BAG set the blueprint for environmental justice in Western Australia, it focused on one issue and one campaign. Similarly, CSA was limited to the issue of contaminated sites. Realizing the need for a concerted effort to tackle much larger issues, including the lack of regulation and laws to protect human health and the environment, a new and more coordinated organization was created: the Alliance for a Clean Environment (ACE). Incorporated in 1996, ACE became a new model for activism and organized Western Australia’s first conference on contamination laws and environmental justice.
Today, ACE follows the science, providing credible information to help other groups with their campaigns, and legitimately and accurately representing some of the bigger issues facing our shared life support systems: chemical pollution, waste, pesticides, and toxics. To improve quality standards and industrial legislation, ACE endeavors to engage directly with the government by participating in stakeholder roundtables and other platforms allowing the legitimate representation of civil society.

Jane’s work led to her participation in the community engagement forum of the federal government’s industrial chemical regulatory committee—the erstwhile Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS), now the Australian Industrial Chemicals Introduction Scheme (AICIS)—for 10 years. “Women like me, sitting on these committees, made sure that the existing chemicals review program included all of the things that would affect women and children... Standard risk assessment, let’s not forget, is based on a 70-kilogram healthy male. Now that’s not representative of our society,” she said.

Besides being co-founder of ACE, Jane is currently the Zero Waste and Anti-incineration campaign coordinator for Australia’s National Toxics Network, working collaboratively with GAIA and the International Pollutants Elimination Network (IPEN). Cumulatively, these networks represent more than a thousand non-government organizations working for the public interest and a Zero Waste, incinerator-free, and toxics-free future.

WORKING TOWARDS SYSTEMIC CHANGE

Jane believes that caring for the environment means taking an active role in sustaining it. She credits other internationally recognized environmental justice experts like Dr. Mariann Lloyd-Smith of the Australian National Toxics Network and Lois Marie Gibbs from the US-based The Center for Health, Environment and Justice, whose journey mirrors her own and provided the powerful female role models and mentoring she was long seeking. It was at a Greenpeace OZ Toxics conference in 1997 that Jane met Dr. Mariann Lloyd-Smith and Lois Marie Gibbs, who both taught her that using independent scientific evidence, as well as legal and political methods, was key in successful environmental justice campaigns, a methodology that stands strong today.

In her years of campaigning, Jane has learned numerous lessons and basic principles that even frontline communities in the midst of a traumatic experience may follow. She shares that it is important to not let feeling overwhelmed paralyze you—break the challenge down to manageable issues that are actionable; and find your friends, your allies, particularly in grassroots groups free from corporate influence, and partner with the people whom you
can trust and will support you. Finally, she underscores the importance of elevating your voice. “Develop good relationships with the media, and be brave and speak out,” she said.

The changes in the environmental movements landscape and its influence in Australia make it both an exciting, but also an uncertain time. The political power shifting to Australia’s Labour party and the election of the female “Teal independents” or minor party candidates on a platform focused on climate change action and political accountability is a welcome change for Jane, but she remains cautious as the job’s not yet done. “The next test is how honest and committed they’ll be to the grassroots and real change. That’s where people like me and my sisters in the environmental justice movement will be ready and waiting because it’s just not enough to put a woman in a position of power, it has to be a woman who can articulate the rights of women and children at the forefront,” she said.

For Jane, there is no more room for compromise and no time to skirt the big issues. “I know what it means to live in fear of toxic contamination, to have your health harmed by toxic contamination, and to feel the betrayal of those institutions that should be defending you, turn their back on you. So I’m not interested in working on soft issues like lifestyle choices, I want systemic change because we’re running out of time. Too many people are being harmed. We’re destroying our children’s futures... Legislative change drives behavioral change rather than the other way around. That’s why I positioned myself in driving systemic legislative change because I know that changes behaviors faster than asking individuals to do that themselves,” she added.

Jane, together with her colleagues at the National Toxics Network illustrate the effectiveness of women-centered, environmental justice approaches to addressing many of the biggest environmental challenges our world is currently facing. “Fossil fuel and petrochemical pollution, whether it’s plastics, pesticides, toxic and hazardous industrial chemicals, or waste incineration, all threaten women and children disproportionately, globally and intergenerationally,” she said.

“It is by holding corporations and governments to account in the very places that laws and standards are set — from the highest international bodies and most importantly, where the impacts are felt most, which is in our local communities — that citizens and communities are empowered to defend their health and environment. The effectiveness of this approach can be seen in our campaign wins to resist waste incineration threats, ban toxic and hazardous chemicals and pesticides, and place Zero Waste and circular economy policy firmly at the center of our current Australian government policy and legislative reforms,” she added.
Jyoti Mhapsekar is one apple that didn’t fall far from the tree. Raised by parents who were freedom fighters, she has dedicated more than half her life to her work as a women’s rights activist, environmentalist, and waste management advocate.

“I’m proud to have such courageous and dedicated parents who organized and worked with people,” Jyoti said.

When the United Nations declared 1975 as International Women’s Year as a reminder to the international community that discrimination against women persisted in much of the world, a group of young female activists that included Jyoti took action. They established Stree Mukti Sanghatana or SMS (Women’s Liberation Organization) with the aim of empowering disadvantaged women in India and improving their lives.

Today, SMS is the leading women’s organization in the state of Maharashtra. It works to uplift women’s position in society by creating awareness on women’s issues and issues related to equality, peace, and development through theater, family counseling centers, daycare centers, and adolescent sensitization programs, among others.

A librarian by profession and a renowned playwright, Jyoti is the current president of SMS. She has received many awards for her social activism including the Nari Shakti Puraskar, an annual award given by the Ministry of Women and Child Development of the Government of India to individual women or
institutions that work towards the cause of women empowerment. It is the highest
civilian honor for women in India, and is presented by the president of India on
International Women’s Day (March 8).

**EMPOWERING WOMEN WASTE PICKERS**

SMS started work for the Parisar Bhaginis (women waste pickers) of Mumbai in 1998.
India is among the highest waste-generating countries in the world. According to a
2018 World Bank report, India produces around 277 million tonnes of waste annually,
an output that is likely to reach 388 million tonnes in 2030 and 543 million tonnes by
2050.

There are no official data on the number of waste pickers in India; estimates range
from 1.5 million to 5 million. Studies in several Indian cities show that the majority of
waste pickers are women.

"Women waste pickers in India lie at the bottom of the waste management pyramid.
They are exploited and constantly live below the poverty line," Jyoti said.

She cited studies which showed that waste picking is a caste- and gender-based
activity in India. Ninety percent of all waste pickers are the primary breadwinners for
their families. They carry heavy loads and lack transport or storage facilities. Waste
pickers suffer serious health problems resulting from unhygienic work conditions.
The life of a waste picker is totally insecure, with exploitative middlemen further
degrading the marginalized workers’ already pitiful condition. Most waste pickers
are caught in the moneylender’s trap (often a middleman himself) and pay loans with
exorbitant interest rates.

**STRONGER TOGETHER**

Through their Parisar Vikas (Neighborhood Development) program, SMS sought
to address the problems of women waste pickers and the issue of urban waste
management. One of the key Parisar Vikas outputs is the formation in 1999 of Parisar Bhagini Vikas Sangha (PBVS), a federation of 250 self-help groups consisting of 2,500 waste pickers in six cities and Parisar Sakhi Vikas Sanstha (PSVS) with 500 members in Navi Mumbai. “This is the most important achievement of SMS," Jyoti shared.

PBVS and PSVS both have an executive committee of nine members (plus two advisors from SMS) elected through a democratic process. The committee members meet every quarter to discuss ways to address the problems waste picker communities face.

With PBVS registered as a community development society with the Municipal Corporation of Greater Mumbai (MCGM), the municipal authorities provided the federation with spaces for dry waste sheds in several areas of Mumbai and Thane. PBVS maintains these sheds, collects dry waste through its members, stores it at the sheds, and disposes it when enough material is collected.

Under the guidance of SMS, PBVS and PSVS also monitor internal lending activities of individual self-help groups and their social and financial audit; provides economic assistance to members in need; conducts awareness sessions on life skills, training for leadership skills and alternate skills like composting, bio-methanation, gardening, and fine sorting of dry waste; helps women seek employment; conducts health awareness sessions and health camps for members; and promotes education for children of members.

SMS also helped PBVS members to register their own cooperatives in 2004 to sign contracts with housing societies and other establishments for Zero Waste projects. Through these cooperatives, waste pickers who used to search waste in streets and waste dumps, amidst touting and harassment by locals and police (waste pickers are not allowed in waste dumps), have been capacitated to collect and manage waste at the source — in apartments and housing societies — making their work easier and giving them regular days off, predictable source of income, and equally important, dignity of labor.

SMS likewise provides extra study sessions in the evening for the waste pickers' children, allowing them to cope up with studies. Their special programs for adolescent girls have helped reduce the incidence of child marriages.

SMS also conducts health camps and runs a dispensary opposite the dumping ground and a mobile medical van to visit the communities.

"Unless women waste pickers are united, their problems will not be solved. Together, they can achieve a lot. We need to strengthen women's organizations not only at the city level, but at the state, national and global level," Jyoti said.

**POLITICAL WILL, MIDDLE CLASS SUPPORT**

Many challenges remain for the women waste pickers. Weak implementation of waste segregation policies, refusal of local authorities to integrate women waste pickers into the system, and the apathy of the urban middle class are among the major hurdles, according to Jyoti. The COVID-19 pandemic only made matters worse. With community lockdowns, the collection of dry waste became almost impossible, resulting in the loss of livelihood for many women waste pickers who survive only on meager daily wages. Moreover, many people have almost stopped segregating waste in their homes during the pandemic.

"Government should make compliance with policies on waste segregation at source compulsory. Robust waste management policies must be fully implemented. People, especially the middle class, should do their part in segregating waste," urged Jyoti.
Jyoti believes that the youth must be educated about the environment and proper waste management, including waste segregation and Zero Waste solutions. “We must provide cheaper alternatives to incinerators such as biogas,” she said.

**FUELED BY HOPE**

Faced with so many challenges, what keeps the 73-year-old Jyoti going? “Smiling women, hopeful women. Their positive attitude and eagerness to join us and learn new things give us encouragement to continue the work. If you work with people and share their sorrows and joys, this gives you enough energy to continue.”

According to Jyoti, activists have to be optimistic. “We have to maintain a positive mindset, move forward and ensure that the program continues and more people join and support the work,” she said.

And that optimism, the energy, was perceptible in Jyoti. It’s easy to see that this kind, gentle, and humble woman is one of those persons blessed with a charismatic, genuine smile that can light up a room and inspire people to do good.
“It is necessary that the weakness of the powerless is transformed into a force capable of announcing justice.”

Since the late 1960s, Paulo Freire’s words have spurred countless activists to create social change including liberation of marginalized people. His book, Pedagogy of the Oppressed, laid the blueprint for critical pedagogy, a social movement that empowers the poor to uplift themselves through education, socio-political critique, and action. Freire’s pedagogy would eventually inspire movements around the world, including Lakshmi Narayan’s work in creating and strengthening a sense of professional dignity among waste pickers in India.

Lakshmi grew up in Pune, the second-largest city in the state of Maharashtra. After completing her graduation in Philosophy, she pursued formal education in Mumbai, where she earned a Master’s degree in Social Work. She was convinced that a career in academia, although intellectually enticing, wouldn’t satisfy her after graduating; she felt the need to work for real social change.

She moved back to Pune after completing her degree and got a job in the Department of Adult Education at SNDT Women’s University, India’s first women’s university. Along with her colleagues, she interpreted education as a form of empowerment — it wasn’t enough to just teach literacy and numeracy; positive change among the urban poor was critically required. Freire’s pedagogy was one of the philosophies that guided Lakshmi and her peers in their mission, as they engaged with some of the most powerless communities in the city.

“We soon realized that one of the most marginalized groups in Pune were waste pickers, who could not even make it to meetings we organized because they were working very, very long hours,” she shared. “They had to be out at the crack of dawn to survive.”
India’s waste pickers collect and categorize trash, sorting out recyclable and reusable materials prior to the municipality’s collection efforts. This informal system significantly contributes to the country’s solid waste management; for instance, India recycles 70% of all used PET bottles, versus just 31% in the United States. Waste pickers divert approximately 20-25% of a city’s waste — equivalent to several million tonnes of trash per year — away from landfills, saving the government millions of rupees in handling and transportation costs.

At the time Lakshmi began her work, a waste picker’s typical schedule began at dawn and ended late in the evening, with barely any time for breaks. Since most labor and welfare surveys took place during office hours, waste pickers were often excluded and essentially voiceless in matters surrounding workers’ rights. Compounded by the fact that they were routinely harassed for doing what others considered dirty, undignified work, Pune’s waste pickers were one of the community’s most vulnerable sectors.

In order to better understand their issues, Lakshmi immersed herself in the waste pickers’ community. “We believed a participatory process of organizing waste pickers where they could come together, articulate their issues, analyze their work conditions and the key sources of harassment, and debate the best strategic collective action to address them was the most sustainable way to move forward,” she explained. “In the course of our interactions and dialogues, discussions and meetings, and sharing of experiences as we went around collecting waste with them, a number of ideas emerged.”

Lakshmi and her team saw first hand the harassment faced by waste pickers from the police, who routinely accused them of theft and abused their power in multiple...
ways. They learned about exploitative loan sharks who preyed upon the waste pickers’ vulnerable situations. They heard stories of homeowners who shunned waste pickers and refused them drinking water in their regular glassware, saying they were too dirty. It was not uncommon for people to hold their noses as they passed them on the street, or turn a blind eye as they fended off stray dogs at the garbage bins. As most waste pickers in Pune were women, they were marginalized on account of their caste, class, and gender.

“We realized that a trade union of waste pickers would establish the environmental, social, and economic contribution they make as workers, and offer the right platform to make demands of the local, state, central, and international governments,” Lakshmi said.

In 1993, they registered Kagad Kach Patra Kashtakari Panchayat (KKPKP), a democratic trade union of waste pickers that sought to protect their rights, improve their work conditions, restore their dignity within the community, and uplift their general quality of life.

Since then, through a combination of dialogue, protests, research, and systemic engagement, KKPKP has significantly transformed the work and lives of its member waste pickers. In 2006, KKPKP laid the foundation for SWaCH, India’s very first wholly-owned cooperative of self-employed waste pickers which integrated them directly into the city’s own solid waste management system. This partnership with the local government has further legitimized the waste pickers’ enterprise in the eyes of the city and its citizens.

Today, waste pickers in Pune have identity cards that recognize them as crucial workers, and are paid monthly fees by the households they service. They no longer have to dig through piles of garbage by the wayside, putting themselves at risk of injury from sharp scraps or wild animals; instead, they collect waste directly from doorsteps. When they face harassment from a police officer, a government official, or any other form of authority, they have the full support of hundreds of their peers in demanding — and securing — justice. They are provided health insurance, support for their children’s education, and financial support from their very own credit societies.
The waste pickers are also now widely recognized as some of the city’s frontline environmentalists. Apart from diverting waste from dump sites and incinerators, their waste collection model is largely pushcart based, with an extremely low carbon footprint. Since their work promotes source separation, both environmental groups and ordinary citizens acknowledge them as an integral part of the city’s sustainability efforts.

Most importantly, KKPKP and SWaCH have helped Pune’s waste pickers find a sense of pride in their work, and in their place in the community. “There’s a change in the way waste pickers look at themselves, in how society looks at them, in how they look at society, and themselves in it,” Lakshmi continued.

“The empowerment goes beyond their work, and translates into them challenging the status quo in their communities and within their families, in the way they bring up and educate their daughters, speak up against abusive husbands, and show low tolerance to community goons. But we have a long way to go….a radical change in the socio economic political context will be needed before they are completely accepted by one and all within the city’s fabric,” she added.

Lakshmi and others like her, see the need to continue this work far longer. While there has been a lot of improvement since the 1990s, there is still much more to be done in uplifting the lives of Pune’s waste pickers. Today, Pune has several activists working closely with the waste picker organization, and offering the support for waste pickers to pull themselves out of their past powerlessness.

And, as Freire would put it, their weakness will continue to transform into a force for justice.
As an English major, Liwen Chen initially did not see herself becoming an environmentalist, much less a Zero Waste advocate. But fast forward to the present: her work has turned a village into a Zero Waste model that has inspired other villages, towns, and counties to pursue the same.

This was how it happened.

In 2006, Liwen saw Liao Xiaoyi, founder of the non-profit Global Village of Beijing, on TV talking about her own work and promoting reduced consumption and decreased use of harmful chemicals. Liwen was struck by what she heard and realized that environmental work was what she was called to do. Thus began her volunteer work and involvement in the advocacy.

At the beginning of 2009, Liwen started working in an environmental non-governmental organization (NGO) that focused on chemical safety and climate change. That same year, China’s anti-incineration movement started. “Many protests happened in China which involved people who were opposed to incinerators,” Liwen said. “From then on, I started paying attention to those things and started working on the waste issue. I visited incinerators, landfills, and recycling markets related to waste facilities. It was very important for me to understand waste generation, especially in big cities like Beijing.”

While she was working in the organization, Liwen found that effective waste management policies have not been properly implemented in rural areas.

Early the following year, she joined another environmental NGO and started her work on waste. She also started working with communities affected by China’s incinerators,
visiting over 30 incineration plants across the country. She admitted that working with the affected communities to oppose the use of incinerators was one of the biggest challenges she faced in her advocacy.

For over six years (2009-2015), she worked with communities against incineration pollution. She said visiting landfills made her “uncomfortable and very frustrated seeing so much waste.”

Liwen’s exposure to environmental issues led her to realize that there had to be a more sustainable way to manage waste. In 2017, she established the Zero Waste Village. Her previous NGO work enabled her to witness the increasing problem of landfills and the effects of uncollected garbage in the villages not only on the environment but also on people’s health, while her involvement in policy-making made her realize that most of the solutions centered around urban areas, leaving rural communities with no system for waste management.

“It was time to zoom in on enabling village or town leaders on how to enforce waste management within their areas,” Liwen said.

“Rural areas have the most potential to implement composting because they have the location to do so,” she added.
We make it possible to help people overcome the barriers in waste separation. We also prove that waste separation also means increasing the investment or government budget to finance the programs.
To implement her vision, Liwen went back to her roots in Hebei and started a program in Laishui County. Without much financial aid and often using her own money to buy materials such as garbage cans in the first two villages, Liwen spent the first few weeks teaching residents the basics of waste sorting and how it could become part of their lifestyle.

She has taught over 60 rural communities in Hebei, Jiangxi, Hubei, and Zhejiang provinces about waste segregation and Zero Waste since the summer of 2017.

Liwen and her group was persistent in teaching the residents about sorting and composting until finally, their work started bearing fruit. That was when they decided to scale up the program to the town level in 2018.

“I don’t think my goal has changed but my work has shifted since 2017,” Liwen explained. “I started with incinerators then I shifted to Zero Waste. There are many challenges why it is hard for China to adopt and practice waste segregation.”

Misunderstanding and uncooperative residents in townships are just a few of the challenges Liwen had to deal with. At one point, she thought that she would not be able to handle it. But she persisted. She and her team held dialogues with the residents to ensure that their message was understood.

“We make it possible to help people overcome the barriers in waste separation,” she said. “We also prove that waste separation also means increasing the investment or government budget to finance the programs.”

So far, the Zero Waste Village has helped design the biodegradable waste and non-biodegradable waste management system of five towns and one county. The system mostly involves ensuring that all stakeholders, including relevant government agencies, are adhering to the processes. All of these are monitored and recorded, and the data gathered are utilized in tracking the progression of the program.

The Zero Waste Village’s work has now extended to Shangrao municipality based on the Dongyang Township’s program.

To ensure the sustainability of their programs, Liwen and members of Zero Waste Village started making documentaries to communicate their efforts to more people. They also started developing textbooks to illustrate how to practice rural waste separation programs.

“Working with the stakeholders can be an effective way of empowering people and spreading the importance of waste separation as well as composting. This will also ensure that programs are institutionalized and sustained even after many years that they were implemented,” she said.

“China’s waste is a monumental problem given its population and it being an industrial nation. But households managing their own waste will have a great impact on the country and the countryside,” she added.
MARIYAM HAMSHA HUSSAIN

Architect, Environmental Advocate, and Feminist

BY JOHANNA POBLETE

Mariyam Hamsha Hussain was “that kid who represented the environment club” in primary school. Now a professional architect with a degree from RMIT University in Australia, Hamsha remains as passionate about the environment as ever. Returning home to Maldives in 2015, she co-founded Zero Waste Maldives together with her husband Ahmed Afrah Ismail. Their aim: to minimize the amount of pollution inter-island and turn waste into wealth.

Maldives generates more than 860 metric tonnes of waste daily — the majority plastic — according to the World Bank. Poor waste management has been threatening the archipelago’s marine ecosystem as well as its status as a premier tourist destination, visited by more than a million tourists annually. Plastic bags, plastic bottles, garments — and more recently — face masks, are but a few of what makes up the mountains of rubbish collected by the island waste management centers or seen floating on Maldivian shores.

Hamsha and her husband Afrah, who worked for the Environmental Protection Agency when they were starting out, saw firsthand the waste situation in the country. Implementing interventions in the waste stream as a co-founder of Zero Waste Maldives has also prompted Hamsha to reimagine solutions — even in her profession.

Hamsha’s firm recently participated in an architectural design competition and entered an energy-efficient and sustainable building design, and she surmised that perhaps recycled plastic, or even construction waste often used to counter soil erosion on beaches, could be repurposed and reused as construction blocks.

“We are still in an experimental phase, so I hope we can do it,” she said.
ECO-FRIENDLY ALTERNATIVES

Hamsha channels her drive to experiment and seek eco-friendly alternatives through Zero Waste Maldives, which started out as a social enterprise in 2018 and registered as an NGO in 2019. “If we don’t get funding from any other way, we still have our business that would fund our projects. It’s helping to achieve what we wanted to do,” explained Hamsha.

From the outset, the co-founders visited Zero Waste management centers to study how the systems worked. They also took it upon themselves to collect trash from the beach. It gave them ideas on what to sell on the business end of Zero Waste Maldives. “What are the most used products here and what are the alternatives for that? That’s how we decided on the products,” said Hamsha.

Today, Zero Waste Maldives has sold everything from bamboo toothbrushes (phasing out plastic toothbrushes) to menstrual cups (minimizing disposables). In addition to the latter, Zero Waste Maldives partnered with the United Nations Population Fund (UNFPA) to educate women on the reproductive cycle, reproductive health, and the use of sustainable menstrual products. They have since distributed more than 700 menstrual cups. More importantly, their initiative enabled women to be more comfortable with their bodies and to talk freely about menstruation. Together with UNFPA, Zero Waste Maldives will also be publishing a book about menstruation, written in their local language.

“The main reason for the project is to break the taboo surrounding menstruation and reproductive health by raising awareness on the subject. If we are not comfortable talking about our reproductive health, how are we supposed to know the problems that we face?” said Hamsha.

Hamsha enjoys working with the women in the communities, as it speaks to their agency — that women are capable of being change-makers — and teaches them to be more accepting of their bodily autonomy. As it turns out, women are also instrumental
in shifting attitudes about waste — either via the power of the purse, being in charge with shopping or waste disposal at home.

“Many women have asked me, ‘Why does it have to be us, women, who have to work on reducing waste? Why does it have to be women that have to change their behavior — why is it just us who have to do that?’ I understand the eco gender gap and mostly it is women who are empathetic towards climate change. We have more power at homes and at our workplaces to lead with these changes. We are slowly breaking this patriarchal society,” said Hamsha.

Zero Waste Maldives advocates that a circular economy cannot be composed only of women, nor does it hinge on individual lifestyle choice — it must be a collective and community-based effort. “I think Zero Waste would bring the community together, it would be a very community-based operation, everyone helping to reduce waste and people being more responsible. I would like to see that kind of community in Maldives,” said Hamsha.

Their waste-to-wealth intervention specifically, “Fehi Fathi,” is designed to empower women to be self-sufficient. The co-creation of a waste-to-wealth business around fabric waste helps to financially support the island’s women’s development committees which are largely underfunded and underappreciated.

**TEACHING RESPONSIBILITY**

Zero Waste Maldives started out by tackling the waste problem on the collection front, piloting a Deposit Refund Scheme (DRS) that offered a financial incentive to encourage the return and proper disposal of used plastic bottles. Funding was provided through the United Nations Development Programme’s (UNDP) Urban Innovation Challenge. By providing one-rufiyaa-per-bottle reward, they achieved an 81% return rate in the pilot city. The collected plastic waste was then recycled through Parley Maldives. From the lessons learnt during this small pilot project, Zero Waste Maldives with adelphi germany have been selected through UNDP’s Ocean Innovation Challenge to create the legal framework that will help implement Extended Producer Responsibility (EPR) in the country.

Given that tourist-heavy Maldives generates more than 280,000 plastic bottles daily, an EPR scheme is vital to waste reduction. As islands are reclaimed to create waste management facilities, collecting and transporting waste becomes a logistical challenge, and the waste ends up being buried in a landfill or incinerated. “We just can’t keep collecting and accumulating waste. By having an EPR policy and EPR system here, it would help reduce the waste that we are producing, put pressure on producers for upstream changes to production and reduce the pressure on the waste management system,” said Hamsha.

Taking lessons from how successful EPR systems are implemented regionally, Zero Waste Maldives is now espousing a Mandatory Packaging Reporting Scheme based on the Singaporean model, which will create a comprehensive and reliable database on packaging waste prior to the establishment of a national EPR scheme. They are currently working with adelphi consult GmbH and the Government of Maldives to develop this framework.

Moreover, Zero Waste Maldives has managed to lobby the government and parliament to get provisions for EPR included in the draft of the proposed National Waste Act. They suggested changes — including the removal of a clause on importation of waste for a planned waste-to-energy project — which are currently under discussion. “It’s in the
Many women have asked me, ‘Why does it have to be us, women, who have to work on reducing waste? Why does it have to be women that have to change their behavior — why is it just us who have to do that?’ I understand the eco gender gap and mostly it is women who are empathetic towards climate change. We have more power at homes and at our workplaces to lead with these changes. We are slowly breaking this patriarchal society.

works right now. Once the Act comes out, and it would complement the new EPR that we are making, then we will be able to go forward with the EPR implementation. Maybe two, three years down the line, we will have [a national] EPR system,” said Hamsha.

When Hamsha and Afrah started Zero Waste Maldives, it was somewhat of a family enterprise, with the two of them tapping extended family as volunteers. Now they are in need of more volunteers to work on their many projects, from anti-incineration campaigning, to promoting the drinking of tap water to combat plastic water bottle consumption (Fenveshi, a project with the Canada Fund for Local Initiatives or CFLI), to rescuing and upcycling clothing to reduce garment waste in landfills (FehiFathi or Green Stitch). “We are still searching [for members who will be just as passionate about Zero Waste] and hopefully we will have [a branch] in every island or in every atoll — that’s the hope,” said Hamsha.

Zero Waste Maldives collaborates with multilateral organizations as well as other NGOs, local communities, and the government. Their work with the environment ministry and the President’s Office even earned them a seat at the table discussing the upcoming National Waste Act.

"Initially we were just only thinking of providing alternatives for the products that are single-use plastic. I didn’t think we’d have this many projects and we’d be involved this much," said Hamsha, noting that they were able to do good work despite the pandemic. "It takes a while to see the results of our projects, the work that we put into society. It would take time to see some desired outcomes. But I think that we are doing really well,” she said.
Mageswari Sangaralingam, or simply Mages to her colleagues and friends, has always been close to nature. Growing up in the Malaysian countryside, she would always insist on taking the long and winding road with trees and a view instead of the short, uninteresting main road every time she and her brother would walk to school. She was a literal treehugger; she loved the feel of her arms wrapped around a tree. A very shy girl, she did not like making conversations and preferred the company of her pets to humans’.

“I wanted to become a vet,” she shared.

Unfortunately, Mages did not make the cut for veterinary medicine when she went to university. But instead of shifting to her dream course when she could, she opted to complete her Bachelor of Science in Human Development course. “I did not want to spend a few more years in the university,” she said.

That decision proved to be pivotal. It took Mages away from her childhood dream, but then it led her to become what she is now — an environmentalist at the frontline defending communities and protecting the environment, both in local grounds and in national and global policy spaces.

THE ARDUOUS JOURNEY

Mages wears many hats. If she is not supporting her colleagues at Consumers’ Association of Penang (CAP) in their local programs, she is either writing or translating press releases, speaking to the media about their campaigns or other relevant issues, doing research,
coordinating local or national campaigns or programs, or joining fellow environmentalists in
other countries pushing for policy reforms, or doing strategic planning.

Mages’ official title at CAP is Research Officer, but she is also a campaigner, a project
manager, and liaison of some of the international organizations and networks CAP is
affiliated with, such as the International Pollutants Elimination Network (IPEN) and Global
Alliance for Incinerator Alternatives (GAIA). She is also a board member of Friends of the
Earth Malaysia.

Since joining CAP in 1992 as a fresh university graduate, Mages has been involved in
key campaigns and programs of the organization. As a researcher, she carried out
investigations and developed resource materials on various issues, including resource
and waste management, agriculture, water, toxics, and poverty. As a campaigner, she
has facilitated community mobilization and participation on environmental issues and in
defending their environmental rights. She has also campaigned for the phaseout or ban
of single-use plastic and hazardous substances (e.g., asbestos, mercury, pesticides, and
fluoride in water) and problematic technology and systems (e.g., industrial aquaculture,
incineration, nuclear energy, and genetic engineering).

Mages’ varied roles have brought her to different parts of the country for her research or
community engagement, and to international policy spaces to bring to the world stage the
grassroots realities in her country of which she has intimate knowledge.

Her roles have also put her in a special position to “co-birth” a network and a movement
— both global. In 2000, she joined scores of fellow environmental activists from various
countries who gathered together in Bangkok, Thailand to organize themselves to become
a network of non-government organizations (NGOs) campaigning against incineration and
other thermal waste management technologies. The network, then called Waste Not Asia,
is what is now GAIA. In 2015, she was again among over 60 individuals — many of which are
representatives of GAIA member organizations — who gathered in Tagaytay, Philippines to
give life to the Break Free From Plastic (BFFP) movement.

One of the more recent global campaigns Mages has been involved in is the waste trade
campaign. Together with fellow BFFP and GAIA members, she has spoken against the
practice of richer countries of sending their plastic waste to poorer countries like Malaysia,
Thailand, and the Philippines, in the guise of recycling. Hers has been among the many
Asian voices telling Global North countries: “Asia is not your dumping ground.”

SUCCESSES AND DISAPPOINTMENTS

In her 30 years as environmentalist, Mages has been part of notable campaigns that had
seen successes as well as disappointments. She thought the past three decades have
been good, but she also admitted that there had been times when she would feel tired and
disappointed.

“When we are fighting and fighting, for example against incineration, and then something
else comes up, sometimes I feel like I want to give up,” she shared. “But then there will be
a call from the community, and I’m like, ‘No, I can’t just neglect their request.’ ... There is
always that voice telling me, ‘You haven’t accomplished your goal [yet]; you can’t quit.’ And
then there are also lives and livelihoods involved; I cannot just neglect those,” she said.

“Setbacks are common in campaigns,” she added. “You have to understand that some of
the work takes years. Sometimes, [with] just one letter to the editor or one letter to the
authority, the [problematic] project gets shelved. That has happened. But often, it takes
years of constant push [to even just delay a project].”
Despite the disappointments, Mages acknowledged that they have also gone a long way. When she was starting at CAP, there were a lot of destructive development projects that were being planned and proposed by their government. At the same time, at the regional level, there were many incinerators being planned and proposed in Asia — one of the reasons GAIA was born.

“Through GAIA, we managed to have those plans scrapped. For instance in Malaysia, a proposed large-scale incinerator in Kampung Bohol, Puchong was shelved in 2002. Then they came out with another proposal in Kampung Broga, Semenyih; it was again shelved. Just 10 years ago, there was another proposal in Kepong, which has not materialized,” she said.

Through time, they shifted their campaign strategy, from simply opposing incinerations to proposing solutions — Zero Waste.

“Long before the concept of Zero Waste became mainstream, we already started talking about it to our local government, learning from GAIA. But they laughed at us, saying it could not be done, that it’s impossible,” Mages said. Undeterred, CAP started community Zero Waste initiatives and launched programs that underscored sustainable consumption and mindful living. “Now, I’m happy that some of our language in the 2000s have been incorporated in the government plan — with some local governments now implementing Zero Waste principles,” she said.

But successes like this that involve narrative shifts do not happen overnight. The concept of Zero Waste, for example, took over a decade to become mainstream, and even now, a lot of work still needs to be done — this time to ensure that the concept does not get co-opted.

“That’s why we have to be persistent,” Mages said, adding that when it comes to persistence, you can count on women. “One thing that we always say is that you have to work with women because they are persistent. They want to take care of their children, their family’s health. Whatever gains we have had in our campaigns, it was because the women were behind those campaigns.”

Mages also highlighted the importance of being part of a global network when campaigning at the global level. “Some of us are working at the grassroots level, and probably some of the other groups are not aware of what is happening in developing countries,” she said.

She added that even among NGOs, there is a difference in appreciation of issues between those coming from the Global North and those from the Global South. “Although there are communities affected in their countries, [the Global North NGOs] may not be aware of these. So we need to highlight [the realities in developing countries]. It is very important,” Mages said. “For example, at COP, at the Basel Convention, we brought the stories from our countries and we actually caught the attention of other countries. They want to listen as they are not aware of what is happening. So we bring these issues to light,” she said.

**SLOWING DOWN... A LITTLE**

Having dedicated much of her life to environmentalism and community engagement, Mages confided she would love to be able to slow down the pace of her work. She is happy to note that young people are claiming their spaces in the Break Free From Plastic movement. “It’s nice to see them speaking up. I’m happy they will carry on with the work. We also learn from them,” she said.
Fortunately, Mages clarified slowing down means just that — lessening the workload, not going away to do other stuff. She intends to continue fighting for the communities she has dutifully represented.

And so for Mages, the journey goes on, and it may become even more remarkable. Thus far, her journey has been hard as it required nothing less than passion and dedication and grit, but it has also been fruitful, made even more amazing by the fact that it did not only begin with her giving up her childhood dream but also moving out of her comfort zone, overcoming her shyness, and conquering her fear of speaking. The once shy girl disliking getting in conversations has actually added her voice to the chorus of voices of impacted communities to amplify their call for environmental justice, systemic change, and respect for the environment and human rights, among others.

Fortunately, the journey also gives Mages a full circle of sorts. Although we may never see her inside an animal health clinic wearing scrubs and administering medication to furry patients, she does get to look after her furry friends’ well-being. “Through my work, I’m trying to protect their habitat,” she said, smiling.
Born as the second daughter in a rural village in a province in eastern South Korea in the 1960’s, Mi Hwa Kim bravely paved a different path for her future, refusing the usual fate of sacrificing for the family. In poor farm villages during the postwar years, girls were not given many options other than providing for their family. Mi Hwa was determined early on to go to university, dreaming of a forward-looking, adventurous life.

When she started her studies in the university in the 1980s, university students were experiencing a turbulent period where social movements sparked on a wide range of issues including labor, democratization, gender, disabilities, and unification. Driven by resentment over dictatorship, it was only natural for Mi Hwa to take interest in social movements and start engaging in cultural movements after her graduation.

Then, in 1987, she was deeply shocked by environmental health damages caused by the Yeonggwang Nuclear Power Plant in Jeollanam-do, including the occurrence of pneumoconiosis in the vicinity of the briquette factory and the migration of the residents who were living near the plant.

“It made me realize how dangerous environmental pollution was. At that time, there was a belief that large-scale industrial facilities would revitalize the economy and that
In Korea, waste policies are often dictated by the political disposition of the government. It is challenging when policies shift in between reinforcement and deregulation according to the political environment. Reinforcing new and existing regulations is of course important, but the role of monitoring deregulation is critical. In our society, the waste problem should not be politically interpreted. Because no one is free from harm caused by waste. Everyone is a cause and a victim, and what we need is a common solution.”

anyone could live well if they worked hard. However, on the other side, we could see people suffering from environmental pollution and endangering their lives. I thought that environmental issues will be very important in Korea in the future.”

Having started as an education campaigner at the ‘Pollution Removal Movement Coalition,’ now Mi Hwa leads Korea Zero Waste Movement Network (KZWMN) that was founded in 1997 by 180 environmental, consumer rights, and women’s rights organizations across the country to solve waste issues and build Zero Waste systems.

MAKING ZERO WASTE POLICIES A REALITY

The greatest joy she finds in her life are the moments of seeing real changes after struggling to propose a new policy. As her efforts usually face tough opposition, the moments of victories create a dramatic contrast and bring her pride. In the 2000s, very few people believed in Zero Waste systems and a circular economy, casting doubt on the feasibility of the concept.

“People asked me why I was talking about something unrealistic when I first introduced the term Zero Waste. I’ve tried to explain that it’s about maximizing circularity through reuse and recycling, not about zeroing the use of materials. I feel content now that Zero Waste is a commonly-accepted concept after 20 years of communication and outreach,” she said.
Mi Hwa takes pride in contributing to developing virtually every bill related to Zero Waste over the past 20 years: restricting the use of disposable cups, prohibiting direct landfiling of food, introducing the volume-rate system, and introducing extended producer responsibility, and developing the resource circulation law, just naming the most representative ones. She humbly notes that it was regrettable that the sharp increase in single-use plastic could not be stopped, and the monitoring activities for illegal export and illegal waste did not respond promptly. Going forward, the KZWMN will urge the government to strengthen measures to reduce the use of disposable products, and to improve the convenience of separate collection and recycling systems.

“In Korea, waste policies are often dictated by the political disposition of the government. It is challenging when policies shift in between reinforcement and deregulation according to the political environment. Reinforcing new and existing regulations is of course important, but the role of monitoring deregulation is critical. In our society, the waste problem should not be politically interpreted. Because no one is free from harm caused by waste. Everyone is a cause and a victim, and what we need is a common solution,” she said.

LESSONS FOR LEADERS IN THE NEXT GENERATION

Mi Hwa has dedicated over three decades to the civil society movement. Looking back, the feeling of having brought positive changes in society through the power of a grassroots network has been the most rewarding part of her life, she says. Staying focused on waste issues and building governance through the network was the key to her persistence and professionalism. She also noted how she learned to be open-minded and to embrace different views from actors involved in the waste sector over time, which brought mutual understanding and synergies among different stakeholders, including governmental officials and industry insiders.

Finding a balance between passion and devotion keeps her going. In her early years as an activist, Mi Hwa did not hesitate to surrender everything to social and environmental causes. As she realized how such practice can lead her to burnout and drag her into a slump, she has embedded health and self-care as a priority in her daily routine that starts with three hours of yoga and physical activity from 6 AM to 9 AM. Allowing three hours wholly for herself has given her the energy to continue.

“To the next generation in the environmental movement, I would like to tell them to go on without looking back or hesitating, considering activism is a lifelong job. For this, you would need to take good care of your health, keep your ears open to listen to others, and remind yourself of the humbleness and respect that you had towards nature and people in your early days, which could help you feel stronger along the way,” she advised.
Coming home to Bangalore, Nalini Shekar saw at once the missing piece in the city’s solid waste management program — the waste pickers.

The regrettable non-inclusion of waste pickers in the conversations on, ironically, the very issue in which they played a central role had Nalini ditching her plans to retire — the reason she and her husband came back to the city in the first place.

Within months of her arrival in 2010, Nalini, who had been away from Bangalore for 23 years, co-founded Hasiru Dala (‘Green Force’ in the local language) with the aim of integrating the waste pickers into the city’s formal waste management system.

“There were talks about decentralized waste management in the city. But they weren’t talking about the people who were being infringed. You can’t talk about decentralized waste management without the waste pickers. But they were not included in the discussion. They were invisible, so we started organizing them to give them continued access to recyclables,” said the social worker who, 13 years prior, co-founded a trade union of waste pickers in Pune — the Kagad Kach Patra Kashtakari Panchayat or KKPKP — and worked for years on human rights issues in the United States.

Sadly, it was not only in the discussions on issues affecting them that the waste pickers were excluded, but in every aspect of life as they were virtually invisible in society.

“When we are born, we are issued a birth certificate. Many of the waste pickers who belonged to the Dalit community didn’t have that,” Nalini shared.
The Dalit or untouchables form the lowest stratum in India’s caste system. They were faceless, nameless, and unpaid laborers doing the “dirty work” like dealing with waste. “Most of them didn’t have any kind of identity, even though they have stayed in the community for ages — 10 years, 20 years, 40 years,” Nalini added.

Without any identification cards, the waste pickers were not only unable to access social services, they also lived and died without any records that they existed.

Worse, waste picking was not considered legitimate labor, and people did not recognize their extraordinary contribution to the city, so none of the waste pickers were paid for the work they did. Instead, they made money by selling the recyclable materials they collected from their waste picking, which only amounted to less than two dollars on a good day. “So my main issue was how to integrate the waste pickers in the local solid waste management system so they can have predictable income, and at the same time, look at how they could access social security or social entitlement,” Nalini said.

Unable to secure social services, most of the waste pickers were homeless. They lived under bridges and on pavements with no amenities for decent living. Waste picking was also challenging because they did not have access to the waste. They wandered the streets and landfills looking for recoverable materials. They were harassed by the public, and even by the police, for doing their work.

The waste pickers themselves are now talking about their own rights. In the past, they would let people talk about them in whatever way. But now they talk about themselves. They know that their contribution has helped the city economically. So they’re very proud [of themselves]. Now they stand up and say, ‘Yes, I’m a waste picker and I’m proud to say ... that I contribute economically to my city to reduce their solid waste management cost.’
“So we thought, let’s change the circumstances in which they work. If we have a better door-to-door collection system, if we have a center where they can do their sorting of waste instead of doing it in the streets, their life will be better,” Nalini said.

Hasiru Dala’s first two courses of action involved organizing the waste pickers and providing them training to improve their waste collection system and professionalize their work. They taught the waste pickers proper collection systems and other skills like organic waste management. They also gave them grooming sessions and taught them how to conduct themselves when talking to people, like the homeowners that they will encounter daily. They also worked with the city to establish dry waste collection centers.

Hasiru Dala likewise engaged with the city to issue identity cards to the waste pickers. After several policy dialogues and court interventions, the local government finally issued identity cards that contained their basic information and identified them as waste pickers, finally authorizing them to collect waste within the jurisdiction of the city.

Having rights to manage waste meant that some waste pickers no longer had to take the risk of wandering the streets to do their work. Some even fearlessly offered their services to apartment dwellers and bulk waste generators.

“With this particular identification card, which is almost identical with the mayor’s, the harassment started to go down. [The waste pickers’] life became better. Their children now have an identity to go to school. They started getting bank accounts. They were able to apply for different life entitlements like pensions [and] scholarships for their children,” Nalini shared.

Seeing the positive outcome of their interventions, Hasiru Dala proceeded to work on the waste pickers’ housing issues by engaging with the city once more.

“Housing is the key. You bring in a lot of stability with housing,” Nalini shared. “It brought in security [and opportunities] for the [waste pickers’] children. So we have done a lot of work around it, even upgrading the housing we have using used materials, thus reducing the ecological footprints in construction. Many donors came forward to share the materials they did not need after demolition or redoing their home, which helped.”

Thus far, Hasiru Dala has changed the lives of nearly 20,000 waste pickers. They have recorded 16,169 social services that were availed from 2021 to 2022; 11,380 occupational identity cards issued; 272 school enrollments and re-admissions among the first generation learners among waste pickers’ children; and 1,597 scholarships and educational loans provided.

Hasiru Dala estimates showed that on average, a waste picker collects about 60-90 kilograms of waste per day. With 15,000 waste pickers in Bangalore, this translates to savings of 84 crores (INR 840 million or USD 10.2 M) for the city per annum.

For her work, Nalini has received numerous accolades, among them the Kempegowda Award in 2015 from the City of Bangalore. In the same year, she was chosen by BBC News as one of the 100 women in India who make a difference in the society.

But for Nalini, the things that make her proud the most are the remarkable changes that happened in their community. Where before, the waste pickers were invisible, now they have a voice.

“Participation of the waste pickers was key in our advocacy,” she shared, adding that their stand in policies are informed by the realities on the ground and are a result of
consultations with the waste pickers. “If we need to respond to a bill, for example, we explain [the provisions] to the waste pickers in a simple way. And then we get their feedback,” she said.

She added: “All our strategies are co-created with the waste pickers. When there is co-creation and there is participation, there is also buy-in [from the waste pickers] in everything we do. We think we are successful because of that,” she said.

Now, 12 years after she came home to retire only to start an advocacy, Nalini does not see herself retiring anytime soon, but she admits that she is considering changing roles in the next few years. “I may relegate my operations role,” she said. “I think there’s still so much more to be done, but I think we’re in the right direction. I also know that we have developed so much leadership in the community; the things that were not there are now there, and work will go on. I’m sure that things will be carried on. I think we are in a very good place now,” she said.

Nalini shared that the empowerment of the community forms the pinnacle of her work. “I feel that what I’m most proud of is that the waste pickers have come to take charge of the profession, they’ve made connections, and they’re not only bringing change to their own community and their own family, but also contributing very heavily to the climate mitigation space.”

Nalini herself is amazed at how massive the change has been. “The community is taking care of their own issues. The waste pickers themselves are now talking about their own rights. In the past, they would let people talk about them in whatever way. But now they talk about themselves. They know that their contribution has helped the city economically. So they’re very proud [of themselves]. Now they stand up and say, ‘Yes, I’m a waste picker and I’m proud to say … that I contribute economically to my city to reduce their solid waste management cost,’” Nalini shared.

She added that the waste pickers are likewise confidently sharing knowledge with others. “These are people who don’t know how to read and write, but they are teaching others about the importance of segregation, how to do segregation, and how climate change is mitigated through their work. They do it beautifully. They are articulate and they share knowledge to the public who otherwise didn’t see them as important people in society because they’re all from the Dalit community — the outcast community — and people maintained a lot of distance from them,” she said.

Nalini underscored that change was also apparent in the community. “[Previously], when you asked the public about waste pickers, they’d say: ‘They are dirty and they are poor.’ But if I ask the same question today to a similar kind of group, they’d say: ‘Oh, they are environmentalists, they are essential workers.’ So the perception has changed. Maybe not in 100% of Bangalore but to a significant number of people who are engaged in public spaces. They all know that a huge difference is happening,” she said.

And that huge difference, that massive change that Nalini sowed when she decided to delay her retirement will surely bring a big smile on her face every time she’d look back in the future, when she’d finally said “I’ve done enough,” knowing that not only did she try to make a difference but that she also gave it her all and succeeded — in a big way. And what’s more, she inspired many others to do the same.

Some “retirements” are not the end to a life-changing experience; sometimes, it is the beginning.
Quách Thị Xuân has always been involved in addressing environmental issues. Her passion in preserving and protecting the earth’s natural resources inspired her to devote her academic endeavors to gaining expertise in the field: she earned an undergraduate degree in Water Resources Economics, a master’s degree in Agricultural and Resources Economics, and a PhD on Participatory and Integrated Water Resources Management.

She made sure to put her education to good use. From 1997 to 2012, she worked for the Institute of Water Resources Planning (IWRP) in Hanoi, and for the Danang Institute for Socio-Economic Development (DISED) from 2013 to 2019.

At IWRP, she conducted a study titled ‘Valuing Economic Benefit from the Improvement of Water Quality in Nhue Day River’ which focused on the water pollution problems and the importance of protecting and improving river water quality. At DISED, she and her colleagues helped direct the fund from Korean International Cooperation Agency KOICA to build a community park in An Hai Bac Commune, Son Tra District, and mobilized private resources to plant more trees and build more green spaces in the city.

The sight of her community in the countryside riddled with waste prompted Xuân to direct her attention to the massive plastic waste problem. In 2017, her resolve was strengthened when she attended a forum on Zero Waste where Froilan Grate, regional coordinator of GAIA Asia Pacific, was one of the speakers.

Organizing and Coordinating a Zero Waste Alliance

BY MARLET SALAZAR
We would like Vietnam to have a comprehensive roadmap to ban single-use plastic as soon as possible.

“Froilan is one of the two people who inspired me to pursue Zero Waste activism. The other is Nicole Portley of the Pacific Environment. I could see their passion in what they’re doing and that compelled me to bring that spirit into our Zero Waste initiatives in Vietnam,” she said.

That same year, she started her work on Zero Waste. At the time, there were already individuals and small enterprises that were aiming to get more people to shift towards the Zero Waste lifestyle. One thing that Xuân noticed was that there was no network of non-government organizations (NGOs) working alongside the government to consolidate and strategize these different efforts to move the country towards Zero Waste.

Xuân stepped up to take a leading role and, with the support of like-minded individuals from other organizations, they organized themselves and formed the Vietnam Zero Waste Alliance (VZWA).

“My role is to build VZWA to become a large network, bigger in terms of members and stronger in terms of influencing, inspiring, and convincing communities to apply Zero Waste practices. Day after day, we have been communicating, sharing best practices and achievements, incorporating new members, and supporting capacity building for our members. I also actively collaborate with our members to do collective actions, such as cooperating with Greenhub on building up a Zero Waste school movement, collaborating with Hoi An to implement the coffee cup reusing project, or coordinating with other stakeholders to have collective comments to draft legal regulations,” Xuân said.

As one of their major collective activities, the alliance conducted various waste assessment and brand audits (WABA) to get a better picture of the waste being generated by various communities. “The waste, especially plastic waste, database is very important. Scientific numbers help convince people easier. The WABA is a good method to apply. We learned more by applying it. [Doing the WABA] also helps increase
the capacity of our members. We encouraged our members to do WABA to create a collective activity that produces a collective result [in the form of a] report and later a collective work on communication. By doing WABA together, we had an opportunity to strengthen our network and improve our network power,” she said.

When she began helping her country move towards Zero Waste, Xuân realized that it wasn’t an easy task. She saw that it was a challenge, even in her hometown in the countryside.

“I saw a lot of waste, plastic waste in particular, in the streets,” Xuân said. “And it was disheartening to be a witness of how the environment is deteriorating.”

Xuán relayed a story about Froilan. “He has a beautiful story,” she said. “He used to do cleanup drives to get rid of waste. But he realized that he needed something more sustainable to really keep waste off the streets. That is how he started to become an environmental activist.”

Through her interactions in the field and with her family, Xuân was reminded about the importance of educating people about waste.

“Even within my family circle, I saw inadequate information on the dangers of waste mismanagement to the environment,” she explained. “Most people don’t really care about it. They had no idea about sorting and ecological waste management practices.”
Xuán is relentless in her pursuit of enabling people to adopt a Zero Waste approach. Her organization, Pacific Environment, has been involved in teaching people about waste segregation and composting organics.

“We are hoping that we will be able to implement Vietnam’s environmental under-laws and policy on waste management,” she said. “The under-laws and regulations of the circular economy and extended producer responsibility (EPR) are still missing, so working efforts on those things are still needed.”

Xuán also underscored the need to further strengthen the regulation on single-use plastic, saying that her country’s roadmap “is not ambitious enough.”

“We would like Vietnam to have a comprehensive roadmap to ban single-use plastic as soon as possible,” she said. “We cannot wait until things get worse.”

Vietnam’s road to Zero Waste has been beset with skeptics. “In the beginning, not many people, including other NGOs, believed in Zero Waste. They said Zero Waste is impossible, as their understanding of Zero Waste is that waste generation must be exactly equal to zero. Many citizens just tossed their waste everywhere. But Zero Waste is [supposed to be] a lifestyle that helps prevent wastes and diverts the unavoidable waste from landfills or incinerators. It is something that all waste generators must practise every day,” she said.

She also admitted that VZWA needs more support in providing people with enough information to shift to a sustainable lifestyle. “We continuously do capacity building. We need to have a strong collective action to bolster waste management in our country,” she said.

She added: “We understood that the problem is time. It will take some time for all stakeholders to be on the same page. We accepted the fact that we need to be patient, we need to use the bottom-up approach, [and so we] tried to pilot and show stakeholders a successful model of a Zero Waste community. We’ve done that. From the first MRF [materials recovery facility] in Tan Hiep commune of Hoi An City, now there are six more, and Hoi An City is mapping potential MRFs in its whole city and it will soon be ready to announce that it is the first Zero Waste City in Vietnam.”

At present, Vietnam is completing its legal framework to implement the law on EPR and the circular economy, and preparing to join the Global treaty on Plastic Pollution. There have been hundreds of national and provincial consultation workshops to ensure stakeholders’ participation and buy-in.

Because of her role in VZWA, Xuân was invited to participate in the consultation workshop with businesses and the government, where she collaborated with various sectors to come up with regulations that would strictly enforce Zero Waste. She is most proud of the role she played in the drafting of the national Zero Waste rule.

Her hope is that the Zero Waste movement that VZWA is working to mainstream in Vietnam would spark a significant wave of interest among the citizens.

“We now have a network with 25 organization members. Zero Waste communities, Zero Waste school models have been built [in various parts of the country]. Knowledge in differentiating right and wrong [practices], in upstream and downstream solutions are well communicated. If we keep doing this, we will achieve our vision that by 2030, most of the Vietnamese people will understand, support, inspire, and apply Zero Waste practices. Of course, the ultimate goal is to successfully solve the plastic pollution problem,” she said.
It’s hard to imagine Siddika Sultana without a smile on her face. The Executive Director of Environment and Social Development Organization (ESDO) has a lot to be happy about despite the often tiring work involved in lobbying for environmental policy reforms and initiatives in Bangladesh. She enjoys the support of highly-engaged colleagues, youth group collaborators occasionally surprising her with flowers, and quiet moments over a cup of afternoon tea.

One of her biggest sources of joy, however, has to be the sterling track record she’s developed through years as an advocate for women’s and children’s rights, and the environment.

Siddika has virtually spent her entire career uplifting the lives of people in vulnerable communities. In 1997, she worked closely with the Bangladesh Women’s Health Coalition to help promote gender equality in workplaces through women empowerment initiatives. In the development field, she also helped raise awareness among adolescents in slum areas about HIV-AIDS — an experience that allowed her to truly connect with people and deepen her resolve to champion their causes.

“The young ladies, they loved me too much,” she recalled, giggling. “If I missed one day, they would just be waiting for me. So I was thinking to myself, ‘How do I deliver this...
She’d just clean everything and put [the food waste] there. One day, I asked her, ‘Why are you always just putting the vegetables in the field?’ She just told me, ‘This is not waste. It becomes fertilizer. After three or five days, this will mix with the soil.’

message the easy way?’ ‘Easy way’, [meaning] not only in their language, but also just to [make them] feel that this is their issue, to make them think about themselves.”

It was the start of her people-centered approach to her advocacies, tying human needs to the creation of policies that would address them. When she lobbied for country-wide restrictions on the use of lead-based paints in 2008 — a process that took nearly 11 years to achieve success — it was this approach that won over policy-makers and led to a collaborative effort to improve national policy.

“Who are the main players? Who are the main stakeholders? The paint manufacturers and the Paint Manufacturers Association. So we involved them in this process,” Siddika shared. “And we showed them the vulnerability of the children with exposure to the lead [in their paints].”

By 2018, the Bangladesh government agreed to impose clear limitations on the maximum amount of lead allowed in decorative paints — a massive win for Siddika and other advocates of the cause. The next step, she says, is to work towards a complete ban altogether, both locally and across the world.

Over time, more and more ecological issues would overlap with her other advocacies, and Siddika felt that championing causes for the environment was something that would come naturally to her. Some of these issues have, in one way or another, been involved with her personal history.

In 1998, Bangladesh suffered catastrophic floods. Over 75% of the country was inundated, with flooding lasting up to 20 days in some areas. More than 30 million people lost their homes, and an estimated 700,000 hectares of agricultural land was devastated. Siddika saw first-hand how plastic waste played a role in the disaster.

“That time, I was living with my parents in the northern part of Bangladesh, a rural area,” she shared. “In my hometown, there’s a big river. The river was overflowing because of these plastic bags.”

The clogging of drainage systems by discarded polythene bags was identified as a major cause of the floods. According to estimates, nearly 80% of flooding in Dhaka, the country’s capital, was due to the clogging caused by these bags. The plastic had also managed to slow down the flow of water in rivers, leading to flooding in riverside areas. The calamity led to increased discussion over the use of polythene bags, and ESDO was among the organizations leading the call to ban them. Siddika had been volunteering
with them as a student since 1990, and was working hard to get people to understand the importance of this campaign. In 2003, thanks to the efforts of ESDO and other organizations, Bangladesh became the first country in the world to ban the use of polythene bags.

Today, Siddika is helping the Zero Waste advocacy grow in Bangladesh, overseeing the development of Zero Waste communities in three pilot areas. One of the key components of these communities is a strong push for food composting—a practice that Siddika has been familiar with since her youth.

She shared that she used to witness her grandmother putting vegetable discards in "some type of vegetable garden."

“She’d just clean everything and put [the food waste] there. One day, I asked her, ‘Why are you always just putting the vegetables in the field?’ She just told me, ‘This is not waste. It becomes fertilizer. After three or five days, this will mix with the soil.’"

From then on, Siddika always saw food waste as a resource rather than something to discard. "We can just collect it. We can just use it in agriculture just like in [my grandmother’s] kitchen garden."

When the campaign for Zero Waste in Bangladesh began, there was some resistance to the idea. People simply didn’t understand the benefits of going Zero Waste. Siddika, however, found ways to engage her audience in ways that mattered to them. She showed them how composting allowed their fields and rooftop gardens to thrive, giving them more food sources and additional means of livelihood. Not only do they get to grow fresh fruit and vegetables, they’re able to sell their excess produce at their local markets. It’s also had a positive impact on their general health—with more vegetation growing, the air quality in these Zero Waste communities has improved.

Despite these successes, Siddika understands that there’s still a lot of work to do in Bangladesh. While ESDO and other environmental organizations enjoy the support of their local governments, there’s a lot of improvement needed in terms of policy.
“Bangladesh has yet to enforce a proper framework for the disposal of waste and segregation, and we are continuously advocating for it,” she explained.

In the meantime, she and her colleagues at ESDO are working tirelessly to educate their community on how to implement a Zero Waste lifestyle at home, with a slight tweak on the Three Rs principle: “We introduced the core concept which is Four Rs,” she said. “You [already] know ‘Reduce, Recycle, and Reuse’ very well, but we also introduced ‘Refuse.’ If we’re not [able to] manage it, we cannot produce it or use it. Why [should] we just introduce [these] to our society? So we leave it. We just refuse it.”

As her community continues to get more and more engaged in the Zero Waste advocacy, Siddika is working to keep their environment safe from pollutants and hazardous chemicals in several ways. Not only is she involved in ESDO’s campaign to impose limits on single-use plastics, she’s also part of initiatives to ban the use of mercury in dental amalgams.

All her work — from reproductive health and women’s rights, to workplace conditions and the Zero Waste advocacy — is meant to help build a safer, healthier Bangladesh for generations to come. She’s championed and will continue to champion all sorts of advocacies because she “wants to help create a country she’d be proud to leave behind for others.”

“I’m really happy with this process. I’m really happy when our advocacy gets a [good] result for the nation,” she said. “Being an environmentalist and a good advocate is to create something for our nation, and for our next generation.”

Despite the many challenges and long, long hours her advocacy work presents, Siddika manages to still be as happy as she ever was. Quick to giggle, she is a warm conversationalist. Perhaps it’s because, deep down inside, she knows that every step of her journey moves Bangladesh towards a future worth smiling about.
What started as Sonia Mendoza’s small-scale efforts to fix the uncollected garbage in her village has led to a lifelong commitment of advocating for Zero Waste. Her tireless campaigning together with like-minded individuals and groups led to the passage of the Clean Air Act of 1999 or Republic Act (RA) 8749 which bans incineration in the country, and the Philippines’ Ecological Solid Waste Management Act of 2000, otherwise known as RA 9003, which provides the national framework for decentralized solid waste management.

“I have always been close to earth,” Sonia said. “I realize that it sustains you.”

Sonia’s family has always been into farming, and being close to nature taught her that everyone has the responsibility to care for it — a belief that she carried well into adulthood. Upon her early retirement as a laboratory manager from a pharmaceutical company in 1984, Sonia was often seen playing at the Philippine Columbian Association (PCA) indoor tennis courts. Still, she found she had so much time on her hands.

Always in tune with anything that concerns the environment, Sonia became aware of one of the biggest threats to clean air, which is the use of incinerators. She decided it was an issue worth devoting her time to, so she joined the Concerned Citizens Against Pollution (COCAP) in 1995 and participated in street rallies to put pressure on legislators for the passage of the Clean Air Act. After four years of campaigning, the Clean Air Act became a reality.
JOURNEY TO ZERO WASTE

Sonia's journey to Zero Waste started in her own backyard. She and other village residents started segregating their waste when waste collectors did not show up for three weeks, causing a massive pileup of garbage in the streets.

“We followed what many waste management gurus (Luz Sabas and Dr. Metodio Palaypay) did at that time, which was to sort biodegradable from non-biodegradable waste,” she said. “We also did some composting and took care of our waste while waiting for the garbage pickup day.”

Sonia and fellow eco-crusader, Odette Alcantara, started giving lessons about waste segregation and composting to anyone who would listen — artists, housewives, local government officials, media — at the latter’s place. They also collected recyclables from homeowners who believed in their cause. Curious onlookers continued to multiply until they got media attention. The success of their solid waste management program led to the establishment of the non-government organization, Mother Earth Foundation (MEF), in 1998.

For me, changing mindsets is one of the best outcomes of the Zero Waste program because it is long-term and we change the lifestyle of the people.
With Sonia as chair, MEF continued — at a more expanded level — what they have been teaching in their village, which was proper solid waste management. They have worked with local governments, specifically with the mayors, to adopt Zero Waste in their municipalities or communities through educational campaign programs. From the north to south of the Philippine archipelago, MEF has held seminars and workshops and assisted barangays with developing and implementing their Zero Waste programs.

In 2001, after the Ecological Solid Waste Management Act passed, Sonia was selected to become part of the National Solid Waste Management Commission.

Sonia’s work brought her to various places, from Puerto Princesa (Palawan) to the City of San Fernando, Pampanga.

Together with MEF, and then member-celebrities and environmentalists Chin Chin Gutierrez and Roy Alvarez, Sonia convinced former Mayor Edward Hagedorn of Puerto Princesa, Palawan to adopt RA 9003 when the local government put up a sanitary landfill in 2009. She told the chief executive that the landfill could last 50-75 years if they would only accept residual waste and the rest would be composted and recycled, as required by the new law.

Their work in Puerto Princesa was replicated in the City of San Fernando in 2012, and has since expanded in many other Philippine cities and communities. Most recently, the foundation helped the island province of Siquijor become the first Zero Waste island in the country.

Sonia finds fulfillment in being able to change someone’s mindset and preconceptions about Zero Waste, such as the notion that it is the sole responsibility of the government to manage municipal waste, as well as the throw-away mindset.

“For me, changing mindsets is one of the best outcomes of the Zero Waste program because it is long-term and we change the lifestyle of the people,” she said.

She explained the two modules (inner ecology and solid waste) of MEF that enable her and the team to change people’s mindsets. The inner ecology module allows people to reflect on that task awaiting them. This will give them time to answer the whys and inspire them to become lifelong Zero Waste advocates who will benefit future generations.

“If we just teach them how to segregate without looking within their hearts and minds, there is a tendency that they may forget all about it as soon as we leave the training area,” Sonia said. “That’s why it is important for us to touch on inner ecology.”

By making it her lifelong mission to teach and train people about Zero Waste, Sonia remains a constant fixture in all the ventures of MEF. Her enthusiasm for community organizing and helping LGUs find solutions to the waste problem never wanes.

She shared that even when faced with the difficulty of convincing people to go Zero Waste, it never occurred to her to give up. “I just kept on going because, in the end, it will pay off, just like the Clean Air Act where we persistently rallied for the bill to be passed and it eventually did,” she said.

The other major pay off, shared Sonia, is the recent retraction of Ocean Conservancy (OC) of their 2015 report, Stemming the Tide, blaming countries in Southeast Asia, including the Philippines, as the biggest plastic polluters in the ocean and recognized
incineration as the proper solution for the plastic waste problem. After seven years, in July 2022, OC has agreed to do Restorative Justice to the countries adversely affected by their report, recognizing the Zero Waste solutions on the ground done by the different environment groups in the Asia Pacific region as the more effective and environmentally sound solution to the waste problem.

“Hope springs eternal for me for the Philippines and for our Mother Earth,” she said, smiling.

Take that from someone who has spent decades campaigning for issues she strongly believes in, and has seen massive successes.
Tiza Mafira is used to adversity. For more than 10 years, she’s fought to create a more sustainable Indonesia, and has seen many setbacks along the way.

Her work as the Executive Director of Gerakan Indonesia Diet Kantong Plastic (GIDKP or Plastic Bag Diet Movement) has resulted in bans on plastic bags across 76 cities, despite the significant number of challenges the movement had to face. And for her efforts, she was proclaimed one of the UN’s World Ocean Heroes in 2018, a recognition for the work she’s done in preserving our oceans.

What’s remarkable about all of this is that Tiza never planned to be an environmental advocate. “I think that what played a bigger role is how my family shaped me to be a logical person,” she shared.

From an early age, Tiza had always felt that damaging the environment was an illogical act. Given how dependent we are on the planet’s well-being for our survival, any sort of harm inflicted by us was just counterintuitive to her.

“It started from small things, like if I’d see my friends throw trash onto the ground. And then to the big things, like when I traveled to Kalimantan, in Borneo. I’d heard of Kalimantan; that’s where all the rainforests are. So I was really excited to see what a jungle looks like in person. But when I got there, we drove to the city and we passed all these hills that were barren. The trees were chopped off. There was a hill that was only half of a hill because it had been mined for the rocks and the minerals,” she recounted.
“It didn’t make sense to me,” she said. “Why would you destroy such a beautiful mountain? With all the plastic waste issues that we’re dealing with, the climate crisis, it’s just illogical for our survival. It’s illogical, as an intelligent human species, that we’re doing this to ourselves.”

Tiza would eventually attend law school and, given her passion for the environment, specialized in corporate law, climate change, and carbon trading when she pursued her master’s degree at Harvard. At the time, however, she felt that environmentalism would just be a hobby.

“I didn’t really think that being an environmentalist would be a profession, or could be a profession,” she shared, “So I started out doing various jobs... whilst keeping my eyes peeled on the environmental issues and looking for ways to channel the interest.”

Tiza shared that while she was happy and content, she started thinking that it was a waste to not apply her specialization. Unfortunately, the clients that would come her way were those who needed help skirting environmental regulations. They would ask her what the bare minimum for compliance was, and if there were any loopholes they could exploit to make it easier.

At one point, Tiza found herself facilitating the sale of lush rice fields to a client who wanted to pave them down in order to build a cement factory. It was then that she began to question her career, and if she could be doing more for the environment. She began to look for environmental causes she could champion. She decided to focus on plastic bag regulations after seeing that there was little to no action in support of this advocacy at that time.

In 2010, she founded the Plastic Bag Diet Movement together with like-minded individuals, which started a long-running conversation on single-use plastics in Indonesia. The group began lobbying for retailers to start charging their customers for plastic bags, believing that the additional cost would incentivize people to bring and use their own reusable bags instead.

While the retailers were open to the idea, they pointed out that implementing such a policy would send their customers to their competitors who don’t charge for the plastic bags. But if it became a policy that every store needed to comply with, they would be more inclined to do so.

Tiza’s team thus launched a successful petition for establishments to charge for single-use plastic bags, and in 2013, to the Ministry of Environment. After three more years of lobbying, the Ministry agreed to hold an unprecedented three-month trial run for plastic charges across 27 Indonesian cities.
After the trial run, the Plastic Bag Diet Movement conducted surveys which found that there was a 55% reduction in plastic bag use in participating cities — a figure that was crucial in confirming the campaign's success.

“We told the ministry that this narrative has to come out,” Tiza said. “There is a quantifiable reduction, and there is support from the retailers and the consumers. That came out, and the media capture was amazing. Yesterday, nobody was talking about plastic. The next day, every single media outlet was talking about plastic bags. It was crazy.”

As encouraging as the media frenzy was, however, the campaign fell short in spurring the Ministry into action. The Movement was able to get new policies drafted based on the results from the trial period, but they never got signed. They’d continue to lobby for the draft over the course of four years, to no avail.

“That was also like a huge lesson for me,” Tiza shared. “It’s not just about having everything in place, drafts in place, science in place. There’s also politics behind it that you may not be able to control.”

With the lack of action setting their campaign back for a few years, the group decided to pivot. If the State Ministry wouldn’t help them, they would appeal directly to the city governments themselves.

As luck would have it, a city in Kalimantan — where Tiza had seen drastic environmental destruction all those years ago — would give them just what they needed to get the ball rolling.

Banjarmasin City had participated in the plastic charge trial, and was so pleased with the results that they told the Plastic Bag Diet Movement that they decided to craft their own legislation to reduce plastic bag use. Instead of just charging customers for using plastic bags, Banjarmasin officials decided to outright ban them.

This set off a snowball effect. With the Plastic Bag Diet Movement’s and the Ministry of Environment’s help, the city was able to organize a symposium on the plastic bag ban, inviting representatives from nearly 30 cities to learn more about Banjarmasin’s policies. Other cities saw how the bans weren’t just feasible; they were beneficial and, more importantly, replicable.

“The next year, there was another city [banning plastic bags].” Tiza recalled. “In 2018, there were five cities. In 2019, there were 13. It just kept rolling and rolling.”

Once Bali and Jakarta announced that they, too, were banning plastic bags, the movement exploded across Indonesia, with roughly 40 new cities making their own regulations within the next couple of years.

Not all sectors shared the cities’ enthusiasm, however. There was significant pushback from the plastics industry, the recycling industry, and waste pickers’ interest groups. Tiza found herself invited to Parliament for a dialogue with these sectors, and they decided to make a show of force.

“I hadn’t anticipated that the industry interest groups would invite themselves. They had invited like 10 other people; their names were not in the invitation,” Tiza shared. “I came into the room and it was just me, and I was seven months pregnant at the time. Just me, a heavily pregnant lady, and about 10 to 12 guys who were all against plastic bag bans.”
The groups argued that plastic bag bans would have a negative impact on the economy. The plastic manufacturers said they’d have to lay workers off, the recycling industry representatives said they’d lose their feed stock, and the waste picker groups said they’d lose their jobs.

In her counterpoint, Tiza showed how the bans could actually be beneficial to their respective industries: “What I said was, basically, I’m trying to prevent some waste from being produced, so that waste management can become more effective. We’re basically taking out the low-value plastics out of the chain, so that you guys can focus on the high-value plastics, and the recyclables.”

The groups would respond by disparaging her, saying that she didn’t understand how the world worked. They told her that her efforts were unnecessary, since everything could be recycled, anyway.

“I said, ‘if you can recycle everything, that’s amazing,’” Tiza shared. “Why don’t you focus on the waste that’s in the landfill … on the waste that’s in the sea and the rivers? Focus on collecting those, focus on recycling those, that would be amazing. I will focus on closing your tap. We can all work in tandem. We can have a great collaboration.’ And that basically concluded the conversation. Ultimately the parliament did not pursue any resistance to plastic bag bans. So I think we won that one.”

But these victories are only the beginning, in Tiza’s view. The Plastic Bag Diet Movement has recently launched their “Reuse in Jakarta” program, which aims to promote the reusing of goods rather than disposal. It’s a means towards their organization’s end goal of pushing for a more circular economy in Indonesia.

“We want reuse to become embedded within the economic system and the supply chain. We’re starting out small, but actually, the vision is much bigger, much more comprehensive. It should be completely standardized. It should be as natural as just going to a supermarket, buying stuff, and disposing of your stuff just as before, except that none of that stuff sacrifices the natural environment,” Tiza said.

She added: “So when everything is reusable, regenerative, recyclable — that’s when I’ll say my work is done. It’s a big vision, though! But I don’t mind the big vision. You have to, because the big vision is what makes sense.”

For Tiza, realizing that big vision is bound to be fraught with new challenges. Beyond the work involved in educating people about a circular economy, she’ll have to deal with the same government bureaucracy that made plastic bans a decade-long effort. She’ll also have to face pushback from players whose business interests conflict with sustainability.

It’s a whole new set of adversities she’ll have to deal with, but Tiza can’t imagine spending her life any other way, even if it isn’t exactly the kind of life she’d thought she’d lead when she was younger.

“I can’t fathom not trying to save the planet. Nobody said that it would be easy, but it would be worth it. That’s what I always have in mind,” she said. “Worth it” doesn’t necessarily mean we’ll ultimately succeed. I have my doubts sometimes. But it means that I can be at peace with myself knowing that I tried as hard as I did.”
Battling for the Next Generation’s Future

BY JOHANNA POBLETE

Yuyun is not afraid of taking risks, not if there is something much bigger at stake. When it comes to ensuring a sustainable future for her grandson, Yuyun will not hesitate to do whatever it takes. “I have nothing to lose,” deadpanned the Ashoka Fellow (2002) and Goldman Environmental Prize awardee (2009). Her fearlessness has led to everything from stalking then educating waste collectors, to being nabbed from a protest rally by shady plainclothesmen, to suing the Indonesian government — and winning.

INITIAL SKIRMISH: BALI’S WASTE PROBLEM

While residing in Bali in the late ’90s, Yuyun was compelled to tackle an often ignored but persistent problem: island sanitation and waste management. “I was supposed to enjoy Bali, but I started seeing all the bad stuff behind the tourist areas,” said Yuyun.

An environmental engineer who had designed water supply systems, Yuyun was appalled at the untreated sewage polluting the waters and garbage being openly dumped among the mangroves. “I realized that the social aspect is very, very crucial in implementing any engineering or technical solutions,” she rued.
The challenging part is to recognize the crucial actors and how we include them in the system... For solid waste, you always need champions. And who will be the best champions in the neighborhood? Women!

Yuyun volunteered at a non-government organization (NGO), became director, and was tasked to work with Bali’s hotel industry on waste management. Gaining the cooperation of the hotels had an unorthodox start: Yuyun followed the garbage trucks from a posh hotel to their dumpsite in a mangrove area, took pictures, and showed them to the hotel’s general manager (GM), insisting on the “polluter pays” principle. After taking his Chief Engineer to task for the mishap, the GM warily asked if Yuyun planned to disclose it to the media. Yuyun warned, “If you are not going to improve [your practices], I will.”

For three years, Yuyun applied herself to NGO-business environment partnerships. First, she labored to transform a group of pig farmers who moonlighted as waste collectors — they purchased hotel food waste to create pig slop — into professional waste managers. They eventually became the go-to waste management company in Bali. “I saw the opportunity to intervene and the only way I could get this guy to listen to me was to become his business partner... But I decided to pull my share after they had established all their systems.” Following that successful pilot, she approached other pig farmers to convert their business models. The hotels tapped these improved services, and waste was significantly reduced on-island.

Yuyun also developed a standardized eco-hotel rating system that incentivized ecological practices locally. “Many hotels in Bali were promoting green tourism, but who’s going to verify it? There should be a way to evaluate you. So I talked to the General Managers Association,” said Yuyun.

The 32-member association, which included such brands as the Hilton, Sheraton, Hyatt, InterContinental, and The Four Seasons, agreed to be evaluated under the new rating system. It took a year and a half of painstaking work, but the experience built Yuyun’s confidence in engaging with the private sector. “Everything can be improved, if you speak their language,” said Yuyun.

BUILDING A FOUNDATION FOR THE FUTURE

In 2000, Yuyun established the BaliFokus Foundation (now Nexus3) with the intention to build “a just, toxic-free, and sustainable future.” The foundation initially partnered with a local Rotary Club to create a viable community-operated waste management program to minimize household waste. The project was adopted by 500 participating households and later expanded to other villages. Proponents included youth and women’s groups. Housewives in particular were keen on being change-makers, said Yuyun, but needed help with execution. She devised an illustrated “informed choices catalog” demonstrating how to properly manage waste collection, composting, and recycling. “You have to simplify it without compromising the quality and the technical standards,” said Yuyun.
BaliFokus was invited to replicate the process on a national scale (and thus renamed Nexus3 Foundation in 2018). They joined an alliance of NGOs, initially funded by the World Bank, in the development of SANIMAS (“Community-Based Sanitation” in Bahasa Indonesia), which provided waste and sanitation management options for poor urban settlements. Incidentally, Yuyun was the only female director, and the only person with an environmental engineering background, who joined the network: “Some [men] are not familiar with working with women. Especially if the women are very strong — sometimes they feel offended. But I know what I’m talking about...it is just a matter of explaining to them in a way they can accept.”

The SANIMAS pilot project was implemented across 64 cities in Indonesia within a five-year period. Yuyun not only helped coordinate a stakeholders’ forum but also co-developed training modules for facilitators to deliver the community-based sanitation programs. Depending on the locality’s needs, she and her partners also provided capacity building. At her instigation, technical and institutional assistance was provided to the communities. SANIMAS was eventually mainstreamed into the national program and state budget. “The challenging part is to recognize the crucial actors and how we include them in the system... For solid waste, you always need champions. And who will be the best champions in the neighborhood? Women!” said Yuyun.

AN ONGOING BATTLE

Despite her contributions to national waste management programs, Yuyun’s relationship with the Indonesian government has been fraught. In 2007, she organized a peaceful protest against the entry of an incinerator project (referred to as a waste-to-energy plant) in Bandung, West Java and ran afoul of local policemen who, as it turned out, had a vested interest in breaking up the rally. “That project is located only 200 meters next to a residential area where a lot of young families with children live. It’s dangerous,” said Yuyun, explaining that the rally was meant to educate the community on the hazards of incineration, linking it to climate change, and the availability of healthier alternatives. “But the mayor already got bribed by the proponent of the incinerator. To gain public support, he built a football stadium next to the incinerator.”

Although the rally was staged with permission in a private area, plainclothes policemen apprehended the proponents, including Yuyun as the coordinator. Fellow activists from GAIA who briefly spoke at the event — GAIA policy director Neil Tangri from the United States, and GAIA coordinators Shibu Nair from India and Ma. Virginia “Gigie” Cruz from the Philippines — were also detained for three days and then deported. The latter three had stopped by Bandung on their way to Bali to host a forum titled “Zero Waste for Zero Warming” at the United Nations Climate Conference (COP 13). They not only missed the conference, they were barred from entering Indonesia for a year.

Nonetheless, the activists refused to pay to be freed. They also refused to sign the police interrogation reports, untranslated from the original Bahasa Indonesia. Yuyun feels vindicated that, years after the incident, the mayor was imprisoned for corruption. Moreover, their detention caught the attention of other groups — including the Viking hooligans, local supporters of the Bandung Football Club — and together they were able to successfully campaign against the incinerator project. “Until now, that project in Bandung, they keep trying to enter again, but nope, the community already protested.”

Yuyun was included in the consultation process for Indonesia’s waste management bill and managed to strike the word “incinerator” from the draft. The next fight is to clarify what lawmakers mean by “environmentally friendly technology” and to ensure that it is not a euphemism for damaging practices. “Within the 30 years of my career, I have already witnessed the evolution of words: waste-to-energy, RDF (refuse-derived fuel), resource
efficiency. It's the same thing. You are burning garbage," Yuyun pointed out. Together with Walhi (Indonesian Forum for the Environment) and AZWI (Aliansi Zero Waste Indonesia) colleagues, Yuyun is also scrutinizing the units used in protective standards, which they consider very lax.

Yuyun was one of 32 plaintiffs in a class action suit against Indonesian President Joko Widodo, three cabinet ministers, the Jakarta governor, and two provincial leaders for violating environmental protection standards on air quality. Jakarta's air pollution, the plaintiffs argued, violates both the standards set by the World Health Organization and the national safe standard. "If we don't sue them, they will not change the regulations and set a strict protective standard," cautioned Yuyun. After a two-year fight, in 2021, a Jakarta court ruled in the plaintiffs' favor — a verdict that the government has appealed.

Apart from her advocacies on waste and toxic substances (she established Indonesia’s Toxics-Free Network in 2008), not to mention refining plant-based soil remediation to generate biogas through her startup company Terra Power, Yuyun is currently campaigning on children’s environmental rights, calling for stricter standards and enforcement, and working with the youth to raise awareness.

"I have a grandson now. He's four years old. I keep thinking about his future. Everything I do now is for his future," said the firebrand. "How can I secure his clean air? If the government won't do anything to protect their future citizens, then we have to remind them. So I joined the citizen lawsuit and sued them."
VISION & GRIT
Exceptional Zero Waste Women in the Asia Pacific Region
©January 2023 Global Alliance for Incinerator Alternatives
Unit 330, Eagle Court Condominium 26 Matalino Street,
Barangay Central, Quezon City, Philippines

The Women LEADERS