



n the battle against plastic waste, Asia stands to suffer the most from the negative impacts of plastic pollution. The excessive use of plastic and the dumping of plastic waste from Global North countries are straining the already inadequate waste management infrastructure in the region, where some cities need to spend as much as 50% of their municipal budgets just to upgrade these assets¹.

Aside from the economic strain, handling plastic waste has been more challenging than ever, particularly with the false promises of recycling. As a result, more cities turn to incineration as a way to make discarded plastic packaging disappear. This supposed quick fix, however, has adverse economic and health impacts, as well as adds 16 million tonnes of greenhouse gases into the air globally².

Despite the growing costs of waste management, more single-use plastics are being churned out annually. Global plastic production reached 311 million tonnes in 2014, and is expected to quadruple by 2050³. Forty percent of plastics produced is for packaging, nearly 50% of which is produced in Asia⁴.

If Asia is to make a dent in addressing its single-use plastics problem, it needs to toughen up against plastics producers. The Association of Southeast Asian Nations (ASEAN) adopted a regional action plan which includes a direct commitment to reduce plastic inputs into the environment, enhance collection and minimize leakage, and harmonize regional policies in the conversion of plastic waste into valuable products⁵. However, these policy responses do not have clear binding targets on plastics reduction, recycling, and harmonization of policies.

Presently, several Asian countries have national regulations or bans on single-use plastics. Bangladesh, the first country to have a national ban on plastic bags, passed the ban in 2002⁶, long before the problem of single-use plastic bags became a mainstream issue. China issued a ban in 2020 with phased implementation⁷, the first phase of which started at the end of 2020 and the last phase commencing in 2025. India also issued a ban on single-use plastics that will take effect in 2022⁸. Implementation has generally been found to be wanting and some national bans have been said to be riddled with loopholes.

In countries without a national plastic regulation or ban, local governments have taken it upon themselves to regulate single-use plastics. There are cities that have figured out how to do it right — resulting in high compliance among households and reduction of plastic waste generation.

In this publication, we put a spotlight on the cities of San Fernando (Pampanga) and San Carlos (Negros Occidental) in the Philippines; Thiruvananthapuram in Kerala, India; and Jakarta, Indonesia. Hopefully, these policy models can catalyze other cities and communities to expedite efforts in addressing plastic waste, starting from regulating single-use plastics.

https://openknowledge.worldbank.org/handle/10986/17388

City of San Fernando, Philippines

PHASED IMPLEMENTATION

The Philippine Ecological Solid Waste Management Act of 2000, otherwise known as Republic Act 9003 (RA 9003) calls for a decentralized waste management system, at-source waste segregation, and regular segregated waste collection. Unfortunately, many local governments find it challenging to implement the provisions of the law. The City of San Fernando in Pampanga is one of the few to have successfully implemented it, with the guidance of GAIA member Mother Earth Foundation, an NGO promoting Zero Waste.

In 2014, seeing that plastic bags were a major challenge in waste management, the city passed the Plastic-Free Ordinance of 2014. Implemented by the City Environment and Natural Resources Office (CENRO), the ordinance aims to regulate the use of plastic bags and polystyrene and encourage the use of reusable bags with a special focus on establishments, institutions, retailers, and households.

Before the bill was enacted into a law, it was met with strong resistance, especially from the business sector.

The city consulted with the stakeholders to understand the reasons for the resistance.

"Nine thousand businesses including multinationals were to be affected by the ordinance, so we engaged with them," shared City Councilor Benedict Jasper Lagman, who is the lead proponent of the plastic use regulation.

It turned out that the businesses feared losing customers if they implemented the ban in their establishments, while the other businesses were not compliant. Eventually, they arrived at a compromise: a staggered yet strict implementation.

They started with Plastic-Free Fridays. For three months, stores were prohibited from providing their customers with free plastic bags and polystyrene (styro) materials for their purchases every Friday. They charged customers PHP 4.00 (USD 0.08) per plastic bag and PHP 1.00 (USD 0.02) per paper bag regardless of size.

For the next six months, plastic bags were no longer free, though still available for a fee. When the six months lapsed, the city prohibited all plastic bags and polystyrene packaging. Businesses found to be in violation of the ordinance were penalized — for the first offense: a warning and compulsory attendance to a values formation seminar; for the second offense: a fine of PHP 1,000 (USD 20); for the third offense, a fine of PHP 3,000 (USD 60); and for the fourth and succeeding offenses: cancellation of business permit to operate.

The city also organized information drives to encourage citizen participation. They also gave away reusable shopping bags during activities and events, organized competitions on designing reusable bags, and hosted TV programs promoting Zero Waste.

Pop-up reuse-refill events were set up, where household products were sold at discount prices as long as buyers brought their own containers.

Today, compliance to the plastic bag ban is very high at 98%. Apprehended violators are mostly ambulant vendors without business permits. The city maintains strict enforcement of the law and plans to expand the ban to other single-use plastics like rolled plastic bags (*labo*), cutlery, cups, straws, styro-packaging, and more.



²https://www.ciel.org/wp-content/uploads/2019/05/Plastic-and-Climate-FINAL-2019.pdf

³http://www3.weforum.org/docs/WEF_The_New_Plastics_Economy.pdf

⁴https://advances.sciencemag.org/content/3/7/e1700782

⁵https://environment.asean.org/wp-content/uploads/2019/06/ASEAN-Framework-of-Action-on-Marine-Debris-FINAL.pdf

⁶https://www.reuters.com/article/us-bangladesh-environment-plastic-idUSKBN1Z51BK

https://www.loc.gov/item/global-legal-monitor/2021-03-23/china-single-use-plastic-straw-and-bag-ban-takes-effect/

⁸https://www.indiatoday.in/india/story/govt-bans-manufacture-sale-and-use-of-identified-single-use-plastic-items-from-jul-1-2022-1840562-2021-08-13

San Carlos City, Philippines

HAVING A DEDICATED MONITORING TEAM

San Carlos City, a coastal city in central Philippines, started its Zero Waste journey in 2011 and eventually led the first plastic ban in the province of Negros Occidental.

Sustainability has always been the guiding principle of San Carlos City. This was exemplified when City Ordinance 13-01 established the City Environmental Management Office (CEMO) which took the Highlands-to-Oceans (H2O) or ridge-toreef approach — a holistic intervention to protect the marine ecosystems (reef) by targeting environmental degradation on land (ridge).

The city implemented green projects. One of their successful programs was the Search for the Most Environment Friendly Market Vendor, which took place from 2013 to 2014. This encouraged vendors to observe sustainable practices such as plastic avoidance and waste segregation.

The city also updated their Solid Waste Management Plan in 2015 — anchored on RA 9003 — to enhance its solid waste management services. However, despite serious efforts to segregate their waste, single-use plastics remained in the municipal waste stream. Thus, the city passed City Ordinance 14-53, or the "No Plastic Ordinance," in October 2014. The ordinance aimed to regulate the use of plastic (cellophane), sando (or carrier) bags, and styrofoam as



packaging materials for food and beverages. The ordinance was fully implemented in May 2015.

With the city's track record in local environmental policy, the passage of a plastic ban came as no surprise to neighboring municipalities. But the road to Zero Waste was not as easy as it may seem for San Carlos City.

The monitoring team, composed of five enforcers and six information officers from CEMO, had to deal with resistance from market vendors and those coming from outside the city who still used plastic as packaging for goods. After dialogues with the concerned stakeholders, the ordinance was amended to include a list of accepted retail use of plastic (e.g. for ice wrappers, pepper).

The local government strictly enforced the ordinance by doing consistent information campaigns, promoting incentives, making alternatives available, and penalizing vendors found to be in violation of the law.

"We would go to far-flung barangays even at night time during satellite market days for enforcement. At first, market vendors were resistant but now they themselves advocate going plastic-free. Our frequent visits to households before the pandemic also paid off because they continue to use reusables," said Analou Gomo of CEMO.

Part of what made the ordinance work was the establishment of a Technical Working Group (TWG) composed of city officials and concerned government offices, including the Public Market and Slaughterhouse Department and the Public Information Office. The TWG is convened whenever issues related to the ordinance arise.

In its 2015 report, the CEMO underscored the significant reduction in the amount of non-biodegradable waste collected from April (over 208 tonnes) to June (more than 176 tonnes) 2014. There was a spike in July but it was immediately and dramatically reduced in August.

Living plastic-free has become the new norm in San Carlos City. In 2019, the city was recognized as an ASEAN Clean Tourist City for its best practices in sustainable protection of the environment⁹. Neighboring Bago City and the Municipality of EB Magalona also passed plastic ban ordinances, following the footsteps of San Carlos City.

The local government intends to expand the single-use plastic ban to include the phaseout of disposable cutleries and polyethylene terephthalate (PET) bottles.

9https://www.pna.gov.ph/articles/1087298



Thiruvananthapuram, India

MAKING ECO-FRIENDLY THE NORM

The City of Thiruvananthapuram in the southern part of India once faced a waste management crisis when the lone city solid waste management plant was shut down in 2011. While this event was a major setback for the city of 1 million, it also paved the way to adopt a decentralized waste management system, and later the implementation of Green Protocol. Now widely adopted in the state of Kerala and beyond, Green Protocol is an initiative geared toward the reduction of disposables.

Initiated by the local government — Thiruvananthapuram Municipal Corporation (TMC) — Green Protocol employed a step-by-step approach which started with regulating the use of plastic packaging or carrier bags. Once this proved to be successful, the program moved on to completely ban the use of different forms of plastics, including non-woven polypropylene bags. It also covers bottled water, food containers, PVC flex banners, and styrofoam.

This started when Thanal, an NGO based in Kerala and a member of GAIA, introduced the first version of Green Protocol in 2000 by implementing it in an international conference on Zero Waste which it co-organized with the government of Kerala. Following the conference, the Kerala Tourism office made it mandatory to use alternative products to prevent single-use plastics in all their events.

Green Protocol was popularized and mainstreamed for the first time in India during the largest sports event — the National Games of India in 2015. Dr. K. Vasuki IAS, the Executive Director of the Kerala Suchitwa Mission, an organization of the Government of Kerala responsible for evolving implementation strategy and providing technical inputs for sanitation and waste management projects,

dared to implement Green Protocol in this major sporting event. Attendees were encouraged to use tableware and tumblers, which further contributed to the reduction of waste generated during the National Games. As a result, the Games avoided 120 tonnes of disposable waste. It has also made Green Protocol a norm in events, celebrations, and elections in Kerala.

The TMC also implemented Green Protocol in a religious annual festival where about 3 million women pilgrims, the Attukal Ponkala, converged. In 2019, the enforcement of Green Protocol reduced the waste generated to 65 tonnes, from 400 tonnes in previous years. This gave confidence to many local governments to follow suit.

"To spread awareness among the young generation about the harmful effects of plastic wastes in the environment, the government has organized awareness campaigns and magic shows at various schools in the city. The school students were instructed to avoid all plastic items and educate their families," said Dr. K. Vasuki.

Working with volunteers like the Green Army International, a youth-led group of volunteers working with the local government, proved to be key in the successful implementation of Green Protocol. In the 2015 National Games, 700 volunteers ensured that the plastic-free regulation was enforced.

The government agencies modeling the use of reusables in their day-to-day operations and in all of their events also proved to be effective, so much so that today, not only is TMC synonymous with Green Protocol but employing Green Protocol has likewise become a goal in other parts of India.

Jakarta, Indonesia

NO DELAYS ALLOWED

At the height of the COVID-19 pandemic which saw a spike in the global use of disposable plastics, Jakarta, Indonesia decisively implemented its ban on single-use plastic bags in shopping centers, supermarkets, and traditional markets as scheduled beginning July 1, 2020.

The implementation pushed through despite pressures from various sectors to delay it. Businesses tried to obstruct the implementation of the regulation during the pandemic — playing around technicalities and semantics and health issues.

It also did not help that there were differing opinions on what step to take to reduce the use of plastic bags, with some agreeing on a total ban while others were proposing paying for plastic bags or reusable bags.

The regulation, Special Capital Region of Jakarta Provincial Governor Regulation No. 142 of 2019, issued by the Special Capital Region of Jakarta Provincial Government, aimed to reduce the plastic consumption of its 10 million residents. The ban sought to fine shopping center operators, store owners, and vendors who fail to comply with fees ranging from IDR 5 million (USD 520) to IDR 25 million (USD 2,600). Repeated offenses will result in revocation of business permits.

Prior to the Jakarta ban, a similar measure was already in place in 56 cities and regions across the country, including Bali province, Bogor in West Java, and Banjarmasin in South Kalimantan. GAIA member Gerakan Indonesia Diet Kantong Plastik (GIDKP or Indonesia Plastic Bag Diet Movement), which has been campaigning to make Indonesia plastic-free, worked with the government in initiating a trial requiring people to pay for single-use plastic bags in supermarkets or other mall establishments. Twenty-three cities and municipalities, including Jakarta, participated in the trial, which reported 55% compliance. Unfortunately, only Banjarmasin was declared plastic bags free in 2016.

Nevertheless, GIDKP continued with its campaign. In 2018, they released a joint study together with the Jakarta Environment Agency showing that the Indonesian capital consumes between 240 million and 300 million plastic bags a year— and that is from supermarkets only 10. In 2018, Jakarta began drafting its plastic bag ban. The following year, the city announced the ban which was to take effect in mid-2020.



In August 2021, exactly one year after the ban was implemented, the Special Capital Region of Jakarta Provincial Environment Agency reported a significant reduction in plastic shopping bags both in businesses and households¹¹.

According to the report, there has been a 42% decrease in average household use of plastic bags, from 11,192 tonnes pre-implementation to 6,452 tonnes of plastic bags after a year.

The report noticed different levels of compliance in the three regulated retail areas. Supermarkets had a close to 100% reduction in plastic bags, while shopping centers registered 95% compliance, and traditional markets were at 50%.

"The experiences of Jakarta and other cities and regions show that if there is a strong political will, policies such as plastic bag bans can be implemented successfully," noted Rahyang Nusantara, National Coordinator of GIDKP and member of the Advisory Committee of GAIA Asia Pacific.

"Hopefully, more and more regions in Indonesia will have regulations for limiting single-use plastics as an effort to achieve the target of reducing waste by 30% by 2025. Local governments need to work even harder to ensure that traditional markets also reduce plastic bags significantly," added Tiza Mafira, Executive Director of GIDKP.

¹⁰https://dietkantongplastik.info/jakarta-umumkan-pengurangan-penggunaan-kantong-plastik-sekali-pakai/ ¹¹https://dietkantongplastik.info/jakarta-umumkan-pengurangan-penggunaan-kantong-plastik-sekali-pakai/

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REGULATORY CATALYSTS: REJECTING SINGLE-USE PLASTICS IN ASIA



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