



# FREE US FROM PLASTIC

12 RESPONSIBLE  
CONSUMPTION  
AND PRODUCTION



ADORNADO, JOHN LOUIE V.  
DELA CRUZ, EUGENE D.G.



To assess the environmental and socio-economic impacts of the rapid expansion of plastic production in Southeast Asian countries, particularly within our own nation, to formulate comprehensive strategies for mitigating mismanaged plastic waste and fostering sustainable growth practices.

## Articles about Philippines being the top contributor

<https://earth.org/philippines-plastic/>

The Earth.org article discusses how the Philippines became the world's biggest ocean plastic polluter. It features a large image of plastic waste floating in the ocean.

POLLUTION  
**How Did the Philippines Become the World's Biggest Ocean Plastic Polluter?**

CRISES - POLLUTION CRISES | BY DENISE RAMOS | ASIA | JUN 12TH 2023 | 5 MINS

EARTH.ORG IS POWERED BY OVER 150 CONTRIBUTING WRITERS

<https://www.rappler.com/nation/philippines-dominates-global-ocean-plastic-pollution-chart-at-36-shows-study>

The Rappler article highlights the Philippines' dominance in global ocean plastic pollution at 36%. It includes a headline, a photo of the Pasig River, and a sidebar about airport construction in Basilan.

HEADLINES  
**Pasig, other Philippine rivers among biggest contributors to ocean plastic pollution**

Gaea Katreena Cabico - Philstar.com  
June 10, 2021 | 5:12pm

Recommended

Construction of first-ever airport in Basilan mulled

Two Bangsamoro regional agencies and the office of the provincial governor in Basilan will jointly study the viability of setting up an airport in the island province to boost its economy.

1 day ago

BANGSAMORO AUTONOMOUS REGION IN MUSLIM MINDANAO

<https://www.rappler.com/nation/philippines-dominates-global-ocean-plastic-pollution-chart-at-36-shows-study>

The Rappler article reiterates the Philippines' 36% dominance in global ocean plastic pollution. It features a large image of a person collecting trash on a beach.

PLASTIC POLLUTION  
**Philippines dominates global ocean plastic pollution chart at 36%, shows study**

OCT 10, 2023 12:35 PM PHT

CONG CORRALES

UPGRADE TO LISTEN POWERED BY SPECIFY

Already have Rappler+? [Sign in](#) to listen to groundbreaking journalism.

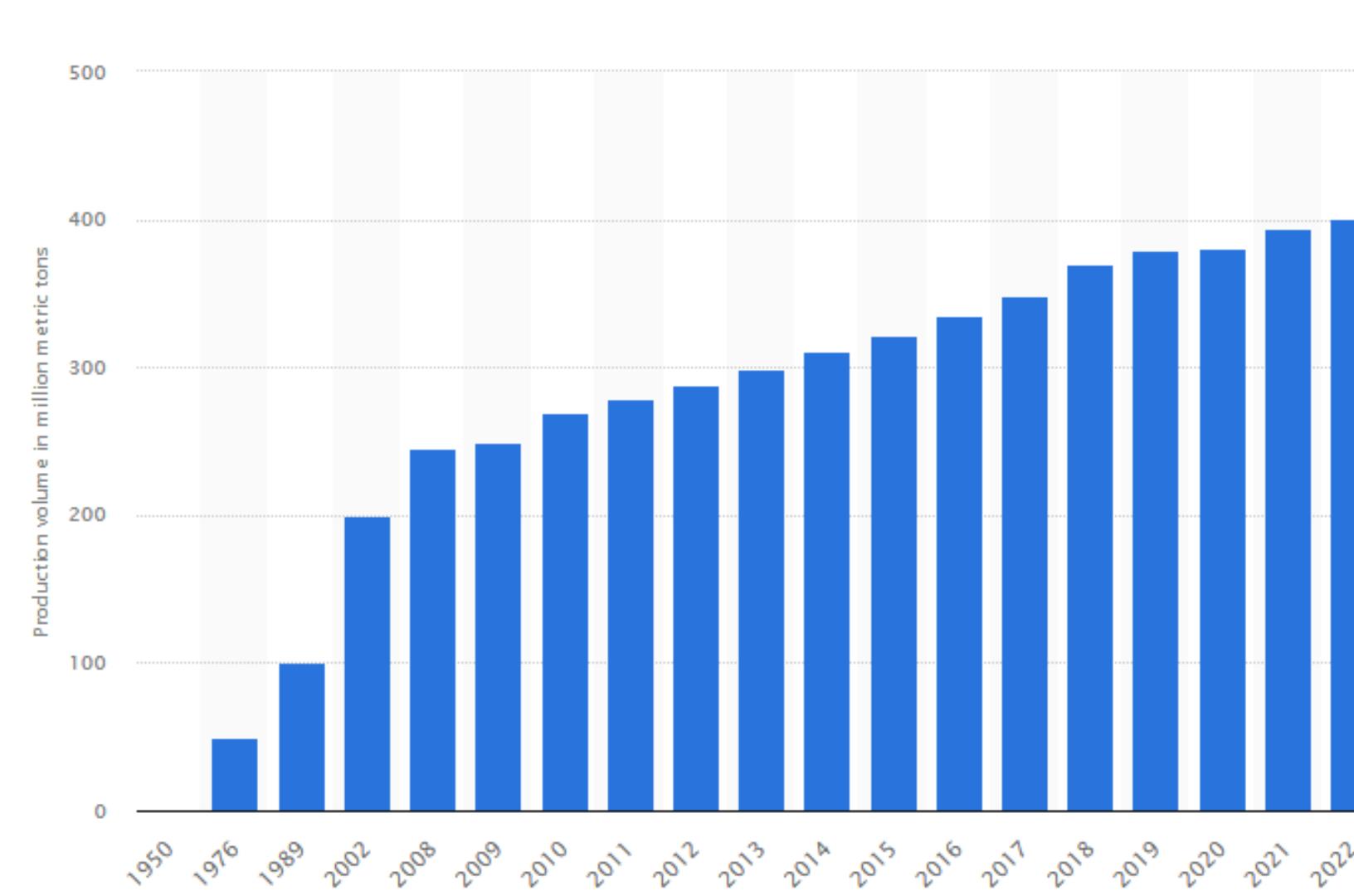
# THE RAPID EXPANSION OF PLASTIC PRODUCTION IN ASIA IS DRIVING SIGNIFICANT GROWTH

specifically, the **Southeast Asian countries** and it is one of the top contributor amongst the rest of the countries



the **rapid growth of plastic production** can result in an increase of **mismanged plastic waste** (Nordic Council of Ministers, 2023)

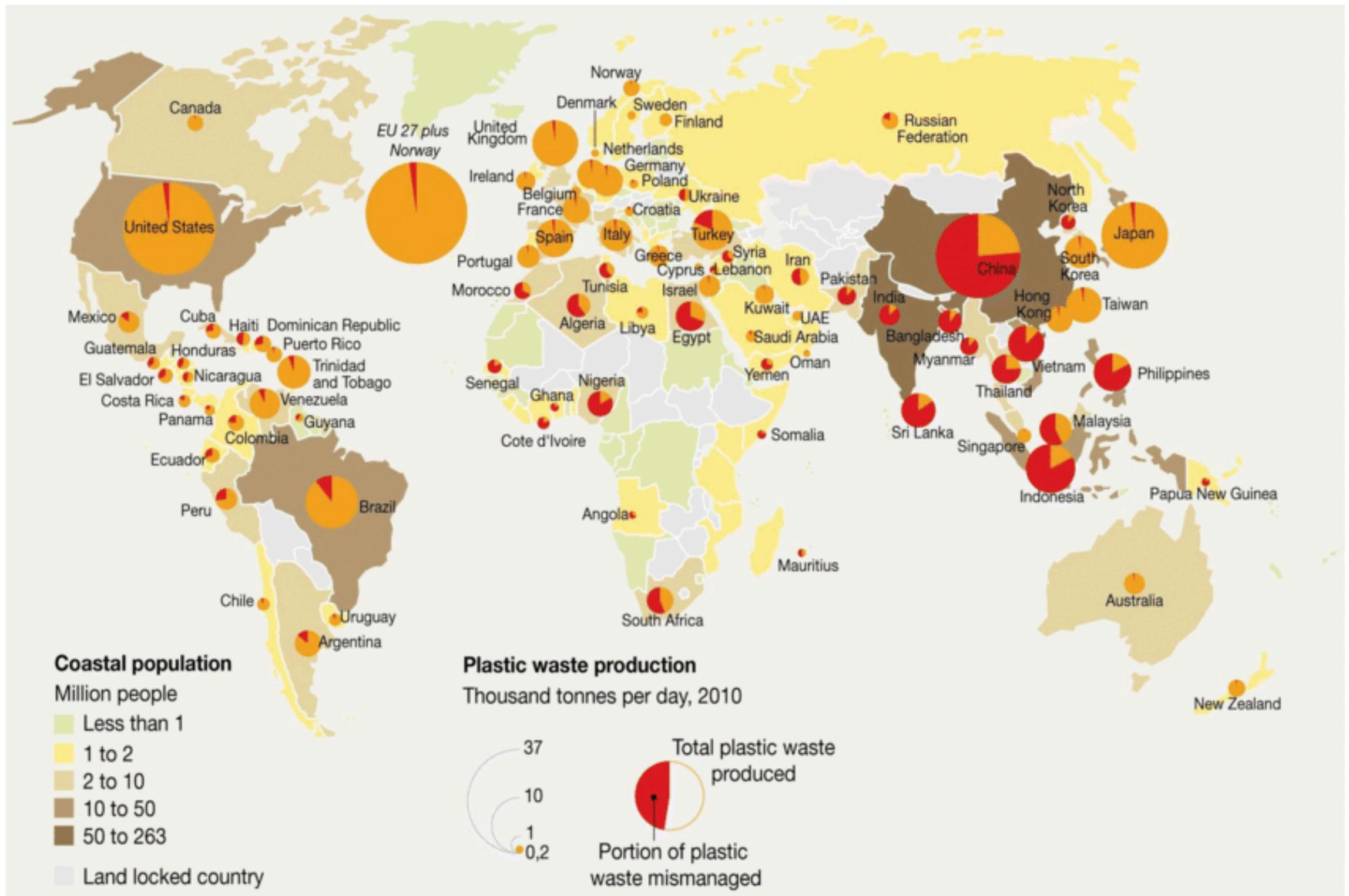
<https://www.norden.org/en/publication/towards-ending-plastic-pollution>



<https://www.statista.com/statistics/282732/global-production-of-plastics-since-1950/>

Along the growth, how is it impacting the environment and communities in our country? What are the implications to mitigate the issue? How can our country **balance growth** with **environmental sustainability**?

## Mismanaged plastic wastes in the world

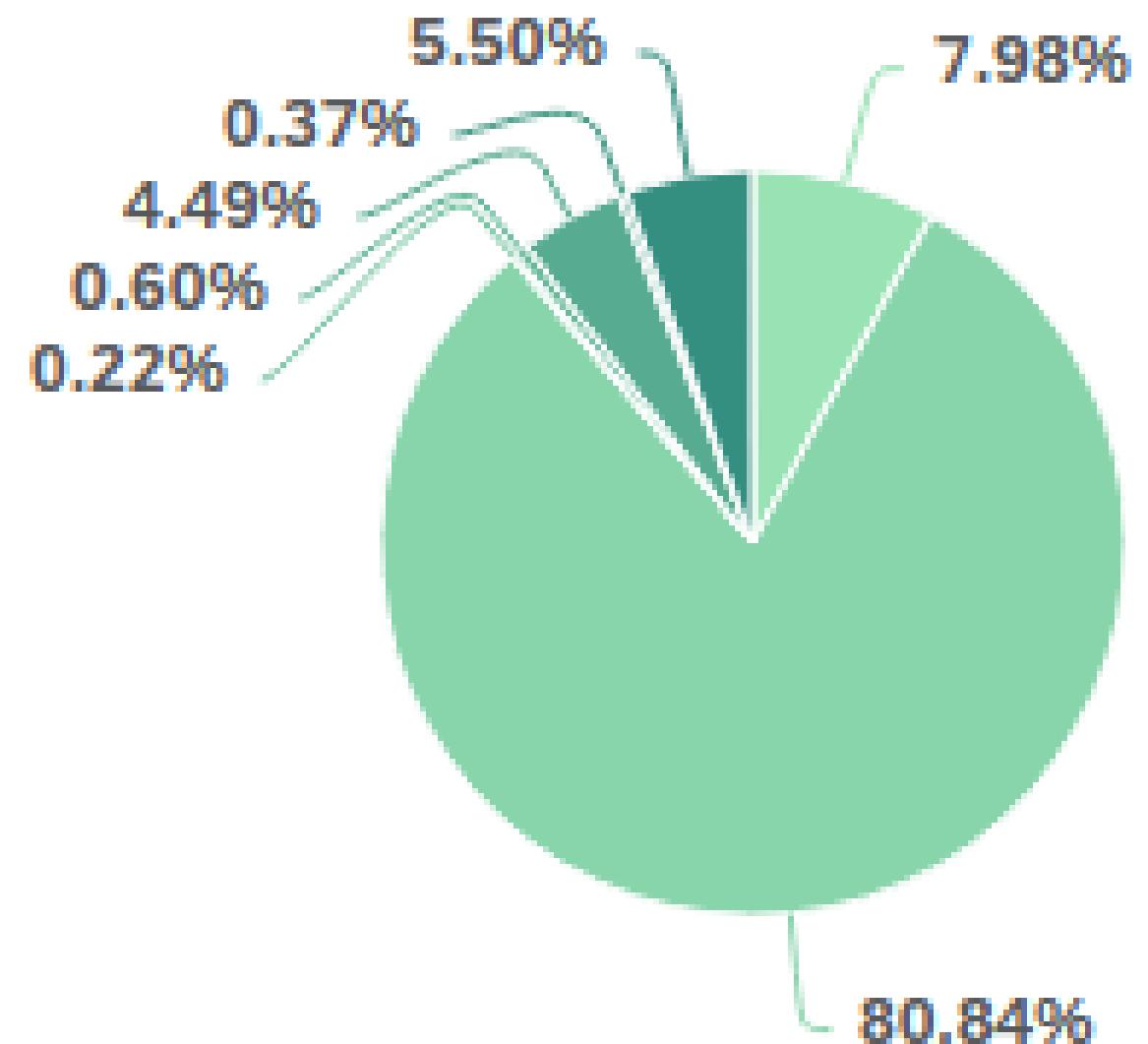


Countries of Asia has the **most mismanaged plastics** among the rest of the countries.



The Philippines **mismanages almost all** of its plastic waste.

## Share of plastic wastes emitted to ocean per continent

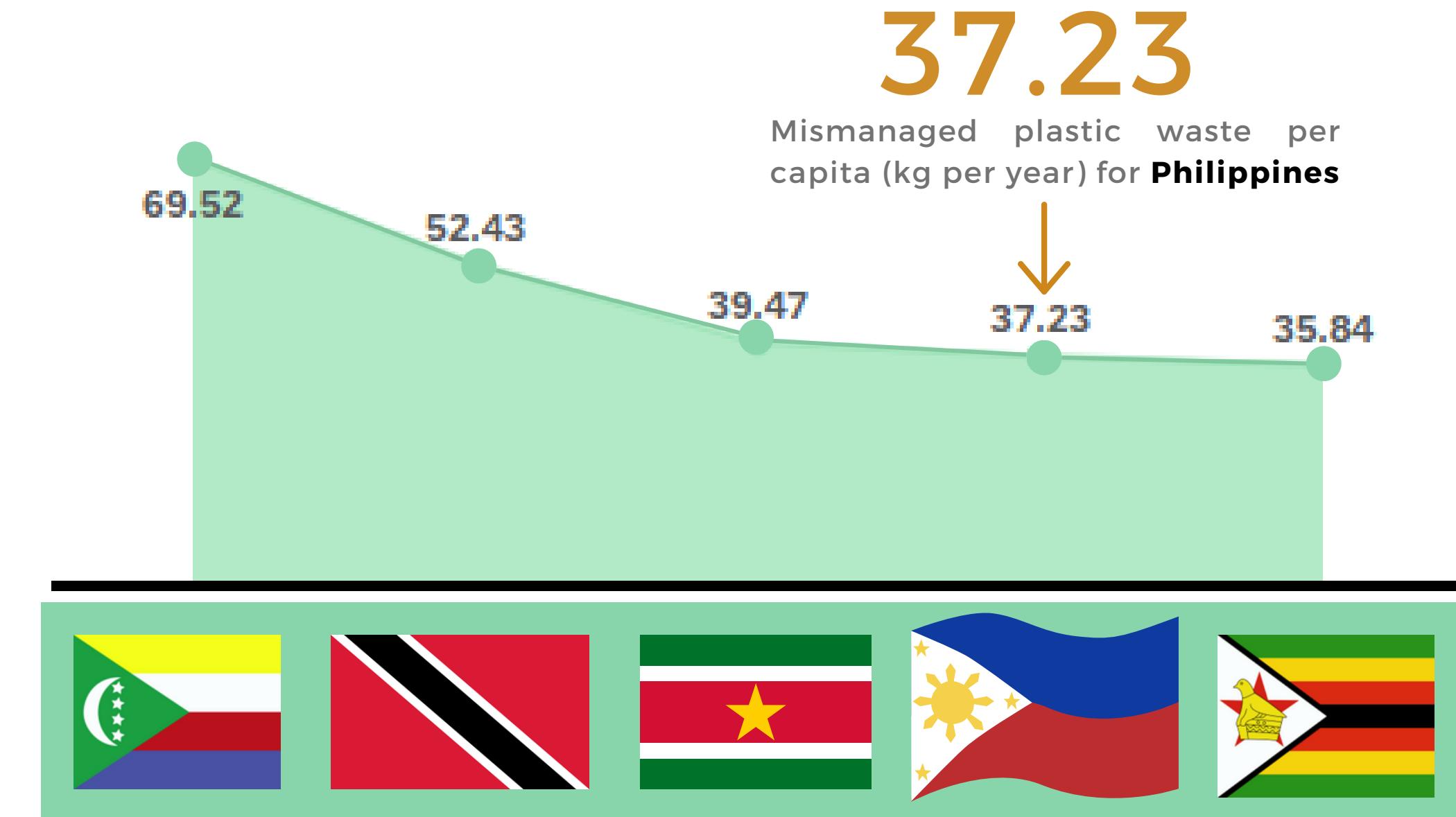
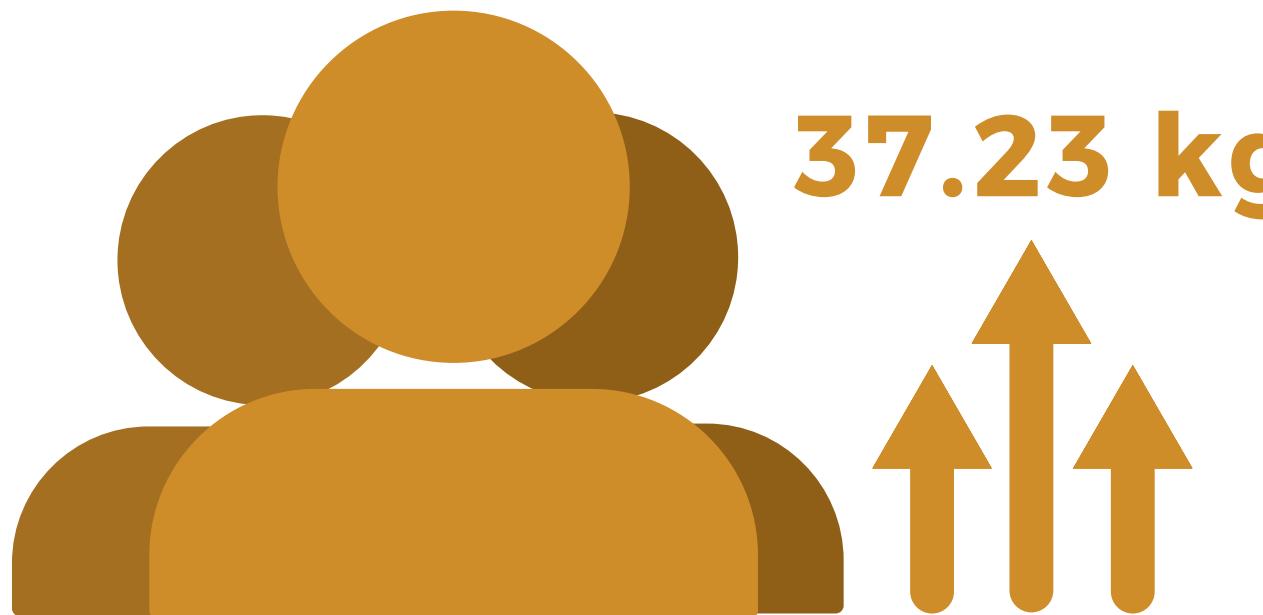


The Asia is among the **top contributors** of plastic waste that ends up in the ocean.



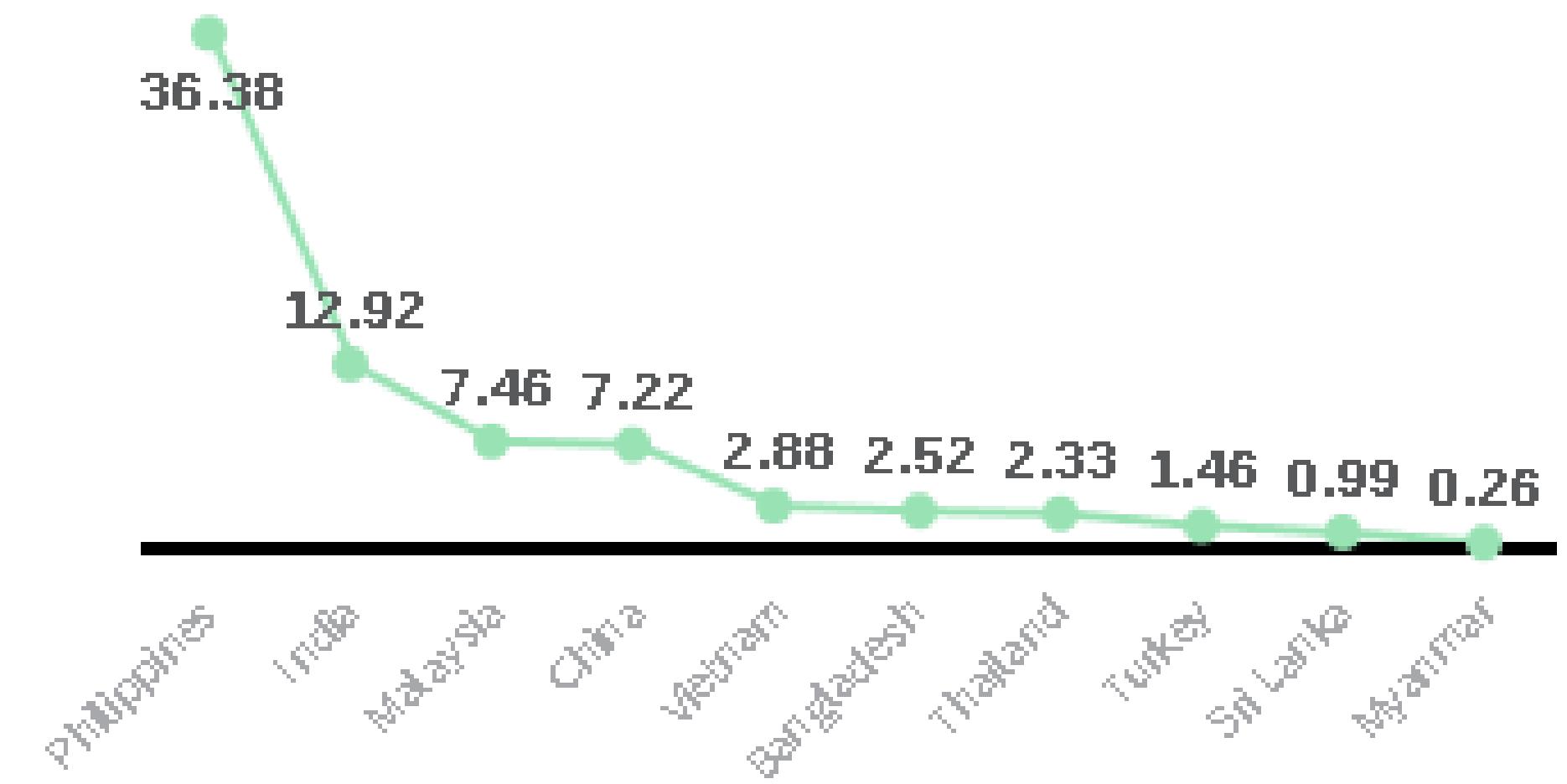
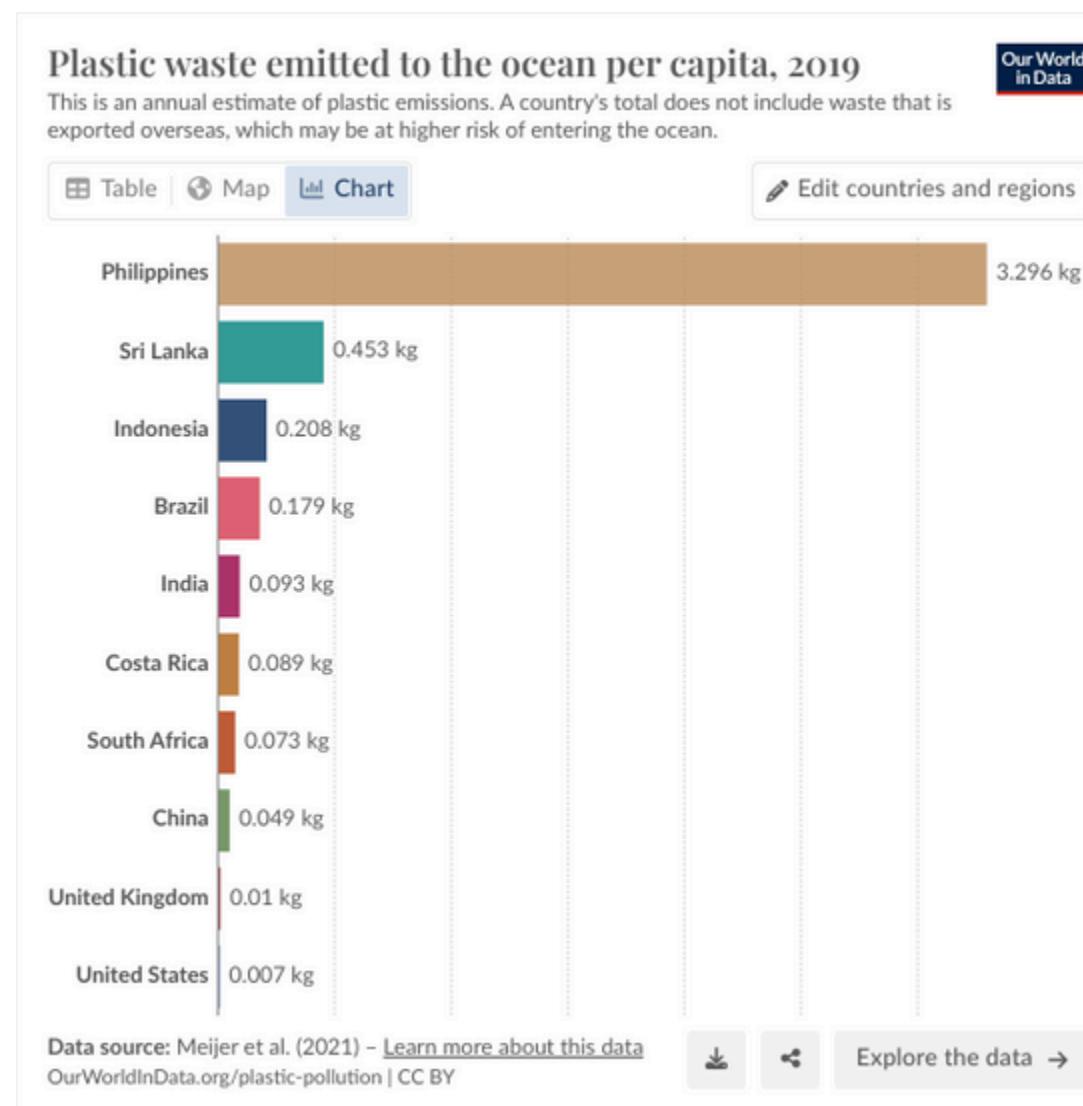
## Mismanaged plastic wastes per capita (kg per year)

The Philippines is the **top 4** for mismanaging plastic, with each person mismanaging about **37.23** kilograms of plastic waste per year.



## Share of plastic wastes emitted to ocean per country

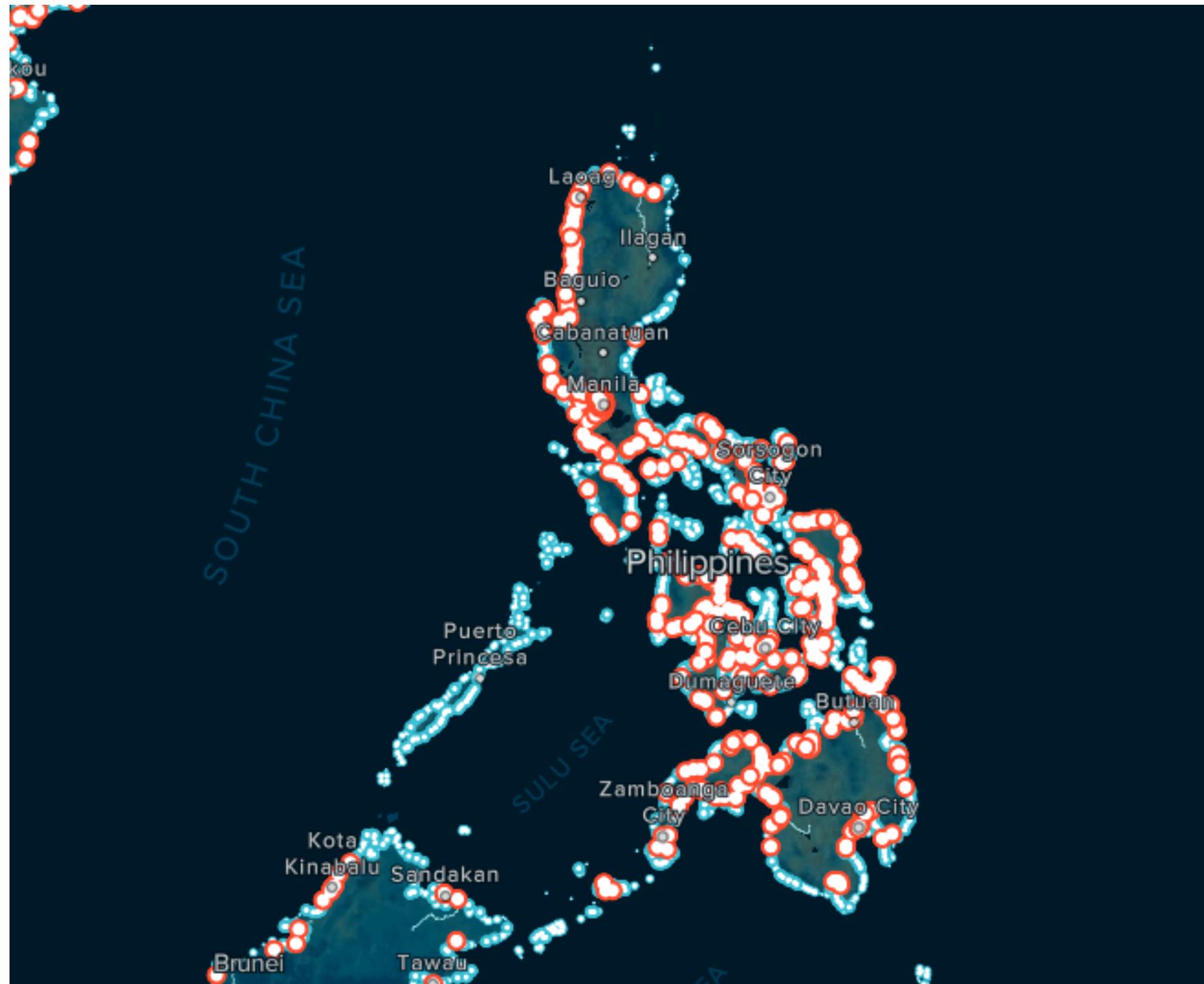
In Asia there is a total of **80%** and accounting for the **36.38%** of that is the **Philippines**.



<https://ourworldindata.org/grapher/per-capita-ocean-plastic-waste?tab=chart>

Philippines the number one contributor of plastic in the ocean.

## Plastic wastes accumulated in the ocean and rivers



<https://www.philstar.com/headlines/2021/06/10/2104533/pasig-other-philippine-rivers-among-biggest-contributors-ocean-plastic-pollution>

### Rivers in the Philippines that contributes to plastic waste emitted to the ocean

- Tullahan
- Meycauayan
- Pampanga
- Libmanan
- Rio de Grande de Mindanao
- Agno
- Agusan
- Parañaque
- Iloilo
- Imus
- Zapote
- Cagayan de Oro
- Davao
- Malaking Tubig
- Tambo, Pasay
- Jalaur
- Cagayan
- Hamulauon

# **It is known that the plastic waste is a problem. But why does plastic waste tend to increase?**

In the Philippines, plastic offers convenience with individually packaged products and various other packaging uses.

## **We are used to using single-use plastic.**

Filipinos mismanaged plastic wastes that's why it increases.

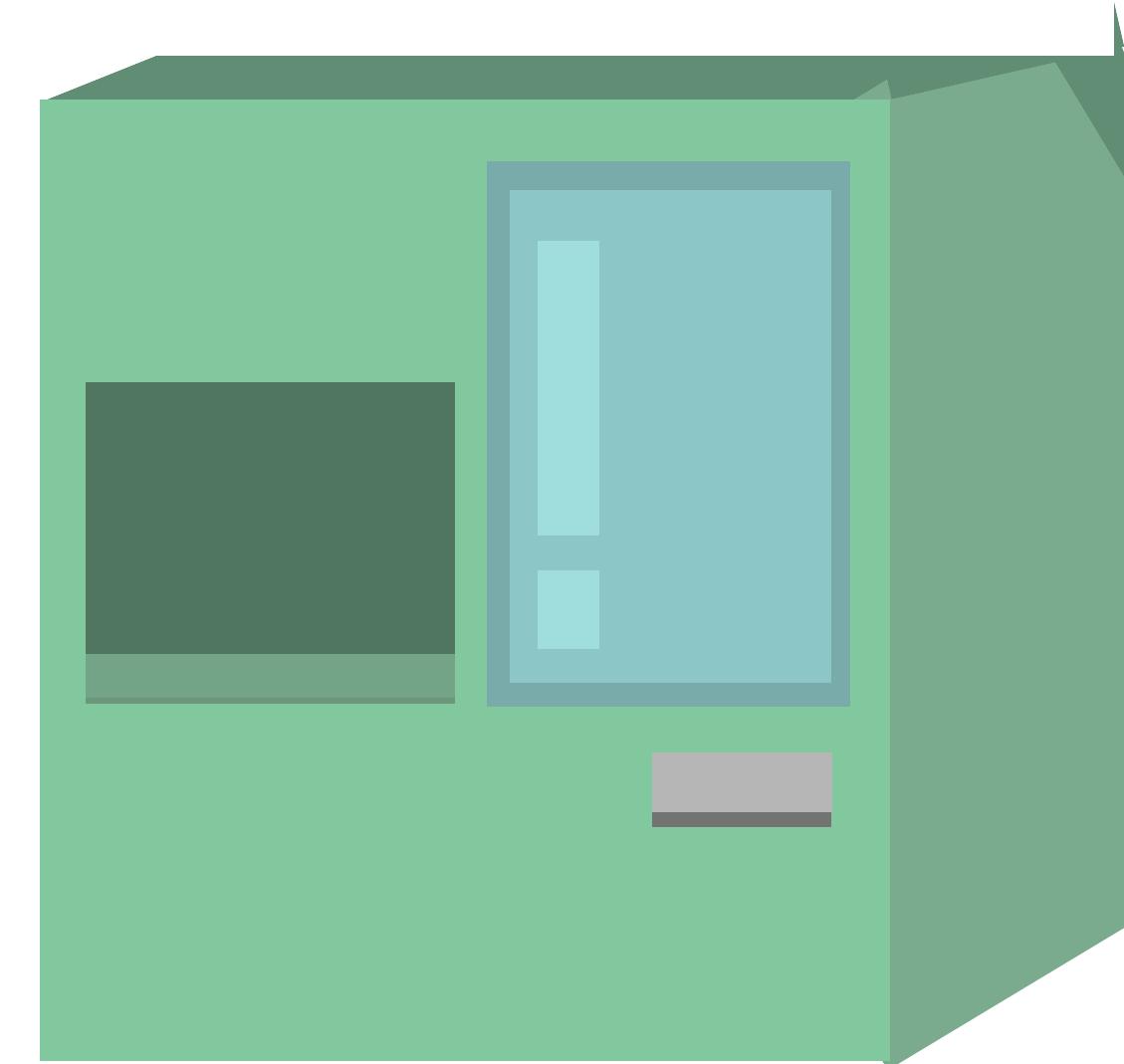
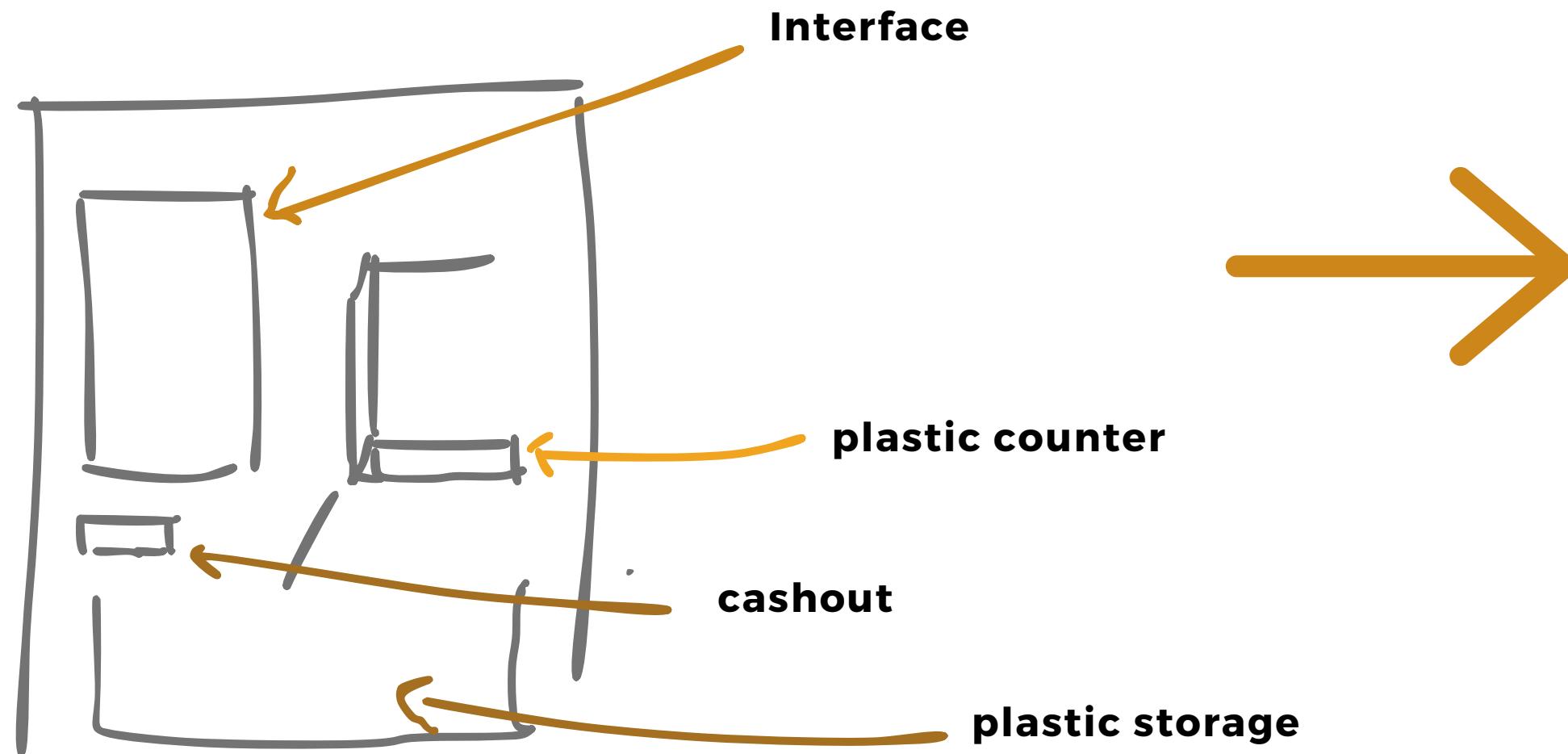


**plastic waste arises from**

**Mismanagement and lack of education.**

**Environmental problems are not that widely recognized or studied.**

## **IMPLEMENTATION:**



# SOLUTION:

Encourage people to recycle/sell their plastic by creating a machine to buy their plastic and turn their plastic to something more useful.

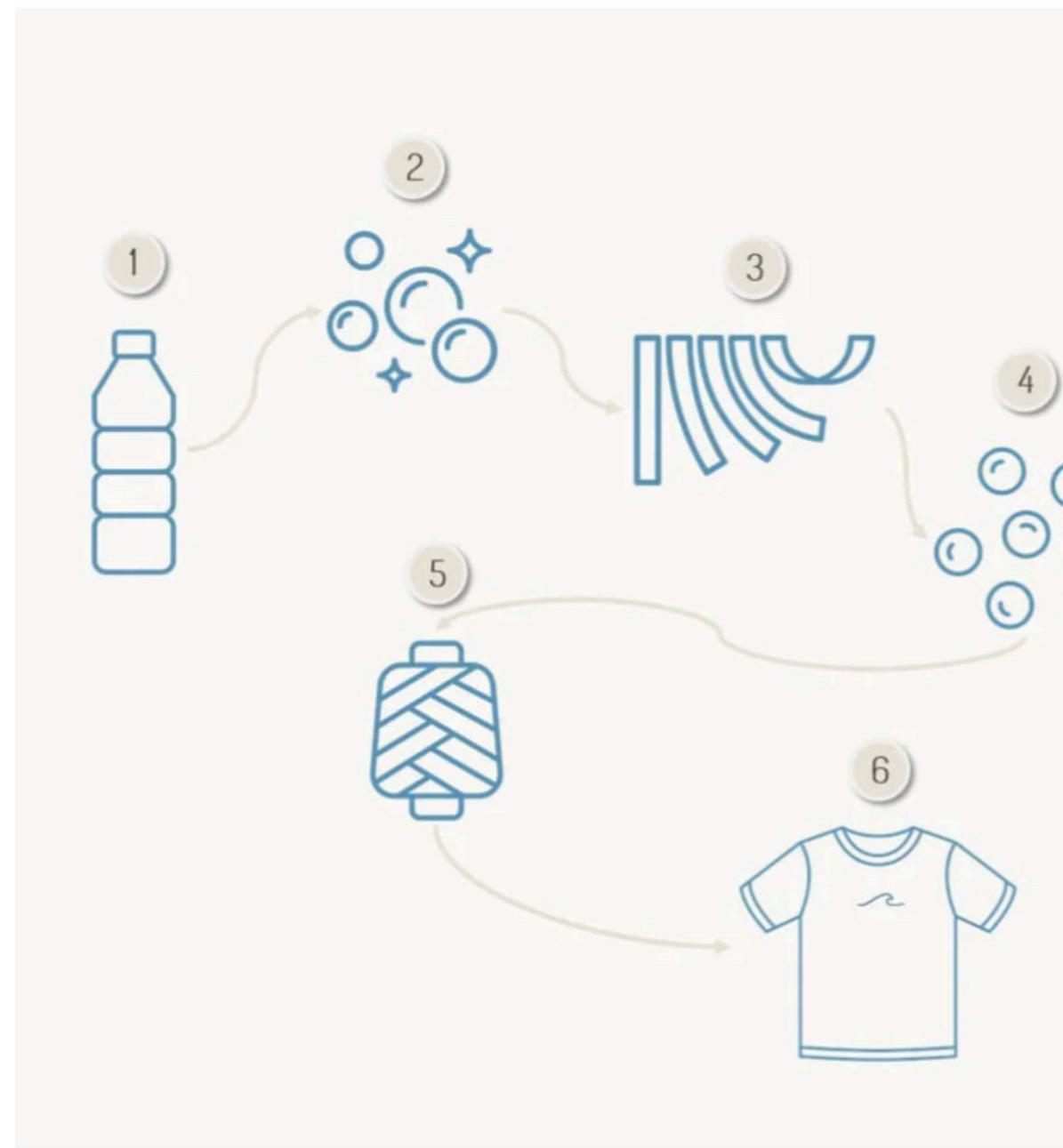
buy -> collect -> reuse -> repurpose



## RECYCLED BRICK

The British non-profit 'Recycle Rebuild' worked together with the Dutch company called 'Precious Plastics' to create a building brick that's made 100% out of recycled plastics. To keep the brick strong but cheap to make, it's design is hollow on the inside. This air also allows for good heat insulation. The design of the brick reminds us of the infamous Lego brick. Since the project is completely dependend on donations, the building plan for creating your own plastic bricks is available on their website. It can be used to build toilet buildings at festivals or bicycle sheds, for example.

[Click here for more information](#)



Also find partnership from people like them ff. for us to be able to repurpose or buy the plastics we collect and reuse it.

## **Impact of Philippines being one of the highest contributor to plastic waste:**

- harming marine life and ecosystems
- increasing the risk of flooding
- health risks to humans who consume seafood contaminated with plastic particles
- degraded tourist spots

## **Benefits of our solution:**

- reduced plastic pollution
- lessened mismanaged plastic waste
- cleaner environment
- educate people about environmental problems
- help people find a way to earn

**SDG aligned to the following:**



# REFERENCE:

<https://www.kaggle.com/datasets/imtkaggleteam/plastic-pollution/code>

<https://www.kaggle.com/code/hieptruong96/eda-23-11-plastic-pollution-plotly/input>

<https://www.kaggle.com/datasets/zvr842/global-pollution-by-counties/code>

<https://www.kaggle.com/discussions/questions-and-answers/437655>

<https://www.kaggle.com/code/willianoliveiragibin/plastic-waste>

<https://www.statista.com/statistics/282732/global-production-of-plastics-since-1950/>

<https://plasticoceans.org/the-facts/#:~:text=We%20are%20producing%20over%20380,at%20least%20several%20hundred%20years.>

<https://www.un.org/africarenewal/magazine/may-2023/understanding-plastic-pollution-and-its-impact-lives#:~:text=Unlike%20other%20materials%2C%20plastic%20does,can%20cause%20serious%20health%20impacts.>

<https://aseandse.org/uploads/asset/Bp5TJ2Fc4g.pdf>

<https://datasource.kapsarc.org/explore/dataset/global-plastics-production/information/>

[https://www.researchgate.net/figure/Global-distribution-of-produced-and-mismanaged-plastic-waste-modified-from-Pravettoni\\_fig2\\_328520912](https://www.researchgate.net/figure/Global-distribution-of-produced-and-mismanaged-plastic-waste-modified-from-Pravettoni_fig2_328520912)

<https://ourworldindata.org/grapher/per-capita-ocean-plastic-waste?tab=chart>

<https://www.plasticsoupfoundation.org/en/solutions/recycled-brick/#:~:text=The%20British%20non%2Dprofit%20'Recycle,allows%20for%20good%20heat%20insulation.>

<https://www.statista.com/statistics/282732/global-production-of-plastics-since-1950/>

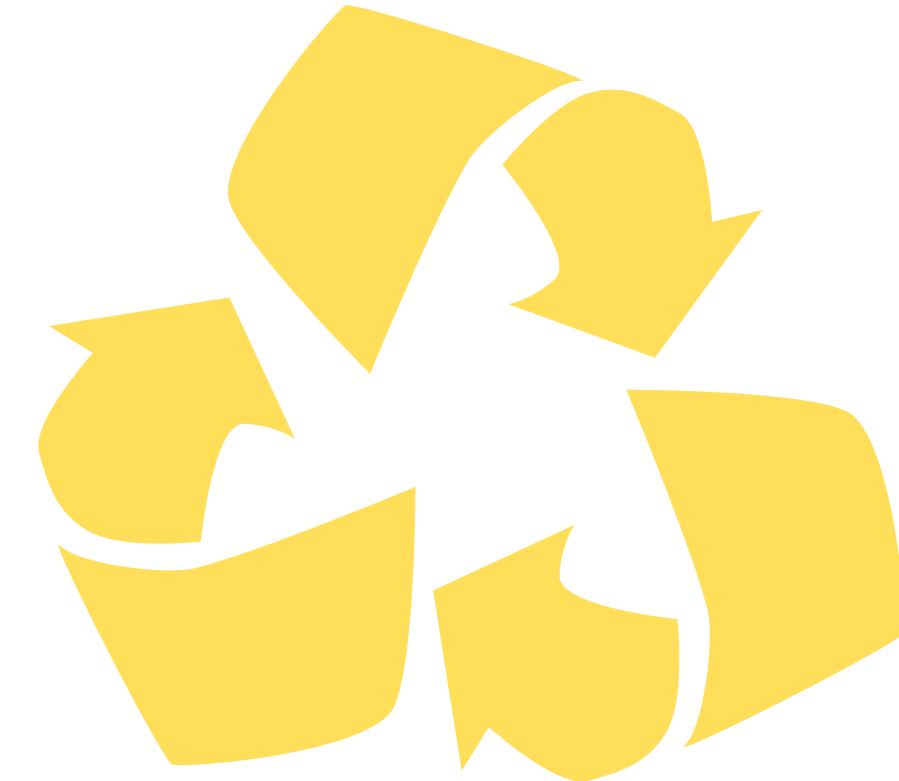
<https://oceanness.com/pages/how-we-do-it>

<https://www.philstar.com/headlines/2021/06/10/2104533/pasig-other-philippine-rivers-among-biggest-contributors-ocean-plastic-pollution>

<https://earth.org/philippines-plastic/>

<https://www.rappler.com/nation/philippines-dominates-global-ocean-plastic-pollution-chart-at-36-shows-study/>

<https://www.rappler.com/nation/philippines-dominates-global-ocean-plastic-pollution-chart-at-36-shows-study/>



**THANK YOU**  
REDUCE, REUSE, AND LOVE RECYCLING

