

# The Need of Sustainable Tourism in the face of Environmental Crises

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# Presenter's introduction

- ◆ Koji Miwa
- ◆ Policy researcher, Biodiversity and Forest Area, Institute for Global Environmental Strategies (IGES), Japan
- ◆ Official trainer of the Global Sustainable Tourism Council (GSTC)



# Global Sustainable Tourism Council (GSTC)

- ◆ Established in 2007, initiated by the Rainforest Alliance, the United Nations Environment Programme (UNEP), the United Nations Foundation, and the United Nations World Tourism Organization (UNWTO)
- ◆ Purpose: foster increased understanding of sustainable tourism practices and the adoption of universal sustainable tourism principles.
- ◆ Two sets of GSTC criteria
  - ◆ GSTC Industry Criteria (Hotels & Tour Operators) (2008, 2012, 2016)
  - ◆ GSTC Destination Criteria (2013, 2019)

# GSTC Criteria

## ◇ Four Pillars of Sustainability

- ◇ Sustainability Management: Demonstrate sustainable destination management
- ◇ Social & Economic: Maximize economic benefits to the host community and minimize negative impacts
- ◇ Cultural: Maximize benefits to communities, visitors, and culture; minimize negative impacts
- ◇ Environmental: Maximize benefits to the environment and minimize negative impacts

↑ **Today's focus**



# Why do we care about sustainability?

◇ We cannot continue to live in the current level of lifestyle in the near future

◇ Climate Change

◇ Loss of biodiversity

◇ Pollution

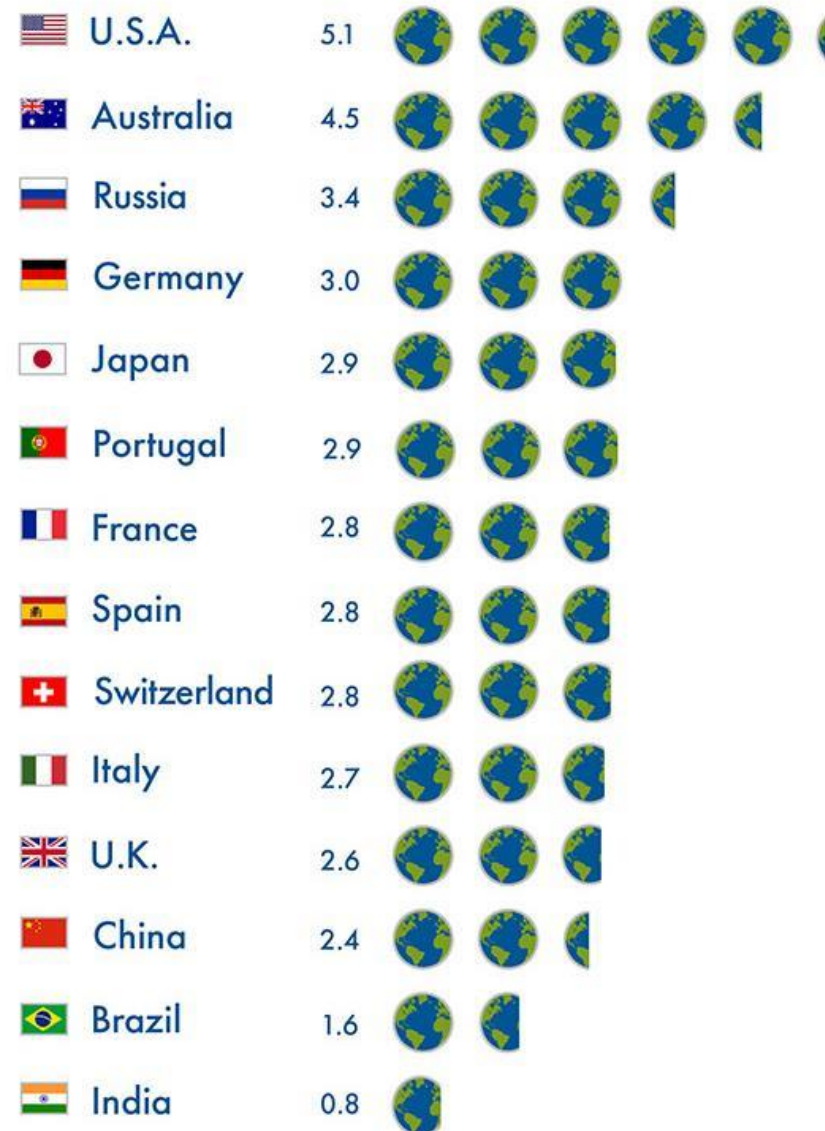


# Growing Global Tourism



Source: United Nations World Tourism Organization (UNWTO, 2023) – processed by Our World in Data

## How many Earths would we need if everyone lived like U.S.A. residents?

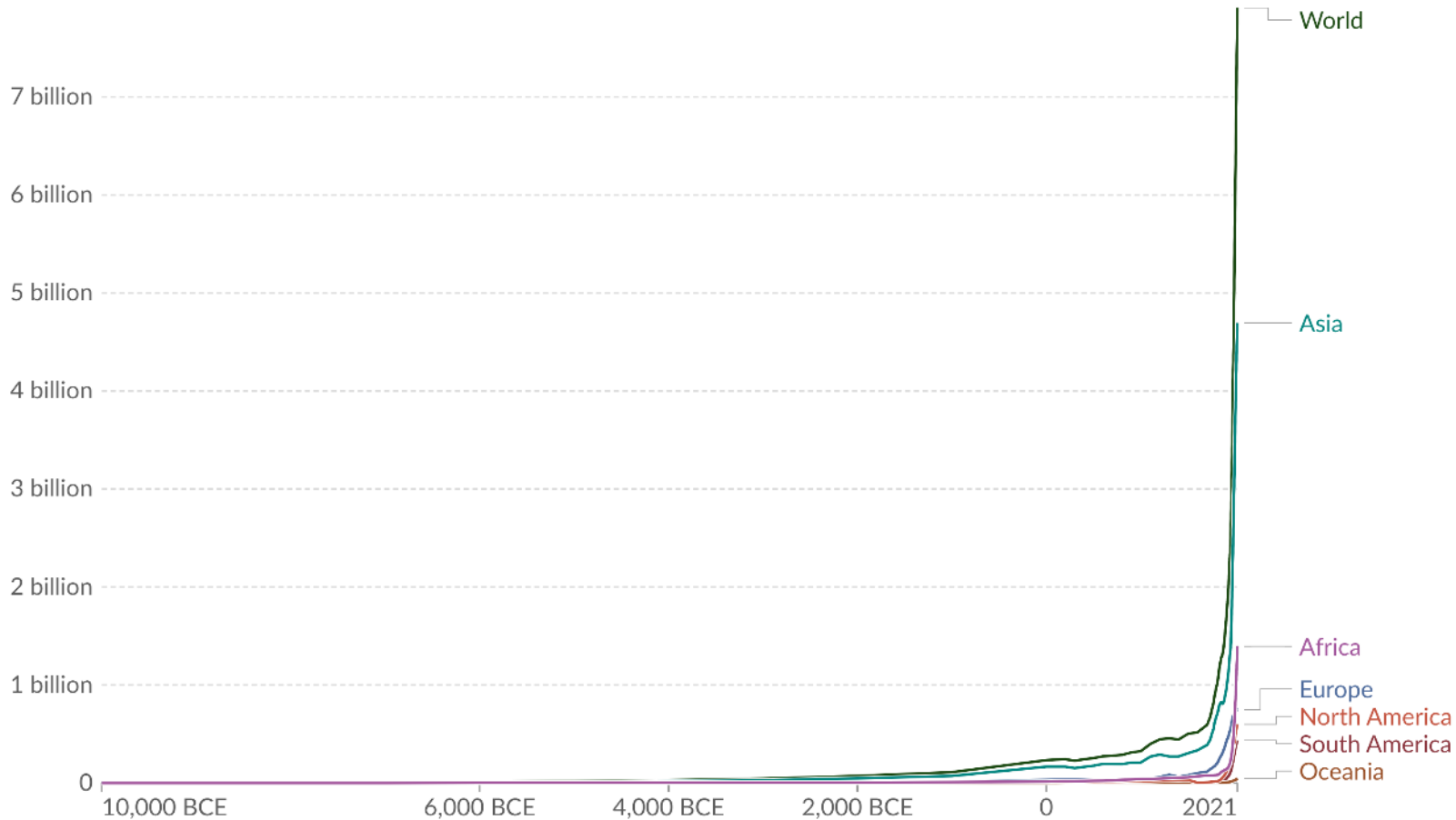


 World 1.75  

Source: National Footprint and Biocapacity Accounts 2022

## Population, 10,000 BCE to 2021

Our World  
in Data



Data source: HYDE (2017); Gapminder (2022); UN (2022)

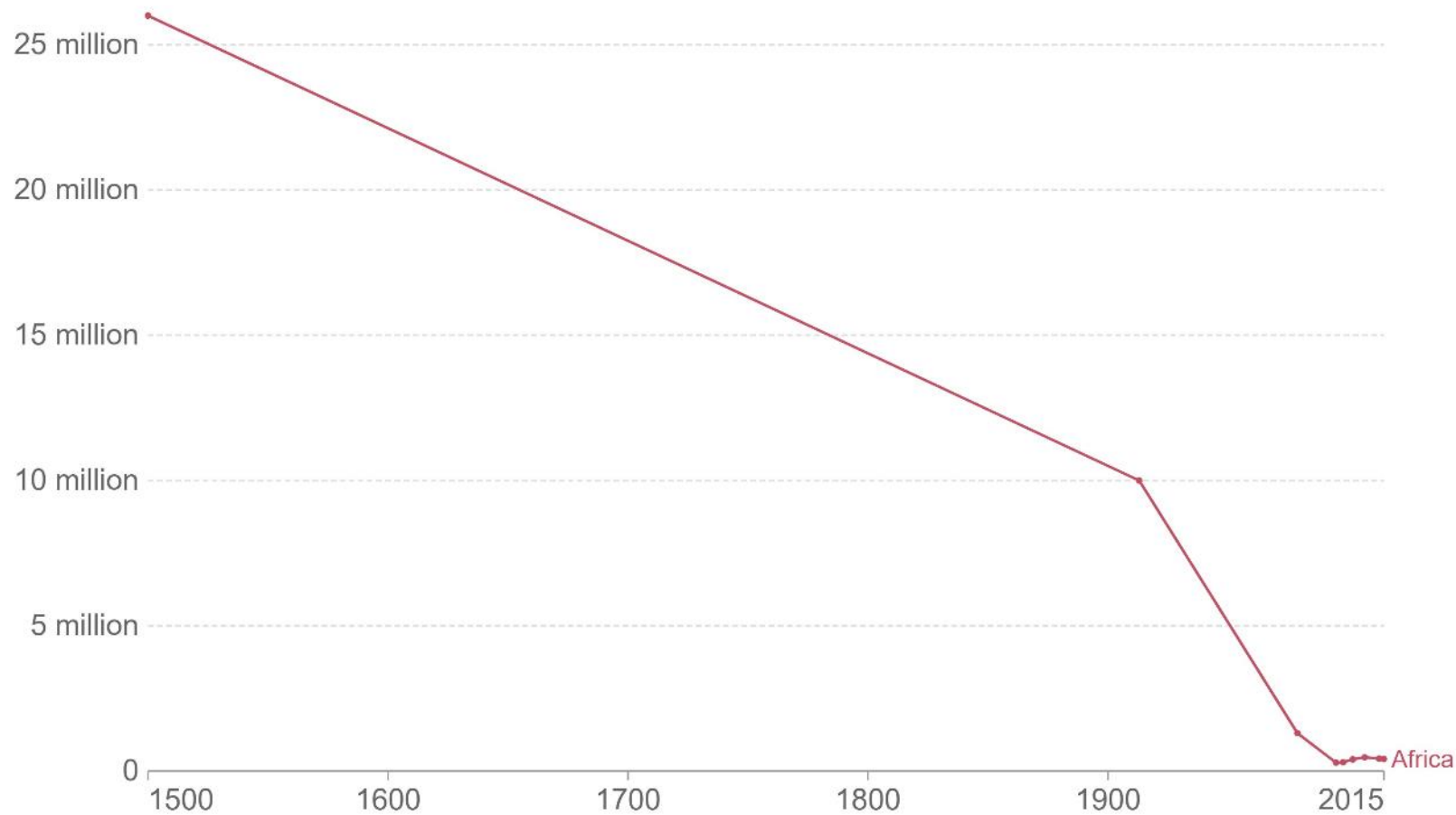
OurWorldInData.org/population-growth | CC BY

Note: Historical country data is shown based on today's geographical borders.

Source: Gapminder - Population v7 (2022); Gapminder - Systema Globalis (2022); HYDE (2017); United Nations - World Population Prospects (2022) – with major processing by Our World in Data

## Number of African elephants

Our World  
in Data



Source: African Elephant Specialist Group (AfESG); Great Elephant Census

Note: Long-run estimates from 1500 and 1913 in particular have a large degree of error and should be interpreted with caution; however, they are a useful indicator of the magnitude of population change over time.

OurWorldInData.org/large-mammals-extinction • CC BY

Source: Elephant population (AfESG &AsESG, 2019) – processed by Our World in Data. “Number of African elephants” [dataset]. Elephant population (AfESG &AsESG, 2019) [original data].



# Unprecedented rate of extinction

- ◇ On the Earth, 8.7 million or more of animal and plant species exist (estimate)
- ◇ Currently, 37,480 species (28%) are threatened to extinction out of 134,425 species identified
- ◇ If we don't take urgent actions, most of them will extinct within a few decades. (IPBES, 2019)





# Direct drivers of biodiversity loss

- ◊ Land/sea-use change (e.g. expansion of residential area, conversion of forests into hotels, agricultural area or roads)
- ◊ Direct exploitation (e.g. deforestation, overfishing)
- ◊ Climate change (e.g. GHG emissions leading to extreme weather)
- ◊ Pollution (e.g. inappropriate discharge of wastewater, plastics)
- ◊ Invasive species

How does tourism in Mauritius contribute to these?

# In case of Mauritius

- ◇ Anchoring corals by touristic boats and local fishers
- ◇ Overcrowding for dolphin watching
- ◇ Polluting untreated wastewater
- ◇ Damping wastes in mangrove forests or the sea
- ◇ Overspeed of boats damaging corals and other species
- ◇ Overfishing by game fishing
- ◇ Unregulated exhaust emissions from vehicles
- ◇ Increase in residential area (deforestation and more pressure to nature)
- ◇ Anything else you can think of?





# Which resource type is overexploited by tourism?

## Which has a potential to be developed?

- ◆ Mountains (e.g. hiking, guided tours, organizing the hiking routes such as signboards, information center, safety caution)
- ◆ River (e.g. kayaking, paddleboarding, swimming)
- ◆ Ocean (e.g. surfing, snorkeling, scuba diving, paddleboarding, kayaking, jet skiing)
- ◆ Beach (e.g. swimming, restaurants, shops for rent)
- ◆ Coral (e.g. diving, snorkeling)
- ◆ Mangroves (e.g. kayaking, boardwalk)
- ◆ Cultural/Historical sites (e.g. Museums, monuments and ruins in Old Grand Port)
- ◆ Ecological food options (e.g. provision of food which were produced or caught in an ecological way and creation of Mauritian style)

# What is the challenge of becoming sustainable for the tourism industry?

The survey was conducted last year, focusing on the east and southeastern areas

# The results of the ecotourism survey (industry)

( $n = 67$ )

Level of awareness about sustainable issues in general

Level of awareness	<i>n</i>	%
1. Not aware at all	2	3.0%
2. Slightly aware	37	55.2%
3. Moderately aware	25	37.3%
4. Very aware	2	3.0%
5. Extremely aware	1	1.5%

Familiarity with the term of “sustainable tourism”

Familiarity level	<i>n</i>	%
1. Not at all	2	3.0%
2. Slightly	41	61.2%
3. Moderately	13	19.4%
4. Somewhat	8	11.9%
5. Greatly	3	4.5%

## Degree of efforts on reduction of wastes and pollution

Degree of efforts	<i>n</i>	%
1. Not at all	14	20.9%
2. Little	35	52.2%
3. Somewhat	7	10.4%
4. Much	10	14.9%
5. A great deal	1	1.5%

Degree of efforts on raising environmental awareness of customers.

Efforts on raising awareness	<i>n</i>	%
1. Not at all	11	16.7%
2. Little	32	48.5%
3. Somewhat	15	22.7%
4. Much	6	9.1%
5. A great deal	2	3.0%



# What is the difficulty to make your facility, services or products more ecological?

Difficulty of being ecological	<i>n</i>	%
It's costly to invest	63	94.0%
Not many ecological products are available	42	62.7%
Customers prefer cheaper prices to ecological and more expensive prices	38	56.7%
It increases prices for customers	36	53.7%
Loss of income due to COVID-19	19	28.4%
It will become difficult to compete with other businesses	16	23.9%
Lack of governmental regulations, supports and enforcement	2	3.0%

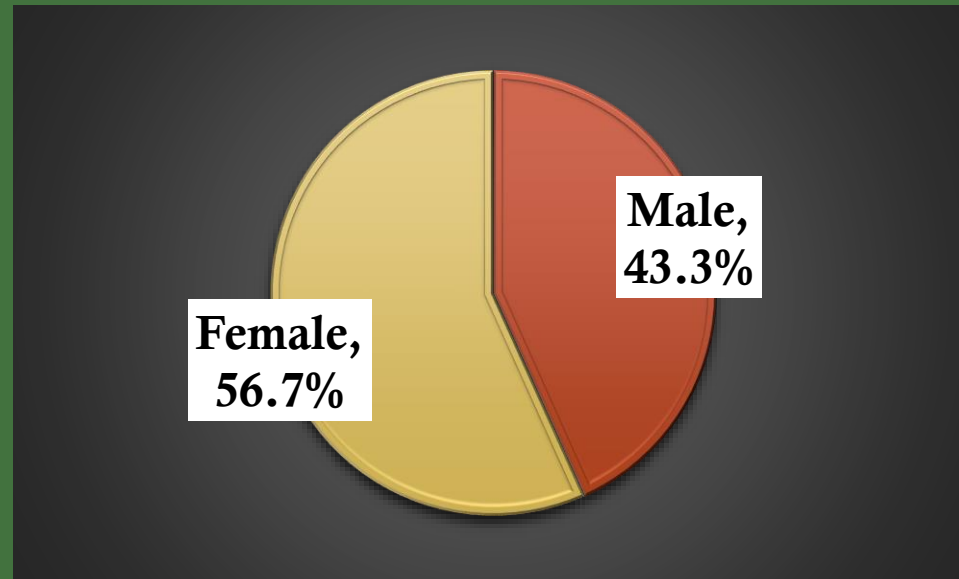
# Expectation in the tourism industry

Expectation in tourism industry	<i>n</i>	%
Bring more tourists than the pre-COVID-19 time	53	79.1%
Invest more in tourism	31	46.3%
Consider more about the well-being of the local communities	10	14.9%
Improve public transportation (e.g. bus, metro)	8	11.9%
Recover the same number of tourists as the pre-COVID-19 time	7	10.4%
Improve the quality of tour activities	7	10.4%
Distribute the profits from the tourism to the different sectors within the society	7	10.4%
Consider more about conservation of the environment	5	7.5%
More communication between the government and local communities	1	1.5%

How are tourists thinking about the environment and sustainability?

# The results of the ecotourism survey (tourists) ( $n = 67$ )

Age	<i>n</i>	%
90s	0	0.0%
80s	0	0.0%
70s	2	3.0%
60s	3	4.5%
50s	12	17.9%
40s	5	7.5%
30s	12	17.9%
20s	20	29.9%
10s	10	14.9%
N/A	1	1.5%



Nationality	<i>n</i>	%
France	42	62.7%
Germany	6	9.0%
US	5	7.5%
Italy	3	4.5%
Norway	2	3.0%
Australia	2	3.0%
UK	2	3.0%
Poland	2	3.0%
Switzerland	2	3.0%
Mauritius	1	1.5%

Activities	<i>n</i>	%
Enjoying beach	63	94.0%
Snorkeling	47	70.1%
Trekking/hiking	42	62.7%
Eating local food/drinks	41	61.2%
Dolphin watching	28	41.8%
Catamaran cruises	26	38.8%
Guided tour	26	38.8%
Visit to historical sites	24	35.8%
Islet Tours	20	29.9%
Diving	18	26.9%
Visit to museums	18	26.9%
Kayaking	16	23.9%
Purchasing local crafts	12	17.9%
Bird watching	9	13.4%
Whale watching	6	9.0%
Horse riding	5	7.5%
Lodging	4	6.0%
Farm stay	2	3.0%
Big game fishing	1	1.5%
Watching insects	1	1.5%
Surfing	1	1.5%

Activities that tourists  
expect in Mauritius

How much do you care about the environmental problems  
(e.g. climate change, plastic wastes) in general?

Level	<i>n</i>	%
Not at all	1	1.5%
Slightly	2	3.0%
Moderately	7	10.4%
Somewhat	29	43.3%
Greatly	28	41.8%

◇ The majority care about the environmental issues.



# If a hotel or tour operator has an environmental or sustainability certificate, how does it affect your choice?

Level	<i>n</i>	%
Not at all	6	9.0%
Slightly	8	11.9%
Moderately	14	20.9%
Somewhat	28	41.8%
Greatly	9	13.4%

◈ The majority care about the certificates



# How much price increase would you accept to pay for more ecologically-friendly services and products?

Rate of price increase	<i>n</i>	%
0%	9	13.4%
1%	1	1.5%
2%	3	4.5%
5%	3	4.5%
10%	26	38.8%
12.5%	1	1.5%
15%	10	14.9%
20%	5	7.5%
25%	1	1.5%
30%	4	6.0%
80%	1	1.5%
100%	1	1.5%

- ◇ 30 % can pay 50 euro or more
- ◇ 24 % can pay 100 euro or more
- ◇ About 10% can pay 200 euro

# Willingness to pay for entering the country for their environmental conservation and restoration

Amount (euro)	<i>n</i>	%
Don't know	12	17.9%
0	4	6.0%
5	1	1.5%
10	14	20.9%
15	3	4.5%
20	3	4.5%
30	7	10.4%
40	2	3.0%
50	5	7.5%
100	8	11.9%
120	1	1.5%
150	1	1.5%
200	6	9.0%

- ◇ 30 % can pay 50 euro or more
- ◇ 24 % can pay 100 euro or more
- ◇ About 10% can pay 200 euro

# How much are you interested in contributing to environmental conservation and restoration while doing tourism activities?

Level	<i>n</i>	%
Not at all	0	0.0%
Slightly	3	4.5%
Moderately	18	26.9%
Somewhat	28	41.8%
Greatly	18	26.9%

◇ Many tourists would like to contribute to the environment during tourism activities.

# Free comments on how Mauritius can improve tourism ( $n = 18$ )

Comments for improvement	$n$	%
Improve waste management (reduce wastes and plastic use)	11	61.1%
Develop public transport	2	11.1%
Widening roads	2	11.1%
German guides	2	11.1%
Environmental education for tourists	2	11.1%
A round trip with a care for mental health	1	5.6%
More trash bins	1	5.6%
Environmental education for tour organizers	1	5.6%
Prevent damage to the seabed	1	5.6%

◇ Most tourists pointed out waste management such as cleaning, reducing plastics and waste segregation.



# Summary

- ◆ There is a gap between the industry and tourists on willingness to care about the environment
- ◆ Many tourists are interested in experiencing natural conservation and restoration as part of tourism activities
- ◆ The balance of natural and socio-cultural experiences is needed
- ◆ Sustainability certificates can attract tourists at a great extent
- ◆ Tourists are willing to pay extra for ecofriendly services and products as well as conservation and restoration of the environment although the businesses are reluctant to invest and think tourists do not prioritize it.



# Way forward: How can we achieve sustainable tourism?

- ❖ **Capacity building:** enhance awareness and knowledge on the environmental issues among all the public, private and civil sectors
- ❖ **Cross-cutting cooperation:** Different sectors of the government needs to collaborate under the shared common vision towards a sustainable society and support the frontrunner which is working on sustainability, which can impact the others
- ❖ **Sustainable tourism = more attractive:** Sustainable tourism has a potential to attract more tourists while improving the quality of nature

# Examples of GSTC Criteria (1)

- ◆ D1.1 Environmentally Preferable Purchasing
- ◆ D2.1 Greenhouse Gas Emissions
- ◆ D2.2 Transport
  - ◆ The organization seeks to reduce transportation requirements and actively encourages the use of cleaner and more resource efficient alternatives by customers, employees, suppliers and in its own operations
- ◆ D2.4 Solid Waste
  - ◆ Waste, including food waste, is measured, mechanisms are in place to reduce waste, and where reduction is not feasible, to re-use or recycle it
  - ◆ Any residual waste disposal has no adverse effect on the local population and the environment



# Examples of GSTC Criteria (2)

## ◆ D3.3 Visits to Natural Sites

- ◆ The organization follows appropriate guidelines for the management and promotion of visits to natural sites in order to minimize adverse impacts and maximize visitor fulfilment

## ◆ D3.4 Wildlife Interactions

- ◆ Interactions with free roaming wildlife, taking into account cumulative impacts, are non-invasive and responsibly managed to avoid adverse effects on the animals concerned and on the viability and behaviour of populations in the wild

## ◆ D3.5 Animal Welfare

## ◆ D3.6 Wildlife harvesting and trade

Thank you for your attention.