



Impact of Microplastics related to COVID in the Caribbean and fishing activity

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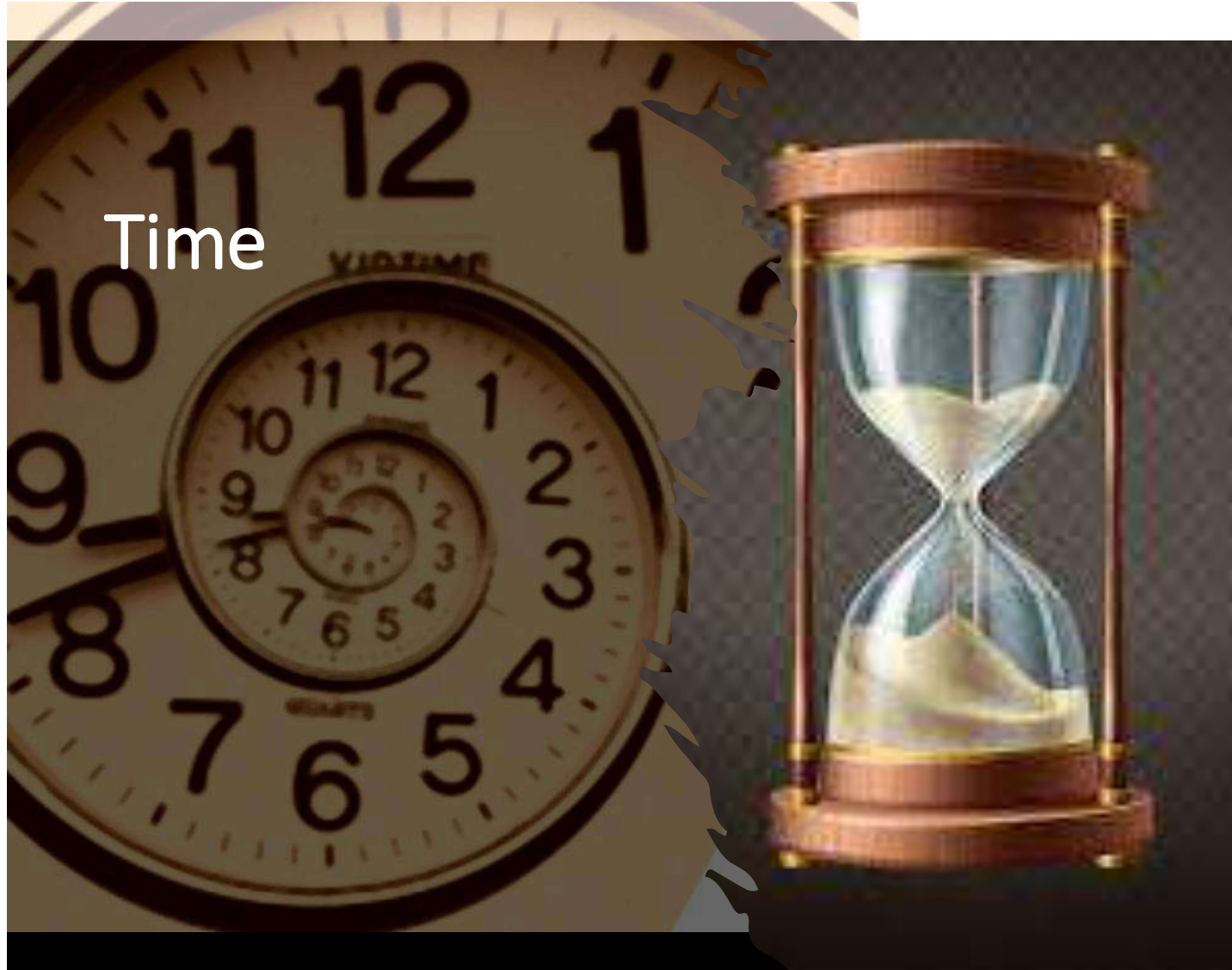


5th, December 2023

Where do I start?

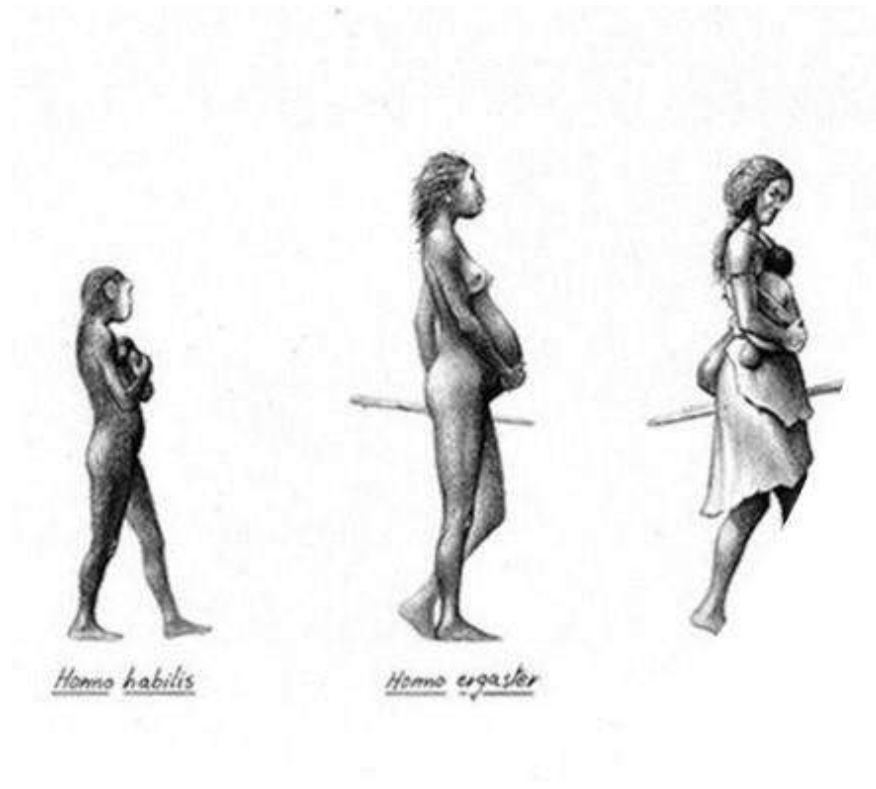


Time



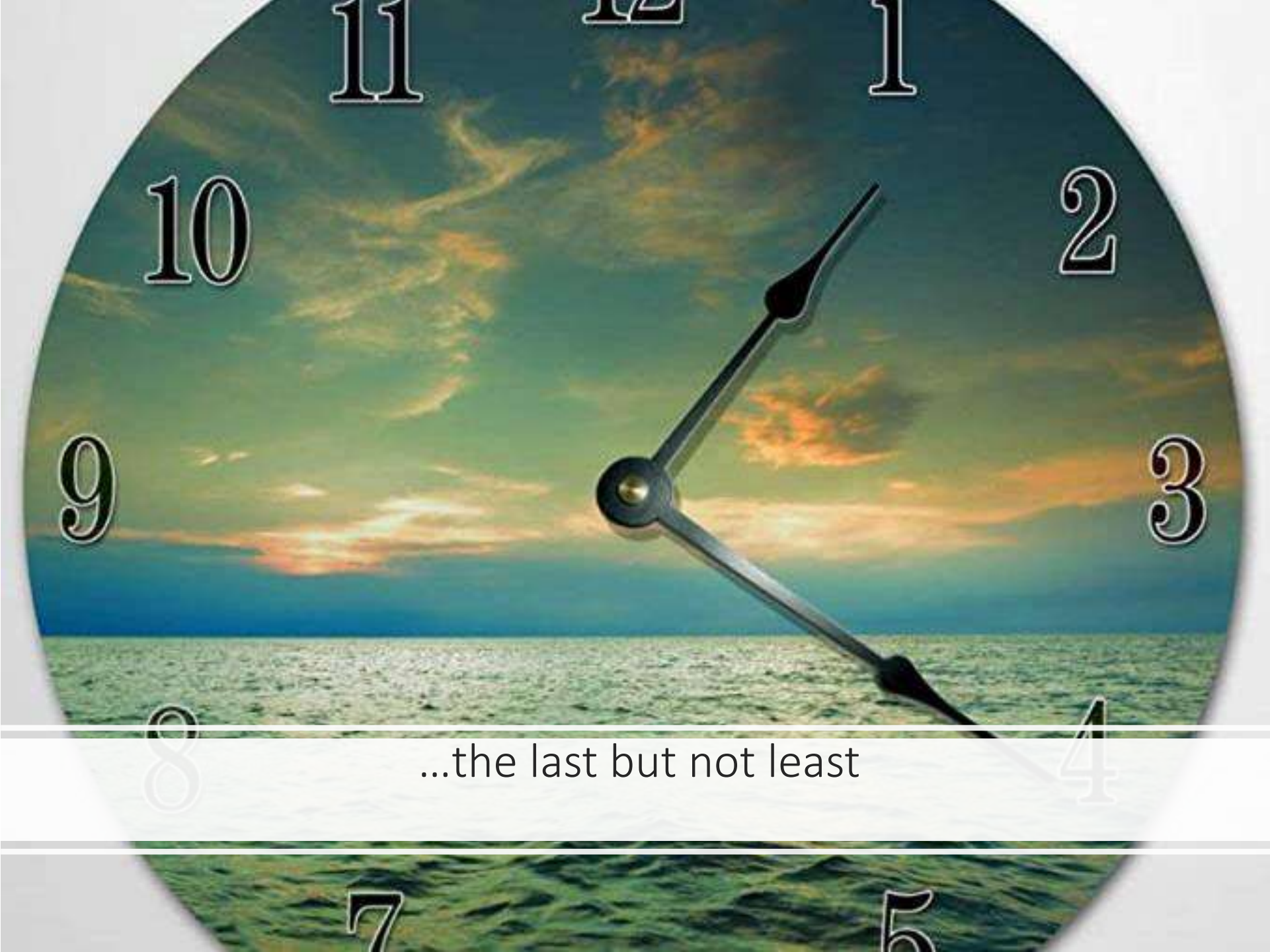
the Earth was
formed 4.5 billion
years ago





.....and then,
300 000 years ago,
the Homo sapiens
appeared

- Thus, we have 23,000 times less "experience" than the Earth



...the last but not least



**almost half of all
plastic manufactured**
has been produced
since 2000

Producción mundial de plástico
en millones de toneladas



In the last 20 years, half of all
plastic has been produced



Annually 9 billion tons of garbage are discharged into the oceans. Plastics make up 80%

50 % is packaging plastics



due to our
consumption model



Each minute,
One million
bottles of
water are
sold. Which
represent
25% of the
marine litter





BIODIVERSIDAD



CARIBE



11% of the fishing catch comes from this region and

10% of the world's population lives there



It is the second sea most polluted by plastics in the world (UN)

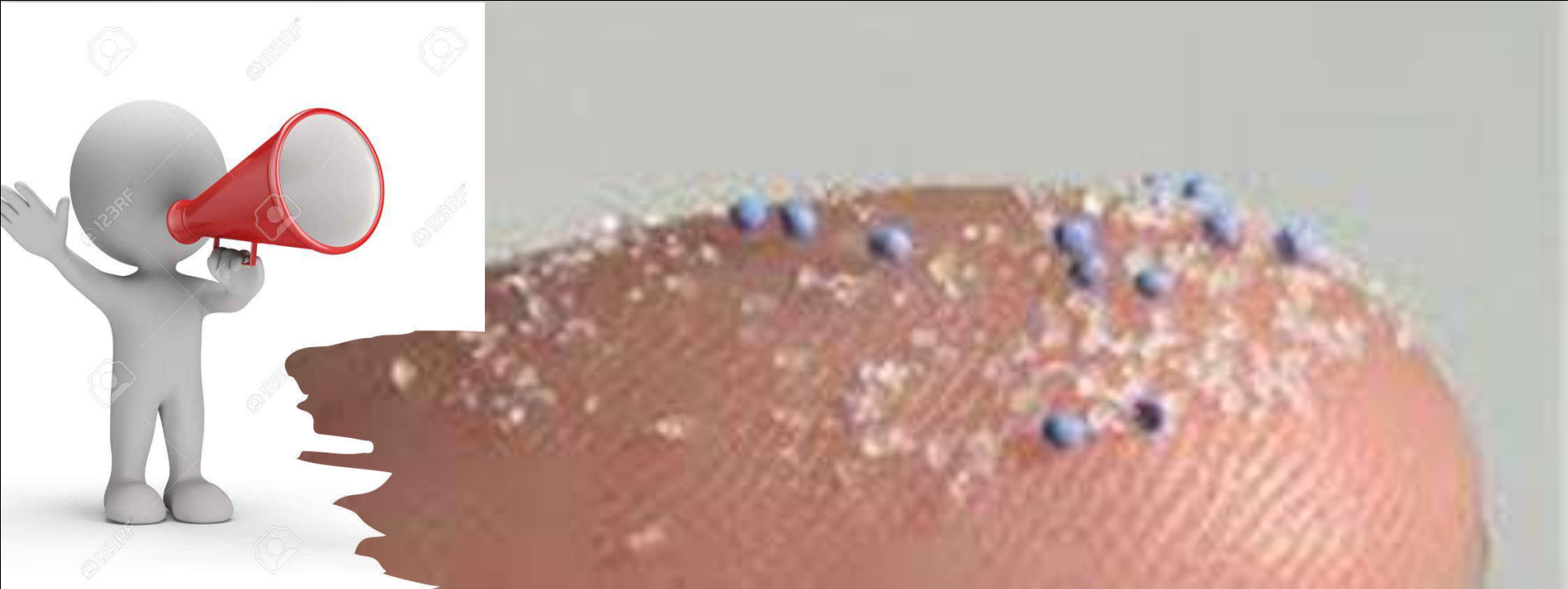
Caribbean

Plastic pollution

Because one third of all waste ends up in clandestine landfills

85% of wastewater is not treated before reaching the sea

Microplastics

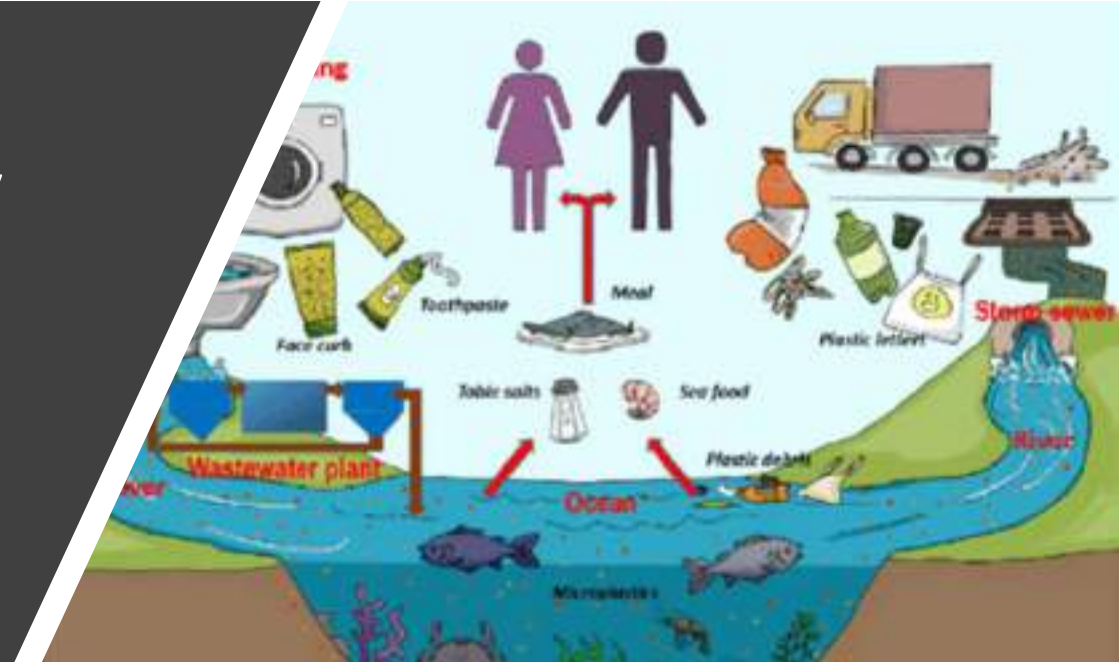


Where do they come from?

The Micro plastics come from:



- Plastic fragmentation
- spheres produced by the industry that are incorporated into toothpastes and creams



Plastic "does not disappear",

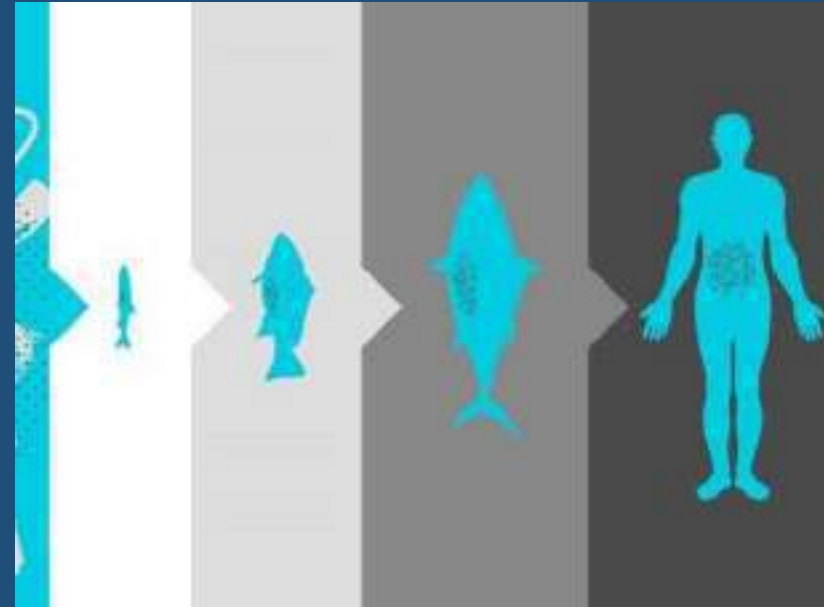
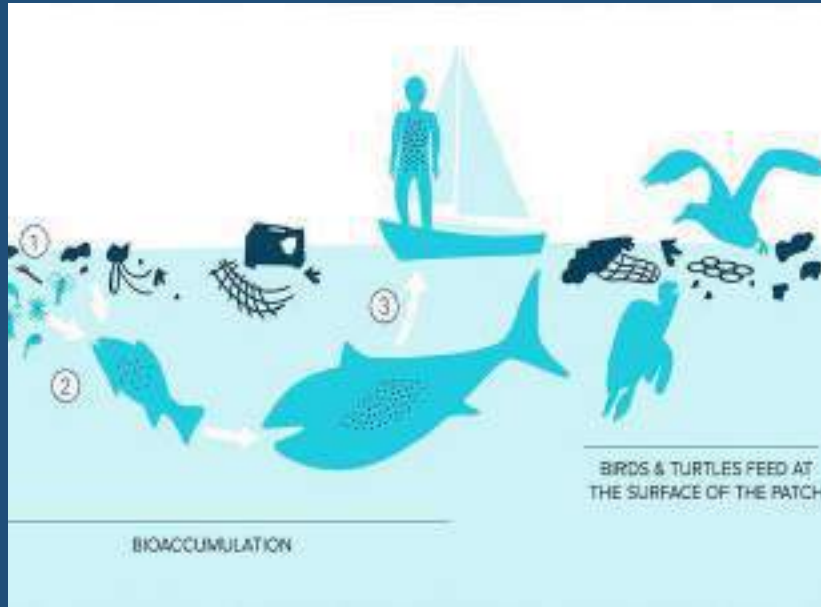


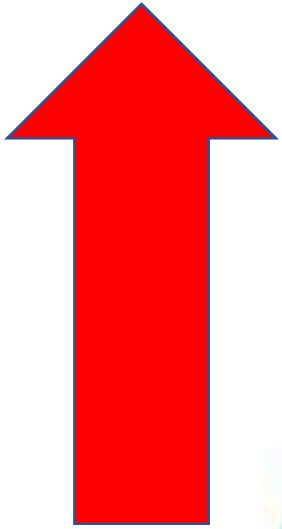
IMPACTO MP



The problem with MP is that they concentrate organochlorines, such as fertilizers

Biocumulation (POPs)

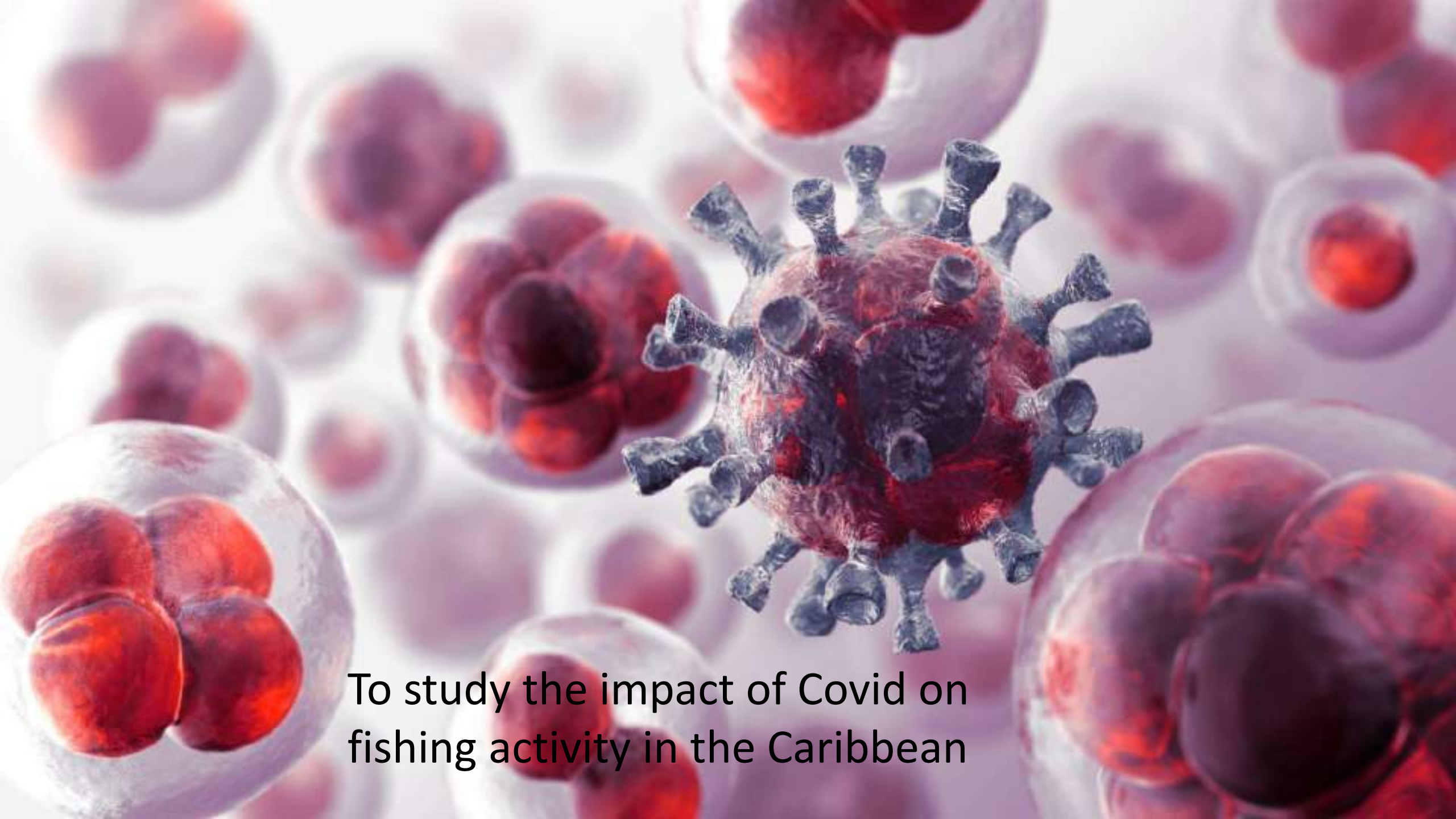




During Covid the use
of plastics increased

Face masks,
Gloves,
Online shopping

**In 2020, around 129 billion face masks and
65 billion gloves were used monthly around the world**



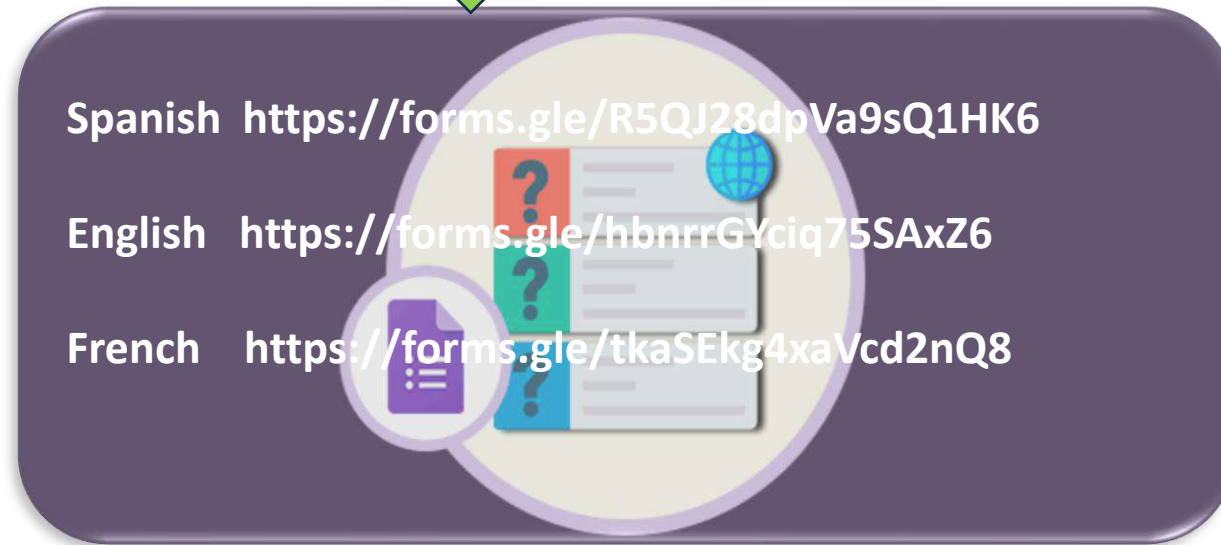
To study the impact of Covid on
fishing activity in the Caribbean

We carried out a survey with closed and open questions



30 closed questions (YES, NO)
and
10 open questions

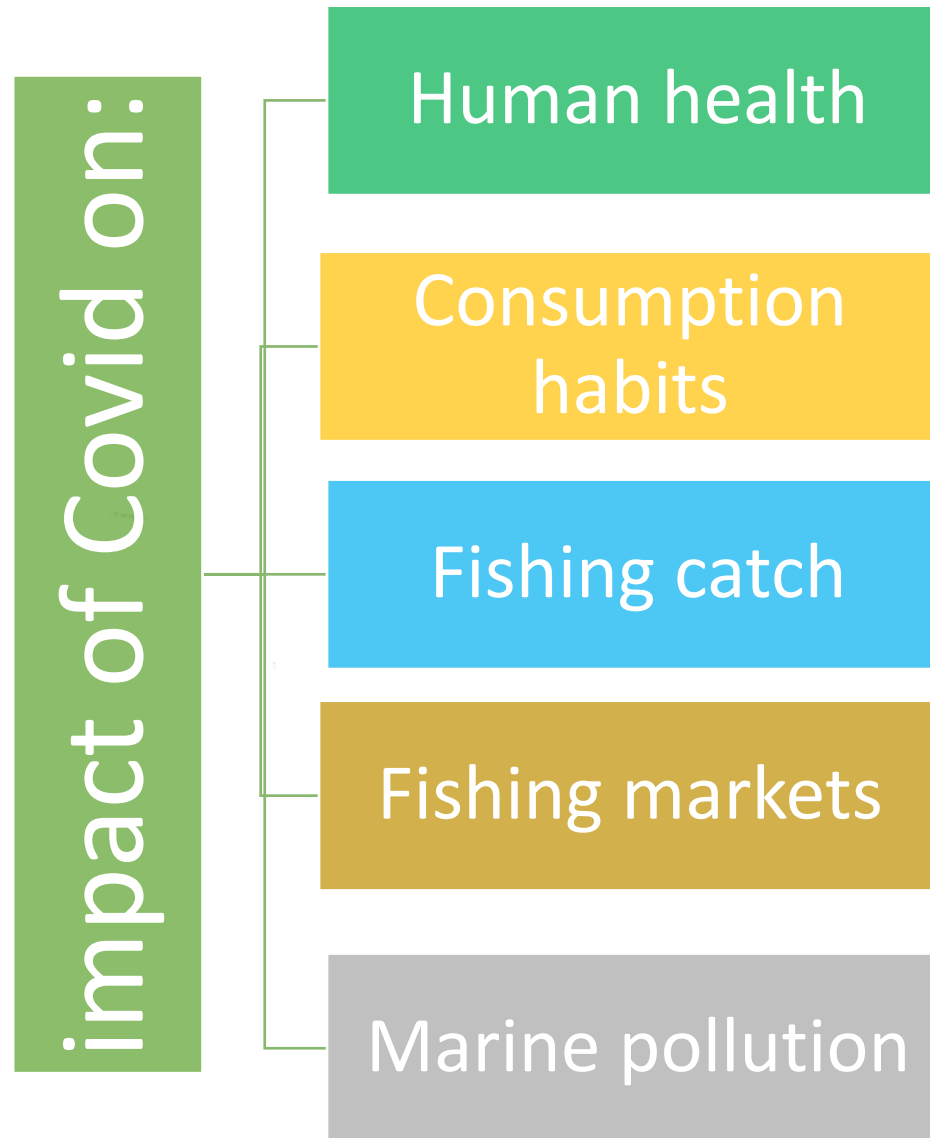
Google forms



sent to fishermen
via wa



The survey had six topics



We obtained responses from 6 countries where at least 30 fishermen responded to the survey.

Belize

Dominican Republic

Jamaica

Mexico

Panama

San Andrés Islands,

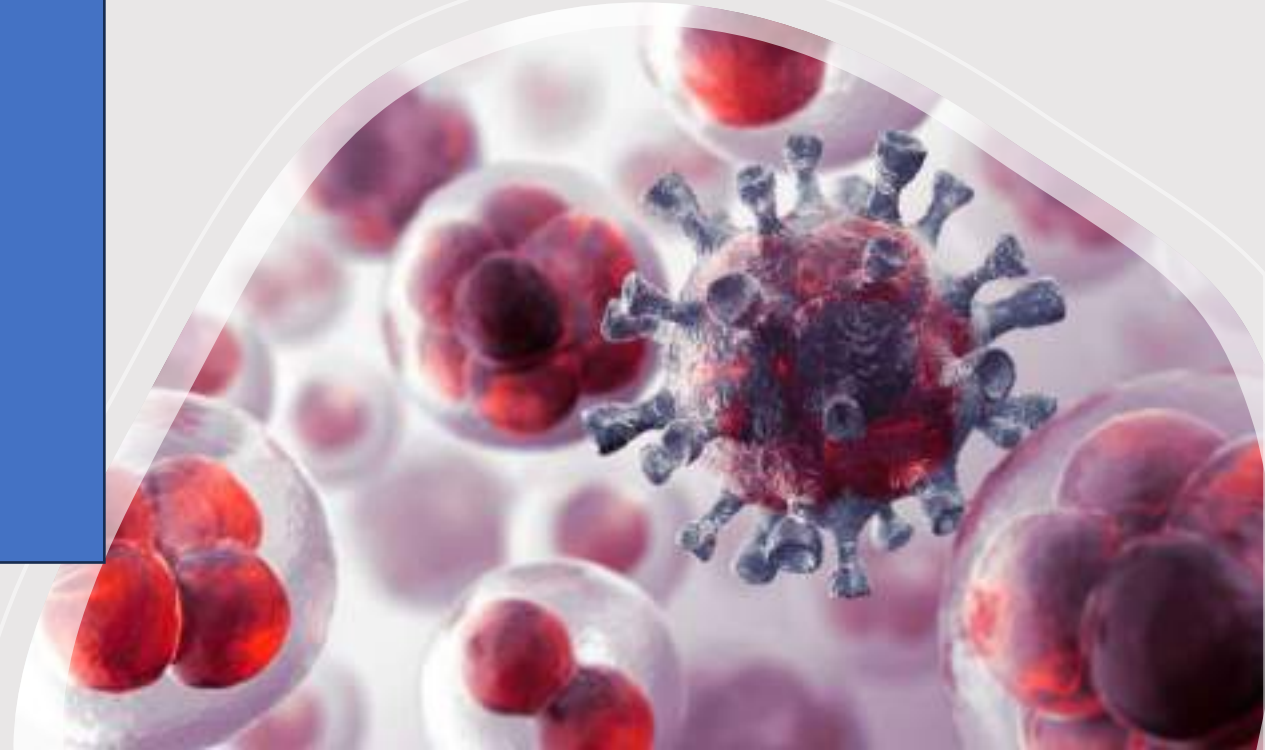
Colombia



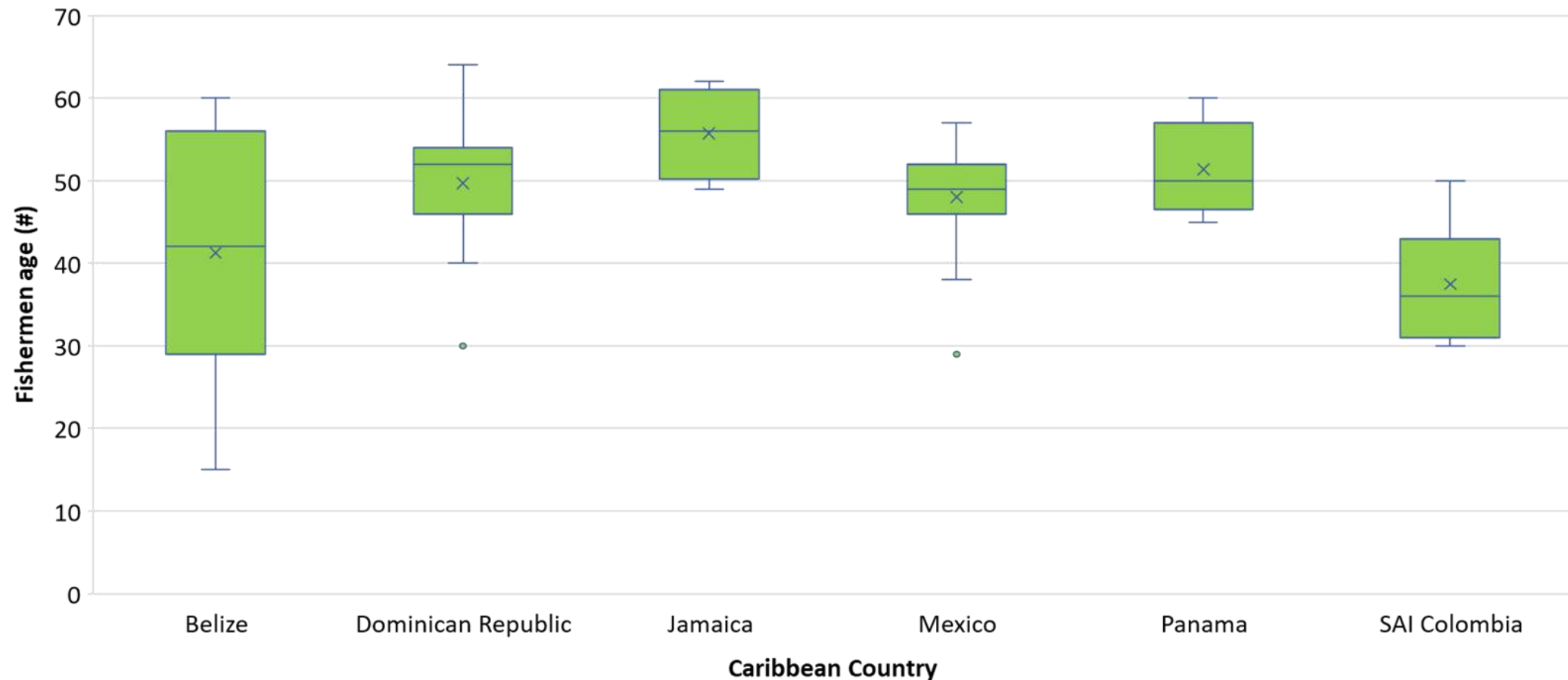
- *Martha Enríquez, Jorge Trejo, Marcia Beltran, Trisha Forbes, Zedna Guerra, Ana María Frías & Hazel Oxenford*

Effect of the COVID on Human Health

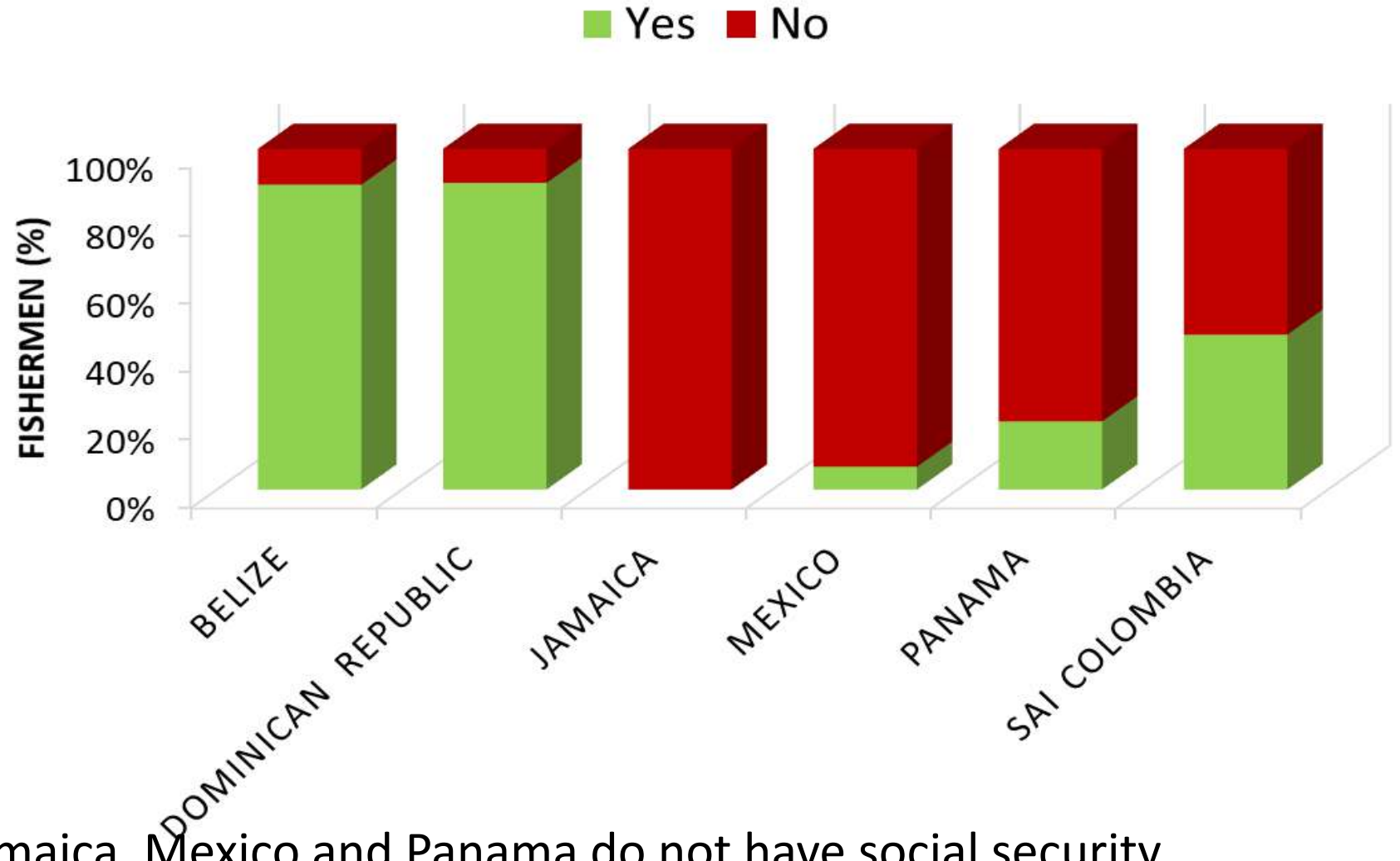
RESULTS



The average of fishermen was 50 and over in Dominican REP, Jamaica, Mexico and Panama.
40 in Belize and the youngest in SAI Colombia



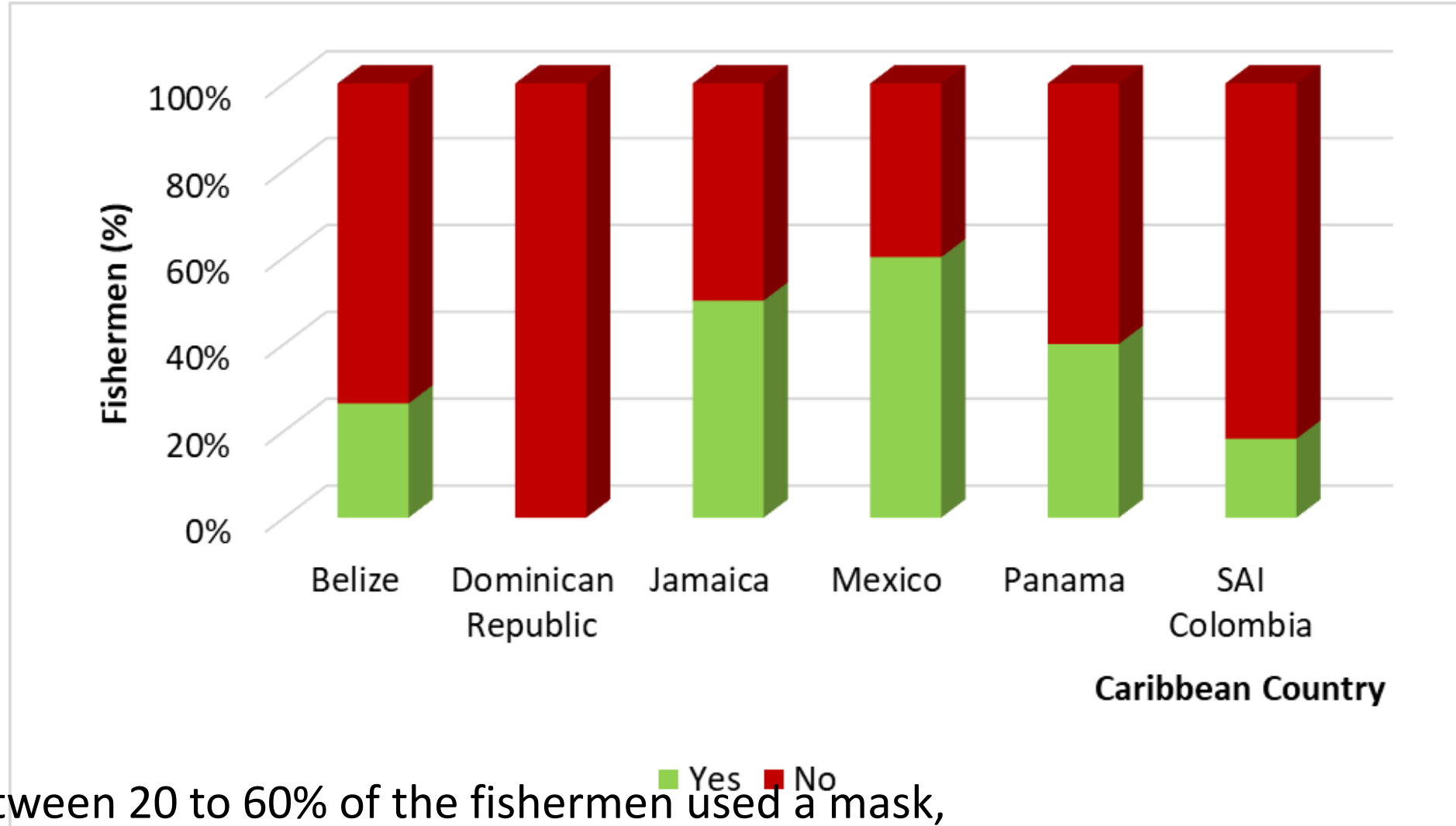
Have you social security?



80-100% of fishermen in Jamaica, Mexico and Panama do not have social security, while in Belize and the Dominican Republic 90% do have this benefit.

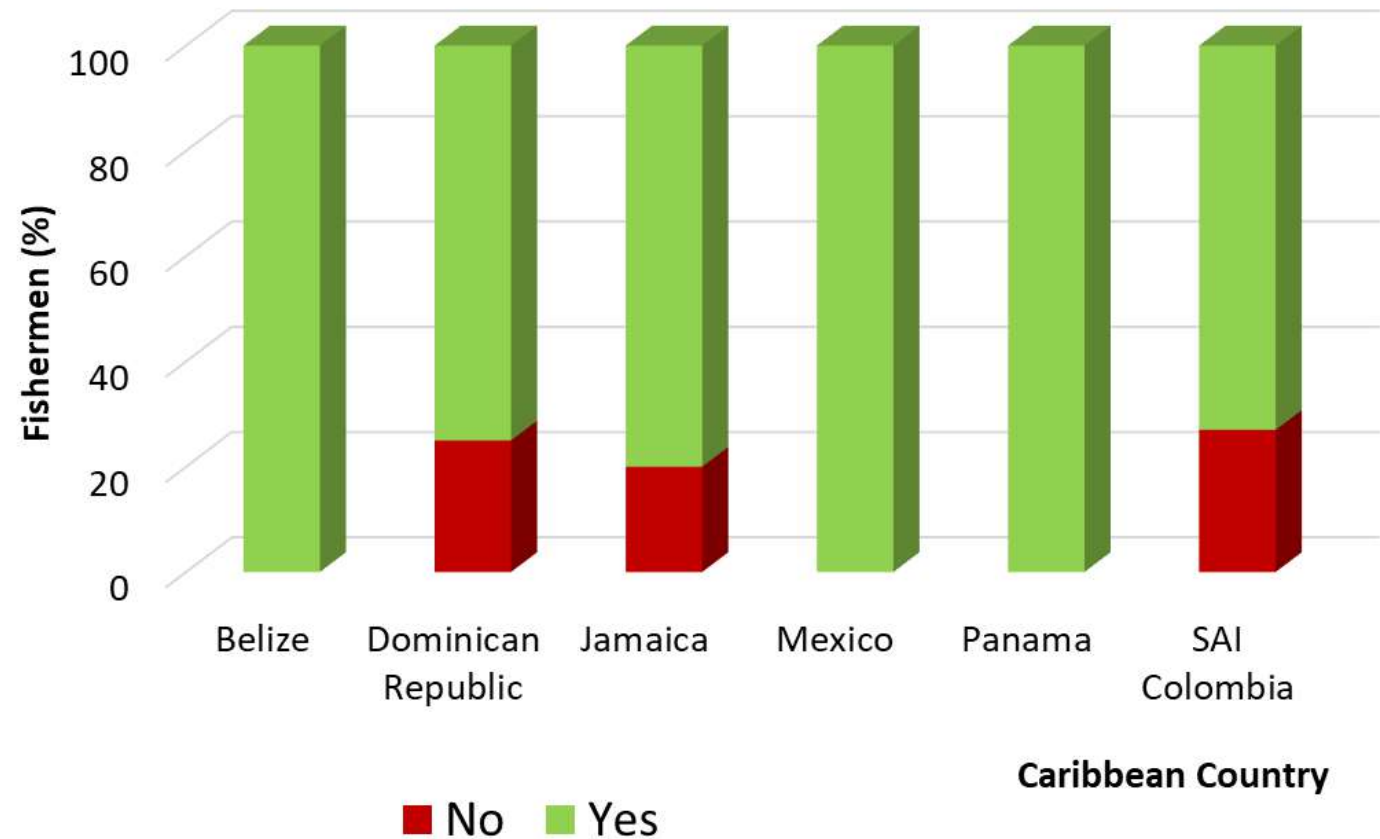
CARIBBEAN COUNTRY

During COVID time you used a face mask



Between 20 to 60% of the fishermen used a mask,
only the DR fishermen did not use any protection

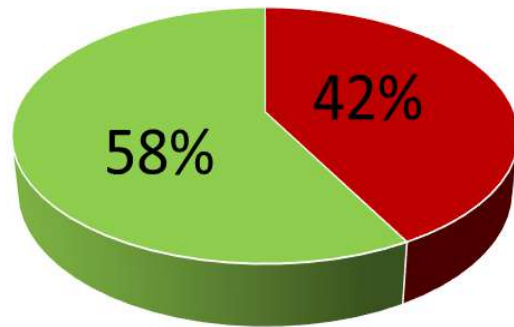
Have you Covid vaccination?



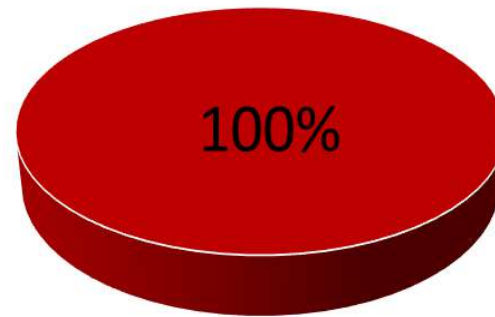
Almost all Caribbean fishermen received the covid vaccine,
DR, Jamaica and San Andres only 80%

Fishermen infected by Covid-19

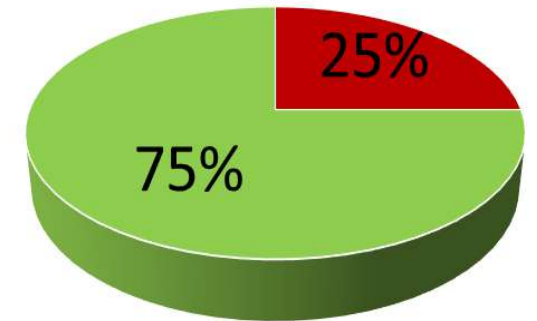
Belize



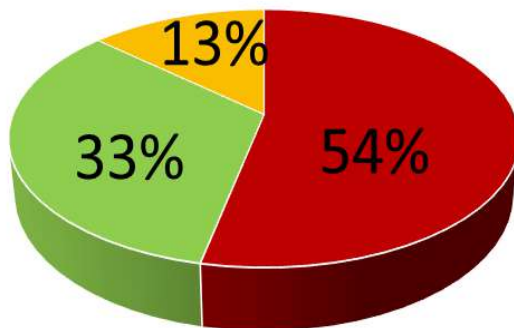
Dominican Republic



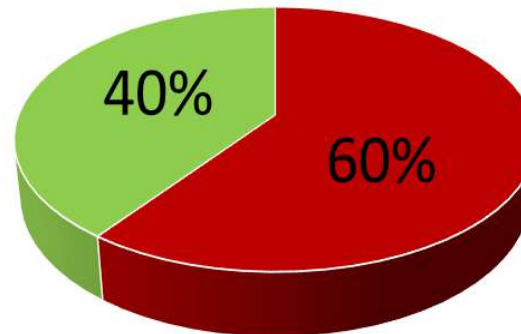
Jamaica



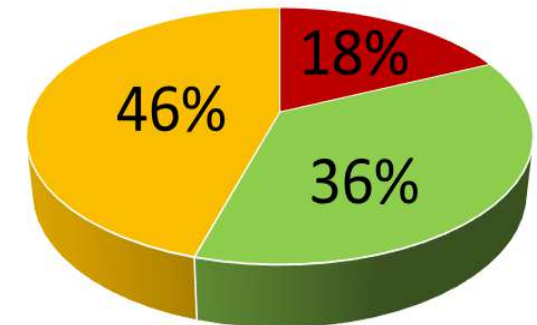
Mexico



Panama



SAI Colombia



The percentage of infected varied between 18% in San Andres until 100% for the Dominican Republic.



Got sick

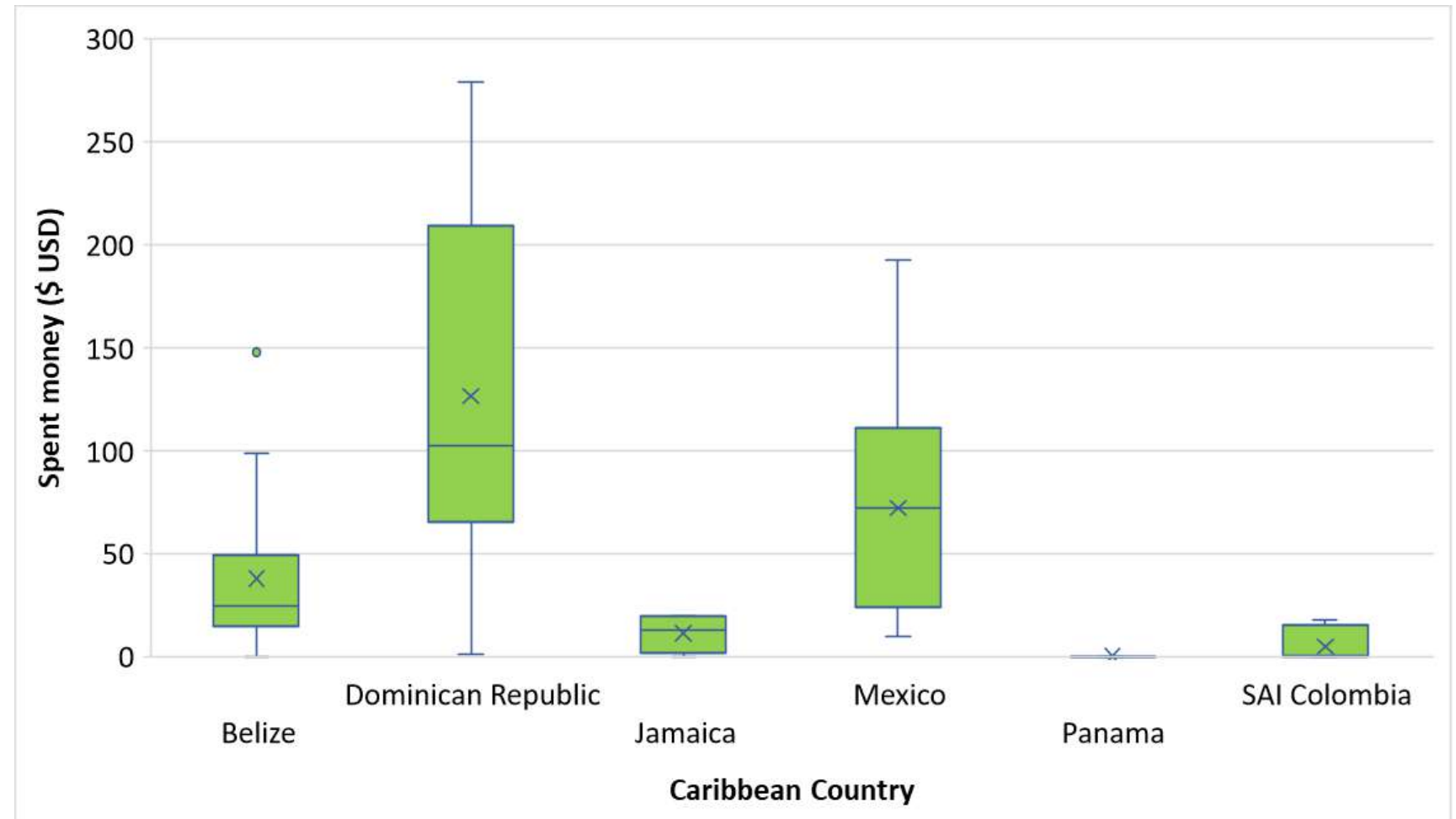


Maybe got sick



Didn't get sick

How much did you spend per week on anti-covid medications?



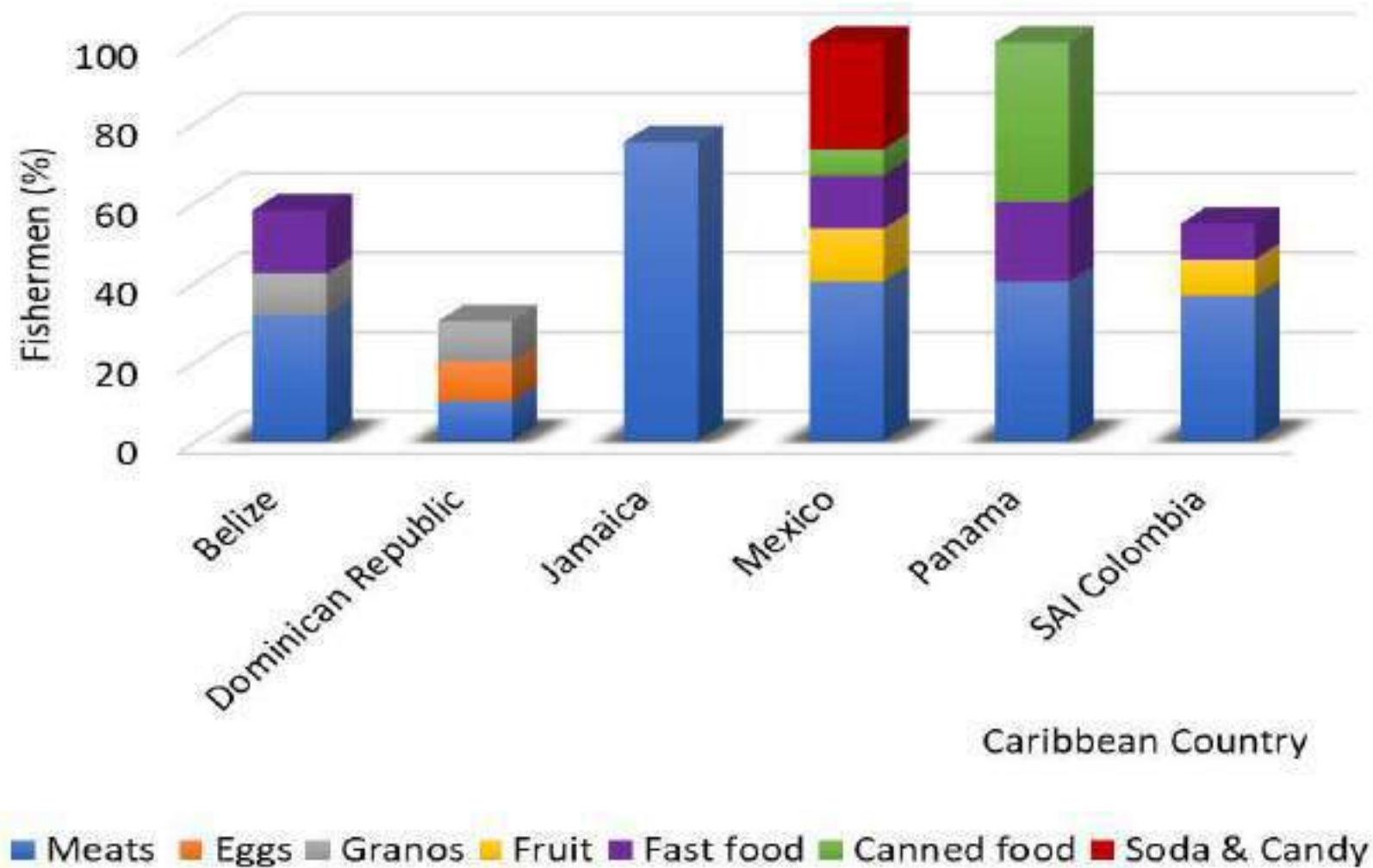
Fishermen in the Dominican Republic were the ones who spent the most, an average of 140 dollars per week

Fishermen of Jamaica, Panama and San Andres spent the least



Impact of consumption habits

What foods did you stop buying?



The product that fishermen generally stopped consuming was meat