



**THIRD WORLD SYMPOSIUM  
ON SUSTAINABILITY  
SCIENCE AND RESEARCH**

Sustainability Futures: Challenges  
and Opportunities Towards a More  
Sustainable World

April 8

# Moving from conventional plastics to sustainable solutions – assessing human willingness to change current practices

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## INTRODUCTION

- ❑ the global threat posed by the accumulation and fragmentation of the highly predominant plastic waste in the oceans, inland waters and terrestrial environments is becoming evident
- ❑ components used in plastics, such as phthalates or bisphenol A (BPA) are detected in humans and can be a threat to human health
- ❑ there is an urgent need to change our current behaviour and substitute plastics by more sustainable and safer solutions

## OBJECTIVES OF THE PAPER

This research addresses plastic pollution problem and assess human willingness to change current plastic usage practices

### **SPECIFIC OBJECTIVES:**

- (a) to evaluate the awareness of people about existing direct and indirect impacts of plastics on human health;
- (b) to evaluate if gender, age, or education level influence their awareness and opinion;
- (c) to recommend actions that could increase the awareness of people about the health threats posed by plastics.

## APPROACH USED

**Online survey** was composed of (i) background questions (country, gender, age group, educational level), (ii) questions on plastic consumption (frequency, main modalities, attitude), and (iii) awareness on impacts of plastic on human health (e.g. availability of information, willingness to change habits)

### **Dissemination of the survey:**

internationally through scientific mailing lists and authors' networks

strategy of snowball sampling

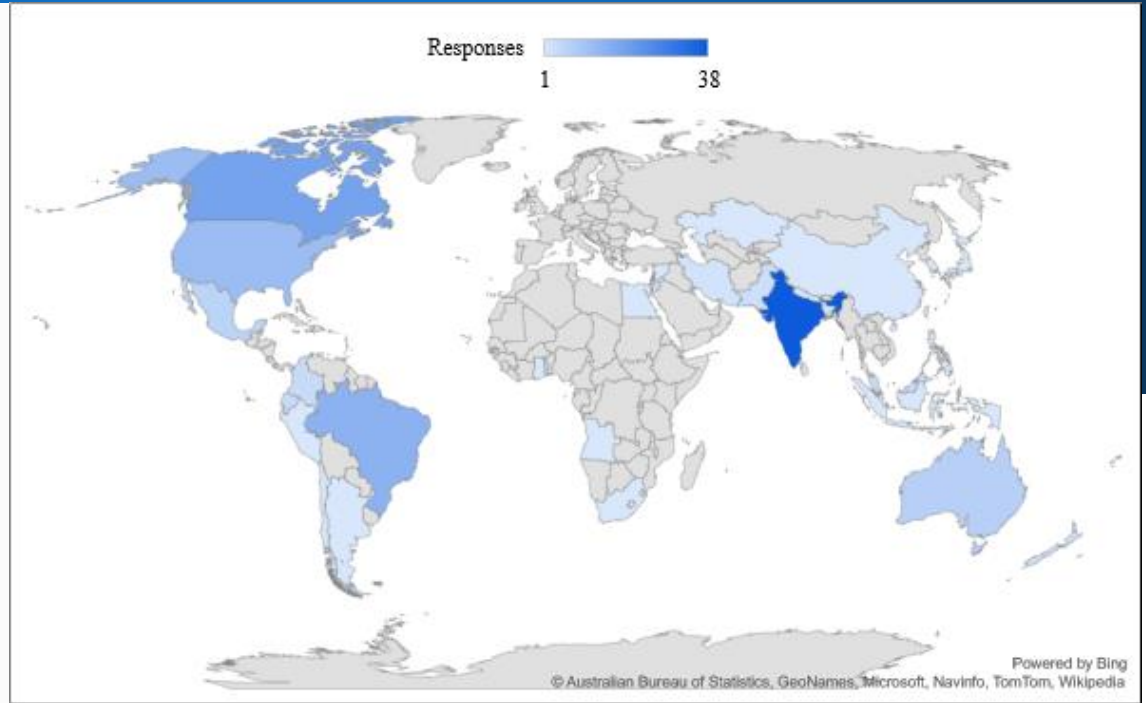
online for 2 months

## KEY RESULTS

**140 responses**  
from **32 countries**  
in the Americas, Africa,  
Asia, and Oceania

**Gender:**  
**58% female, 42% male**

**Educational level:**  
BSc, MSc, PhD and higher



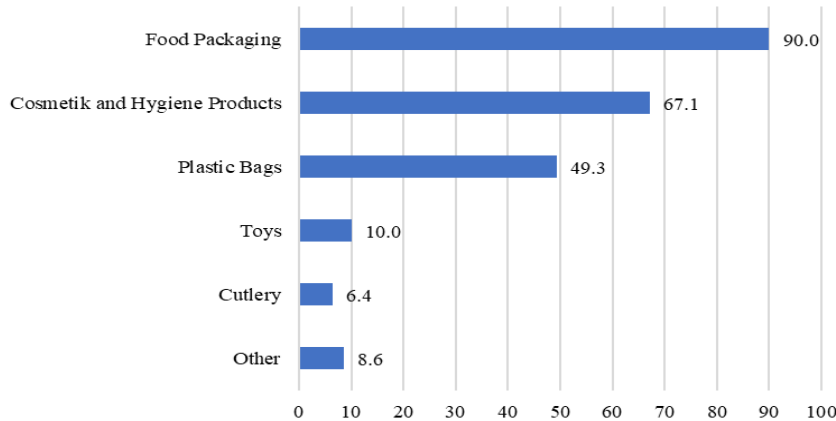
# KEY RESULTS

Nearly 70% uses plastics on daily basis (older use it more than younger\*)

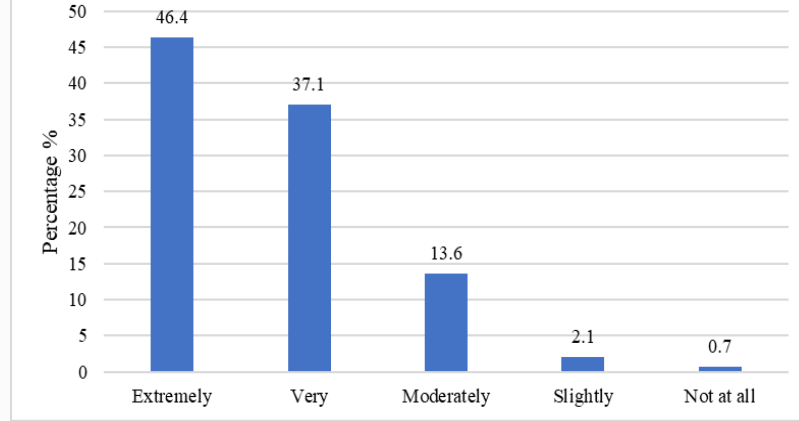
Over 70% of participants-in process of active reduction or avoidance of plastics

+ willingness to pay more for products with less impact on health

Most frequently used plastic modalities



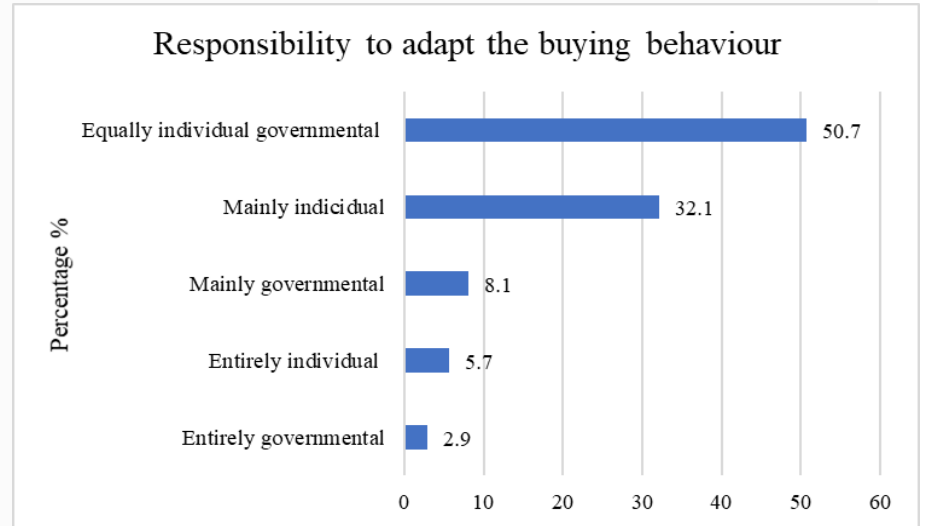
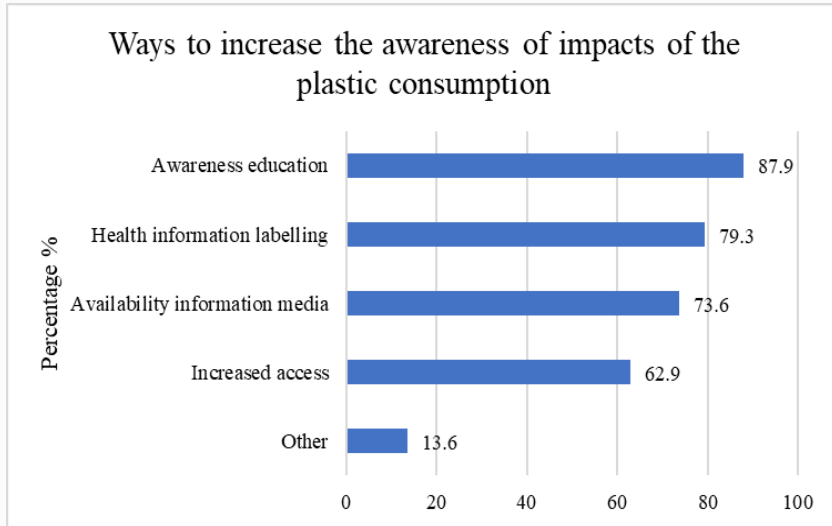
Willingness to reduce plastic consumption



# KEY RESULTS

Available information: 35% disagree and 45% agree (mainly News, SM, Internet)

Strong relation between information available and thoughts about plastics\*



## MAIN CONCLUSIONS

Awareness is present, but still not main driver

Improved Education and Information could help – long term solution

Decision making bodies need to act urgently

Participants are still not satisfied with the information available to the general public and feel that government and individuals should jointly take more responsibility

Study is general overview but in depth studies are needed



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