



IMPACT REPORT

January 2020

TABLE OF CONTENTS

- **1. Executive Summary**
- 2. Introduction
- 3. Methodology & Demographics
- 4. Behavior Predictors
- 5. Behaviors
- 6. Advocacy & Other Issues
- 7. Conclusions & Next Actions



EXECUTIVE SUMMARY: PREDICTORS & BEHAVIORS



Behavior Predictors

Audience Reception. All full survey respondents reported that they enjoyed the Pulau Plastik episode (83% strongly agree, 17% agree)

Awareness. All respondents either agreed (16%) or strongly agreed (84%) that plastic pollution is an important problem. This means that awareness of the issue is already quite high among Bali communities.

Motivation. At the second follow-up, the level of motivation (66% strongly agree, 34% agree) to help reduce plastic pollution decreased compared to both the first follow-up (80% strongly agree, 20% agree) and the baseline (74% strongly agree, 24% agree).

Perceived Knowledge. After the screening, more respondents (from 94% at the baseline to 98% at the first follow-up) reported that they know about actions that can be taken to reduce plastic pollution. However, as with awareness and motivation, this perceived knowledge dropped again at the second follow-up.

Perceived Ability. 97% of respondents reported that they are already taking action to reduce plastic pollution before the screening. 98% of them expressed that they want to take more action. However, when we asked them again at the second follow-up, the level of their perceived ability to take action decreased.



Behaviors

Single-use Plastic Usage Reduction. One-month after screening, we observed a consistently positive pattern of usage reduction of: single use plastic bags, straws, bottles, and cups. The most significant decrease occurred in the usage of plastic bags, where 50% of respondents reduced their usage. Followed by plastic bottles or cups, where 34% of respondents reduced their usage. This pattern did not occur with take-away containers and sachet usage.

Waste Sorting. At the follow-up, 73% of the respondents were doing household waste sorting; an increase compared to the baseline (49%). 11% of respondents started to sort their waste and 13% others were doing it more often.

Waste Disposal. We found positive changes in terms of respondents' waste disposal practices. 8% of respondents stopped disposing of their trash at the local mixed waste collection points. More respondents dispose of their waste better, which includes: having their recyclables picked up by formal or informal waste collectors (5%); bringing recyclables to local a recycling point (3%); and composting organic waste (7%).

EXECUTIVE SUMMARY: **ADVOCACY & OTHERS**



Advocacy & Other Issues

STAKEHOLDER ROLES

Role of Banjar. All respondents expressed that the Banjar (village) plays an important role to help villagers to reduce and manage their waste (84% strongly agree, 16% agree), although the level of their agreement slightly decreased at the second follow-up (79% strongly agree, 20% agree, 1% slightly agree).

Role of Restaurant and Warung (Small Kiosks). All respondents agreed (83% strongly agree, 16% agree, 1% slightly agree) that the availability of more sustainable take-away packaging is important.

Role of Producers. At baseline, there were 4% of respondents who did not think that it was the role of producers to provide more sustainable packaging alternatives. At the second follow-up, 99% of respondents agreed that producers should provide better alternatives (73% strongly agree, 25% agree, 1% slightly agree).

ADVOCACY

Willingness to Advocate. 95% of respondents expressed that they were willing to advocate for relevant stakeholders to change their practices after viewing the episodes. However their level of willingness to do so decreased slightly at the second follow-up (94%).

Perceived Knowledge of How to Advocate for Change. Immediately after watching the series, respondents expressed that they have more knowledge on how to lobby relevant stakeholders to improve their practices (from 24% strongly agree, 39% agree to 43% strongly agree, 28% agree). This change however, was not sustained, as at second follow up, respondents reported a lower level of knowledge on how to advocate for change (13% strongly agree, 28% agree).

What to Advocate. The majority of respondents expressed that: the wide use of plastic packaging for daily products (71%) and unavailability of alternatives (56%) are the main factors that affect their ability to reduce plastic waste. This confirms the need to advocate for packaging alternatives.

TABLE OF CONTENTS

1. Executive Summary
- 2. Introduction
 - I. The Campaign
 - II. The Series
3. Methodology & Demographics
4. Behavior Predictors
5. Behaviors
6. Advocacy & Other Issues
7. Conclusions & Next Actions



INTRODUCTION: THE CAMPAIGN

Pulau Plastik (Plastic Island) is a collaborative campaign to tackle the issue of single-use plastic in Bali and beyond. Pulau Plastik leverages popular culture and includes social media campaigns, short videos, and a feature-length documentary to increase awareness about the hazards of single-use plastic, to change people's behavior and to advocate for change.

Through community screenings and events, and the distribution of Pulau Plastik content, the main goals of this campaign are to:

- Change people's behavior so they begin to refuse, reduce, reuse and recycle
- Support the implementation of government policy concerning single-use plastics



INTRODUCTION: THE SERIES

We produced four 20-minute episodes that strongly feature Balinese philosophy and its relationship with single-use plastics.

The episodes feature practical solutions and calls to action for individuals to reduce single use plastics.



Episode 1 - Segara Kertih (In Harmony with Our Oceans) explores how microplastics have entered our food chain through the seafood we eat, and what companies can do to be more sustainable and prioritize planet over profit.



Episode 2 - Karmaphala (Consequences of Our Actions) explores how our consumer culture produces large amounts of plastic waste and introduces the importance of waste separation to reduce the waste going to Bali's landfills.



Episode 3 - Bedawang Nala (The Turtle that Carried the World) features the first Zero Waste Restaurant in Indonesia and explores alternatives to plastic for food packaging, including how these solutions can be applied to small kiosks and restaurants.



Episode 4 - Tri Hita Karana (The Relationship between Humans, God and Nature) features thousands of Balinese youth coming together to tackle plastic pollution in their most sacred place — the Mother temple Besakih.

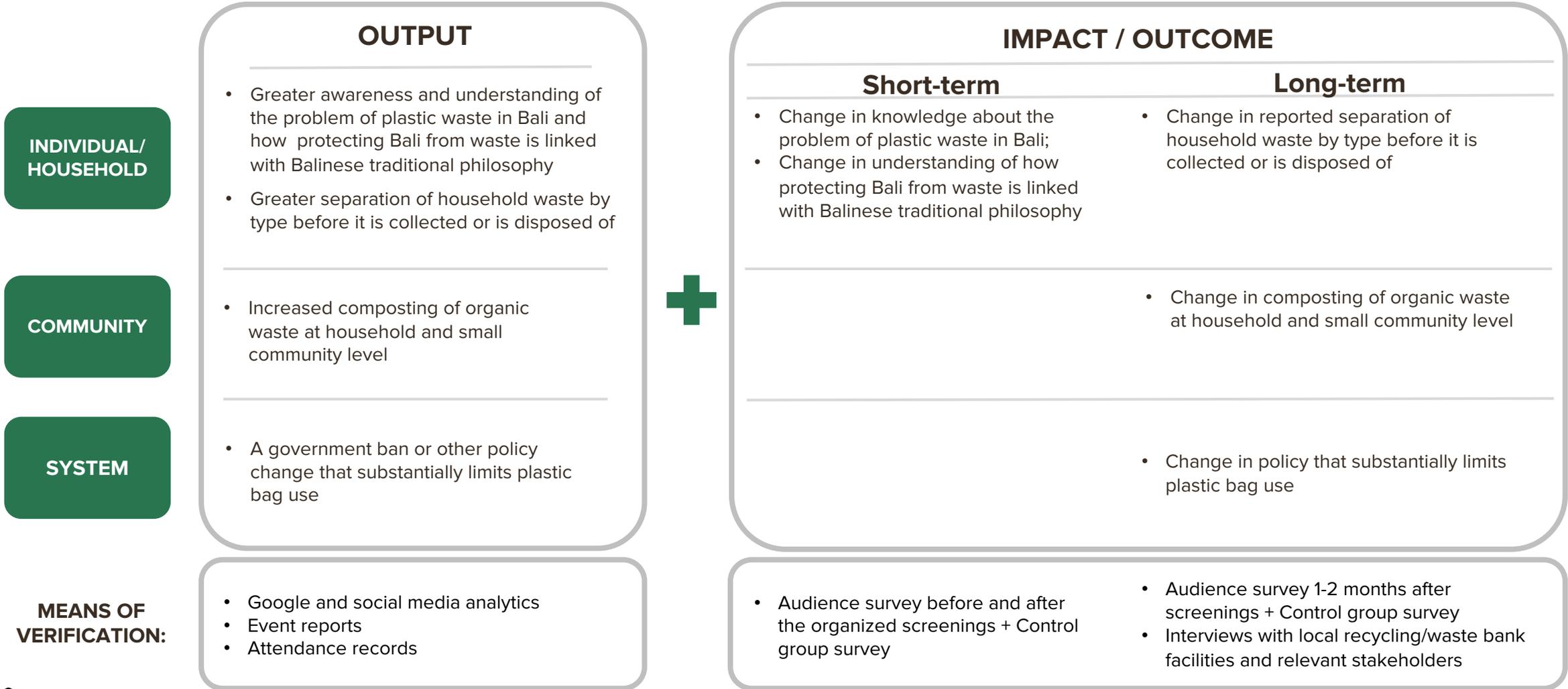
TABLE OF CONTENTS

1. Executive Summary
2. Introduction
- **3. Methodology & Demographics**
 - I. Impact Assessment Framework
 - II. Impact Assessment Plan & Sampling
 - III. Profile of Respondents
4. Behavior Predictors
5. Behaviors
6. Advocacy & Other Issues
7. Conclusions & Next Actions



METHODOLOGY: IMPACT ASSESSMENT FRAMEWORK

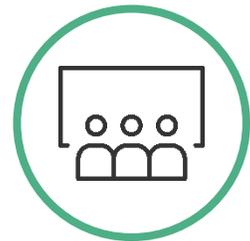
Goal: to reduce the amount of single-use plastic waste in Bali that isn't recycled



METHODOLOGY: IMPACT ASSESSMENT PLAN & SAMPLING

The target population of this assessment is the audience of Pulau Plastik series screenings which were held across Bali. 80 respondents were surveyed for this assessment, which was conducted between September – December 2019. We also surveyed 30 respondents as part of the control group.

There were three phases of the assessment: Registration & Baseline, Follow-up 1, and Follow-up 2. Each respondent was surveyed across the three phases to measure changes in respondent's behavior predictors and actual reported behavior.



80 Respondents



Registration & Baseline
(Before the screening)

Follow-up 1
(Right after screening)

Follow-up 2
(1-month after screening)

Measuring changes

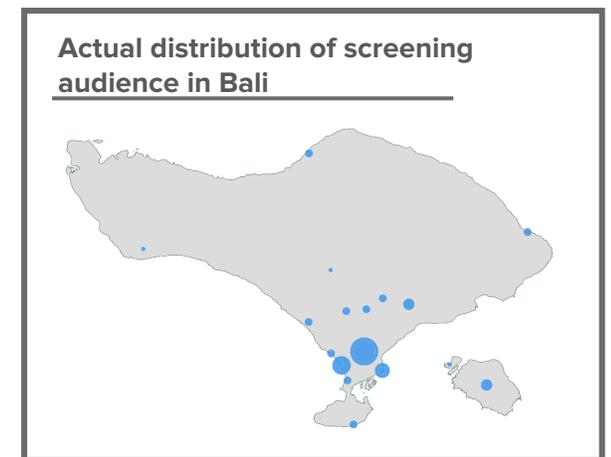
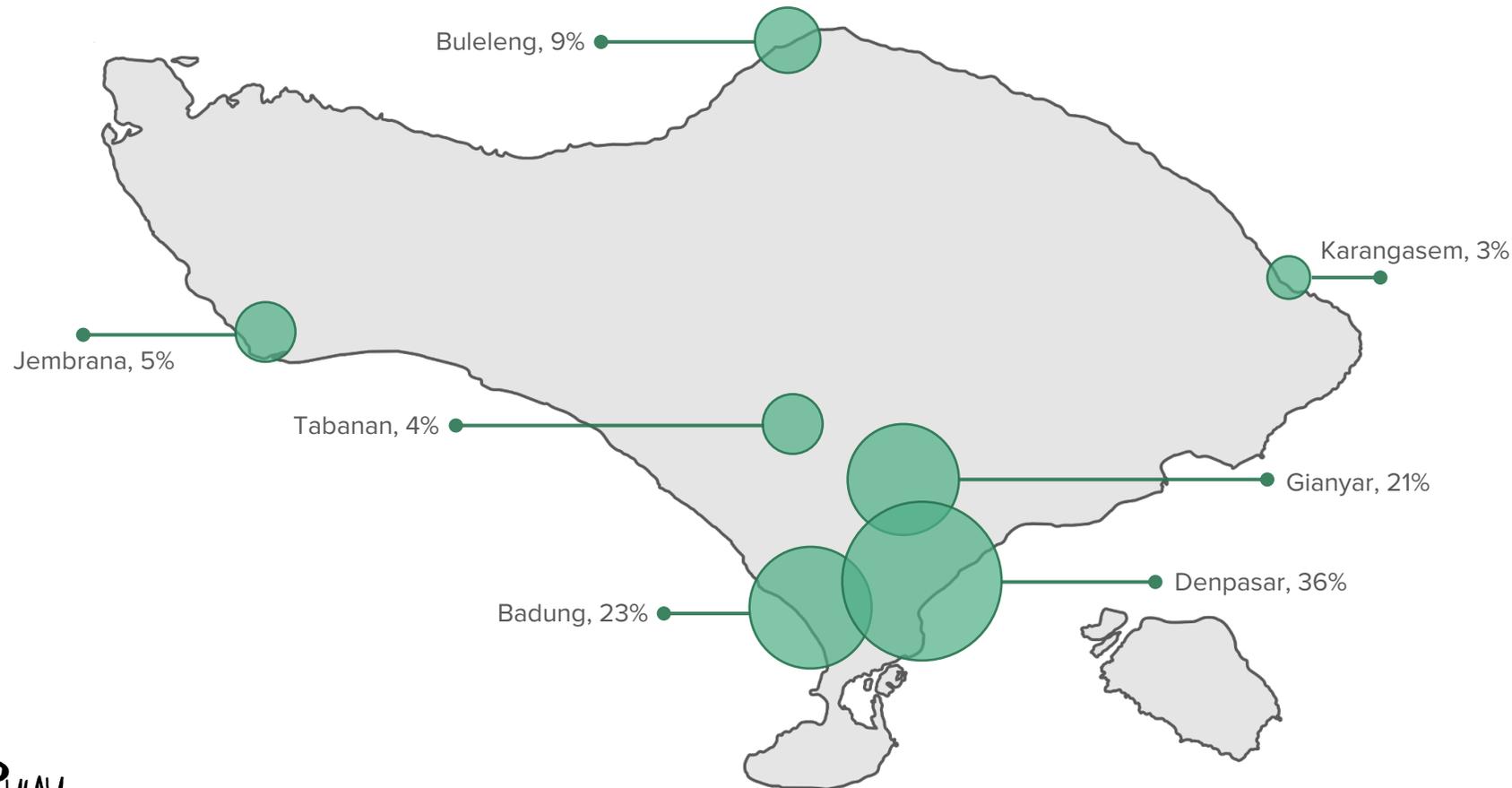
Pulau Plastik Team Conducting Surveys



METHODOLOGY: SAMPLING DISTRIBUTION

The distribution of the respondents, corresponds with the distribution of screening audience across Bali. The majority of the audience live in, and attended a screening in Denpasar, followed by Badung and Gianyar districts.

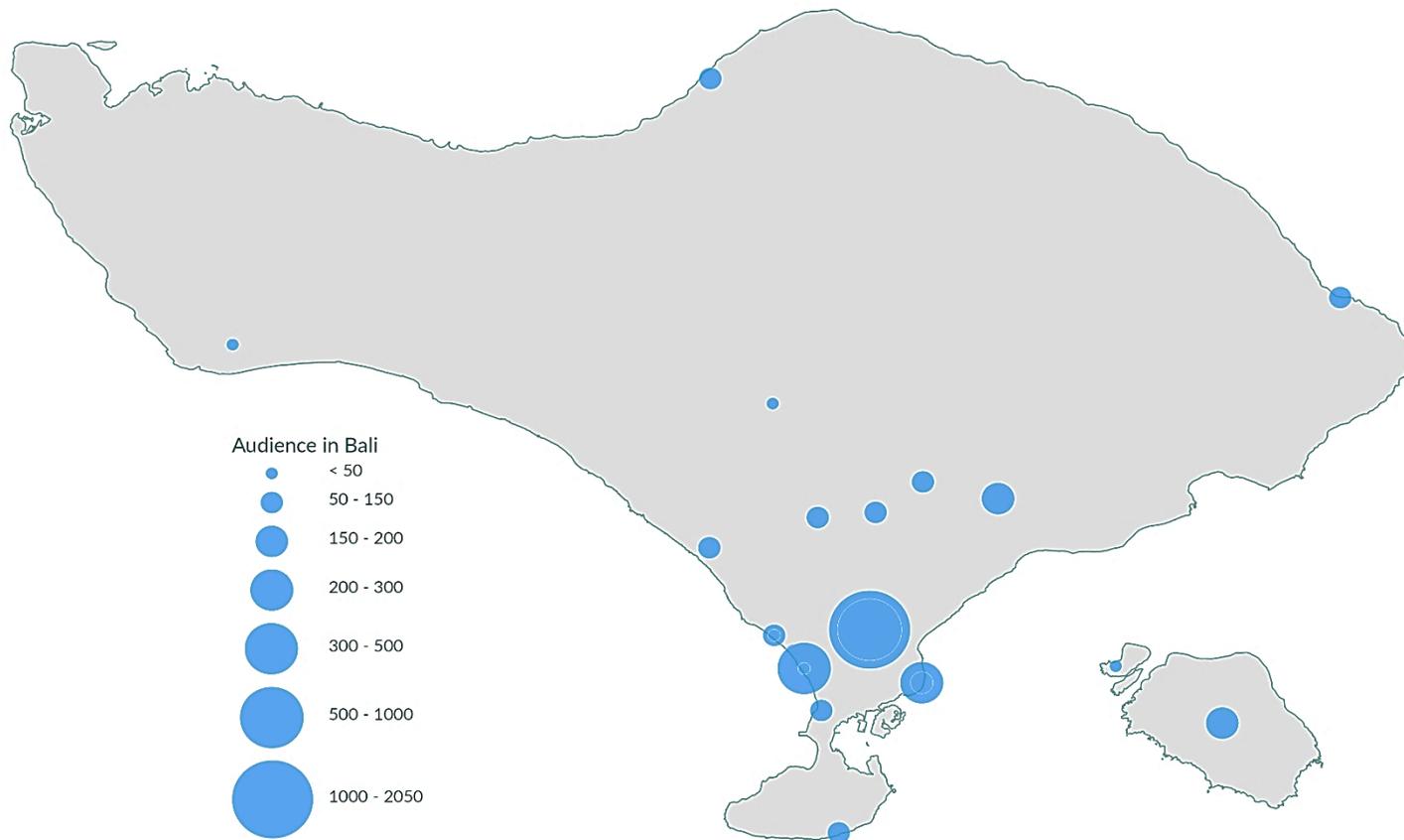
Distribution of impact assessment respondents



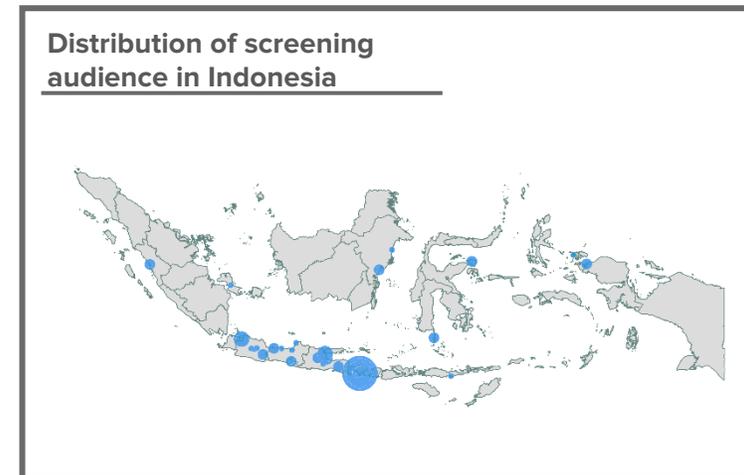
METHODOLOGY: COMMUNITY SCREENINGS IN BALI

The Pulau Plastik Series has been screened at more than 40 community events across Bali, reaching at least 6,605 people.

Distribution of screening audience in Bali



Distribution of screening audience in Indonesia



METHODOLOGY: COMMUNITY SCREENINGS IN INDONESIA

The Pulau Plastik Series has been screened at more than 100 community events across Indonesia, reaching at least 10,000 people.

Community screenings in Indonesia

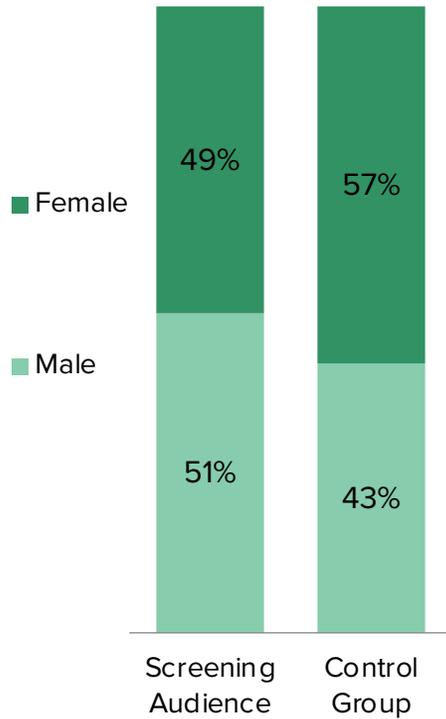


METHODOLOGY: PROFILE OF RESPONDENTS

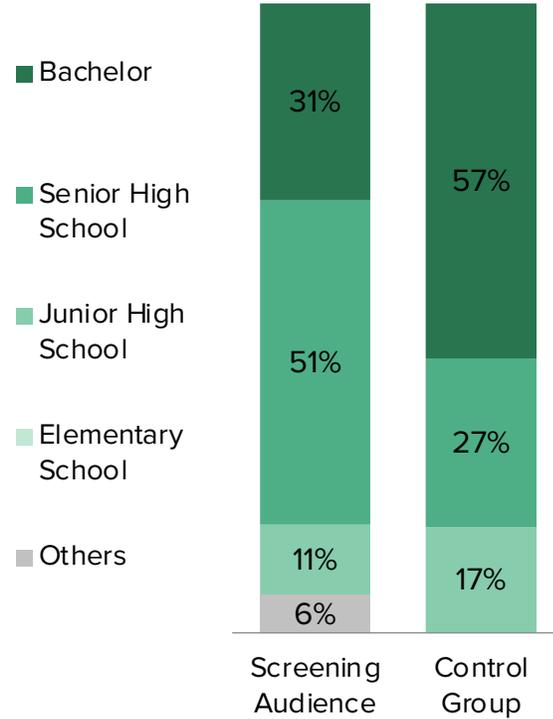
There is a balanced distribution of female and male respondents.

The typical Pulau Plastik audience consisted of university students, with the median age being 21 years.

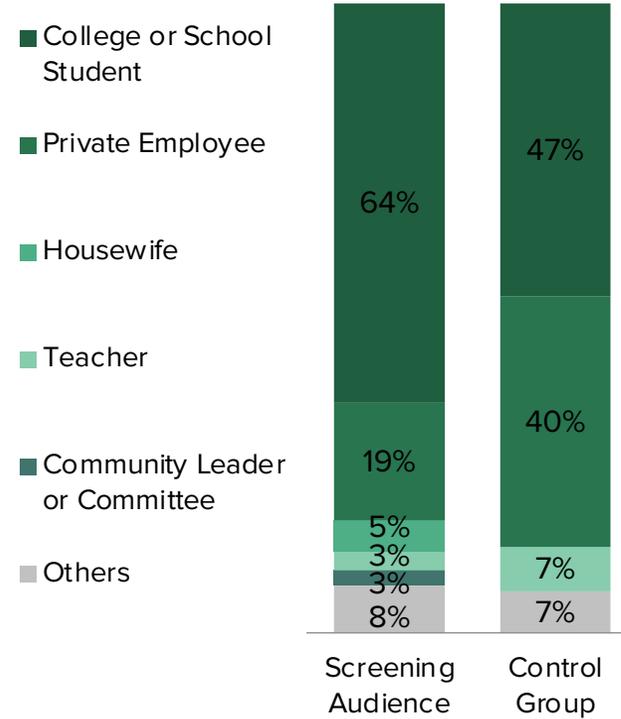
Gender identity



Education level



Occupation



THE MEDIAN AGE OF SCREENING AUDIENCE IS
21 YEARS

THE MEDIAN AGE OF CONTROL GROUP IS
23 YEARS

TABLE OF CONTENTS

1. Executive Summary
2. Introduction
3. Methodology & Demographics
- **4. Behavior Predictors**
 - I. Audience Reception
 - II. Awareness & Motivation
 - III. Perceived Knowledge & Ability
 - IV. Ability-affecting Factors
5. Behaviors
6. Advocacy & Other Issues
7. Conclusions & Next Actions



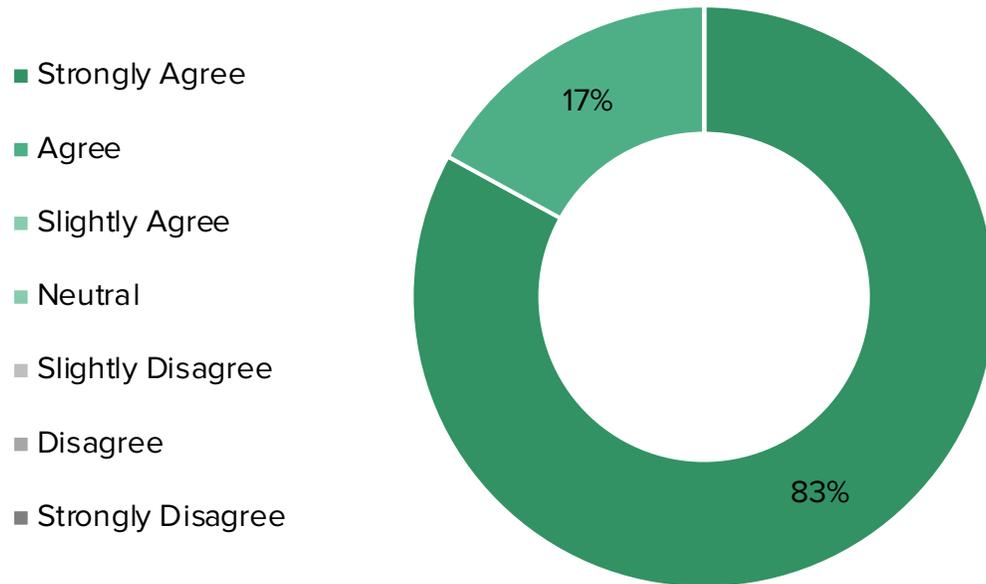
BEHAVIOR PREDICTORS: AUDIENCE RECEPTION

Full Survey. All respondents reported that they enjoyed the Pulau Plastik episodes they watched (Fully Agree = 83%, Agree = 17%).

Lean Survey. 97% of respondents reported that they enjoyed the episode, 2% were neutral and 1% reported that they did not enjoy it.

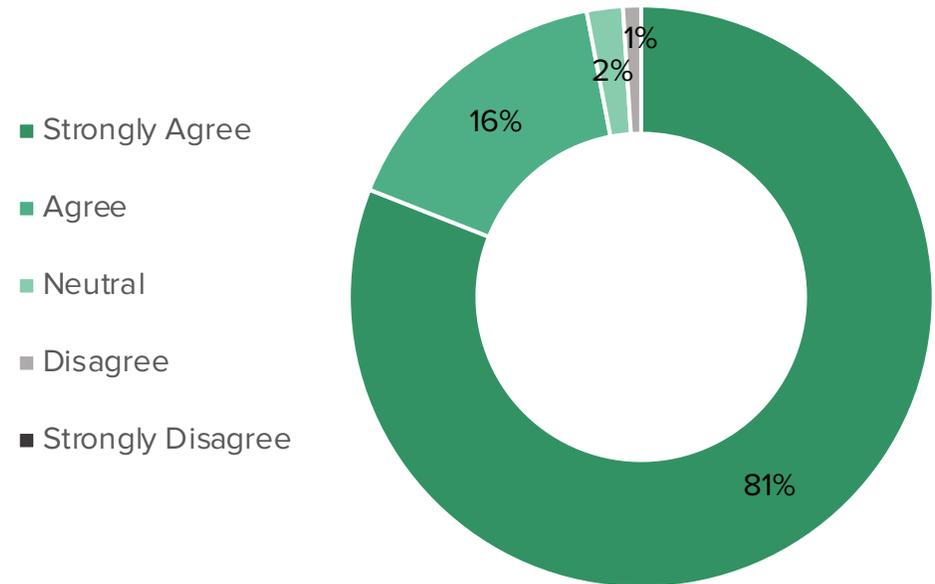
Audience Feedback (Full Survey)

“I enjoyed watching the Pulau Plastik episode”



Audience Feedback (Lean Survey*)

“I enjoyed watching the Pulau Plastik episode”

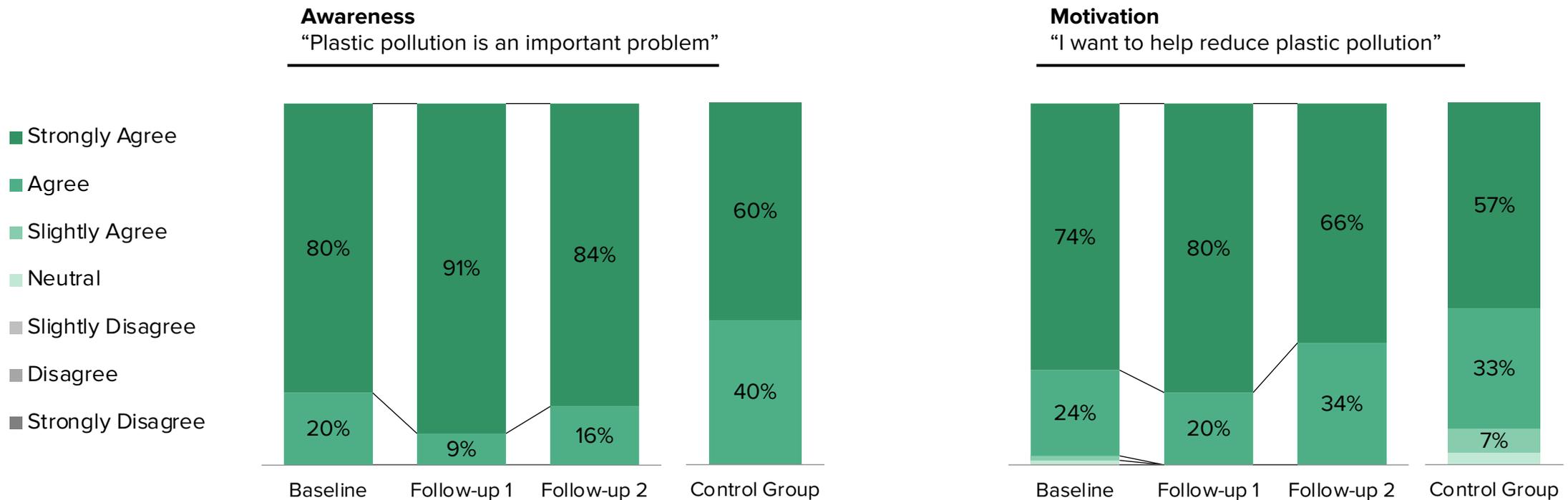


*The lean survey is a online and shorter version of our assessment survey aiming to get quick feedback from our audience and was conducted in addition to the full survey (n = 229)

BEHAVIOR PREDICTORS: AWARENESS & MOTIVATION

Awareness. All of the respondents either agreed or strongly agreed that plastic pollution is an important problem, meaning that awareness of the issue is already quite high among Bali communities. After watching the series, the respondents' level of awareness increased. At second follow up it dropped again, but was still higher than prior to watching the episode.

Motivation. Respondents' reported motivation to reduce plastic pollution follows a similar pattern as awareness. Motivation increases at first follow up, but drops again at second follow up.



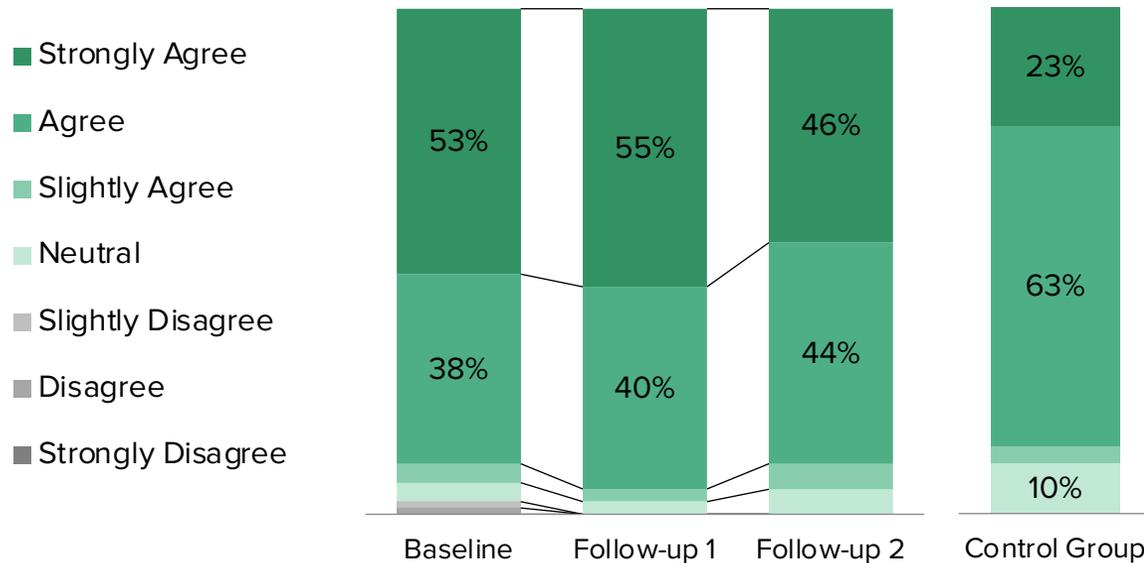
BEHAVIOR PREDICTORS: PERCEIVED KNOWLEDGE & ABILITY

Perceived Knowledge. After the screening, more respondents (from 94% at the baseline to 98% at the first follow-up) reported that they know about actions that can be taken to reduce plastic pollution. However, as with awareness and motivation, this perceived knowledge dropped again at the second follow-up.

Perceived Ability. 97% of respondents reported that they were already taking action to reduce plastic pollution before the screening. 98% expressed that they want to take more action. However, when we asked them again at the second follow-up, the number of respondents who reported that they were taking action to reduce plastic pollution, was smaller than at baseline.

Perceived Knowledge

“I know actions I can take to reduce plastic pollution”

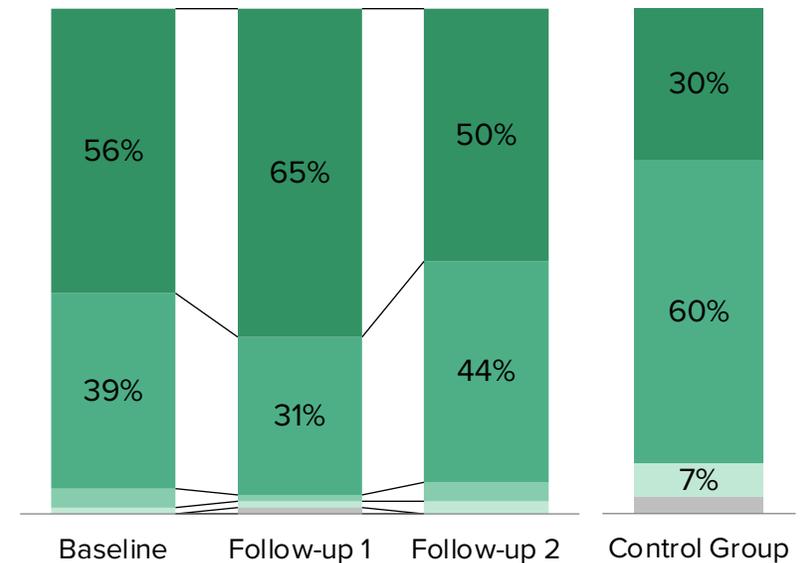


Perceived Ability

Baseline: “I am taking action to reduce plastic pollution”

Follow-up 1: “I will start taking action or do more to reduce plastic pollution”

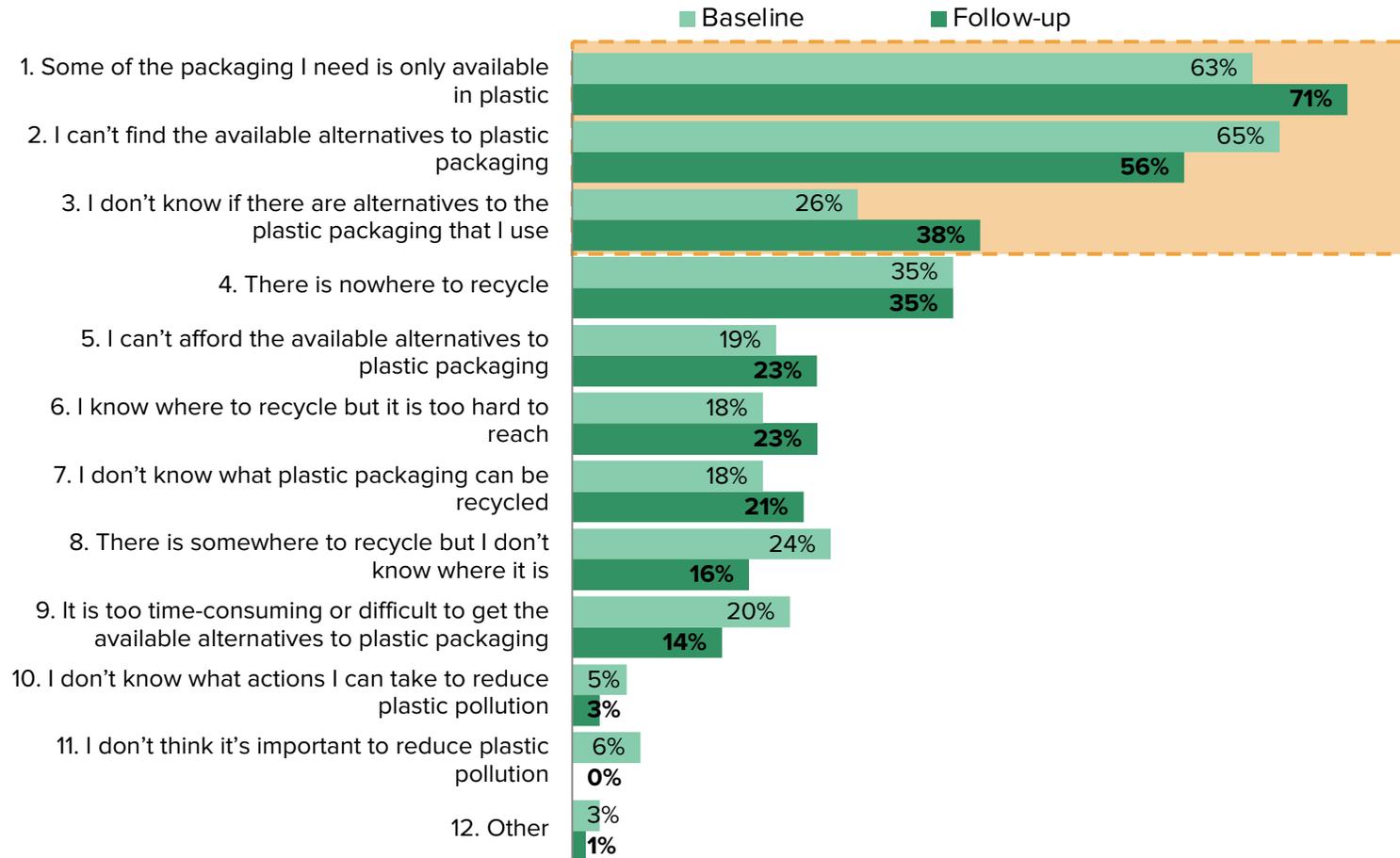
Follow-up 2: “I am taking action to reduce plastic pollution”



BEHAVIOR PREDICTORS: ABILITY-AFFECTING FACTORS

Ability-affecting Factors

“Top 3 factors that affect your ability to reduce plastic waste.”



WIDE USE OF PLASTIC PACKAGING AND UNAVAILABILITY OF ALTERNATIVES ARE SEEN TO BE THE MAIN FACTORS THAT AFFECT RESPONDENTS' ABILITY TO REDUCE PLASTIC WASTE.

TABLE OF CONTENTS

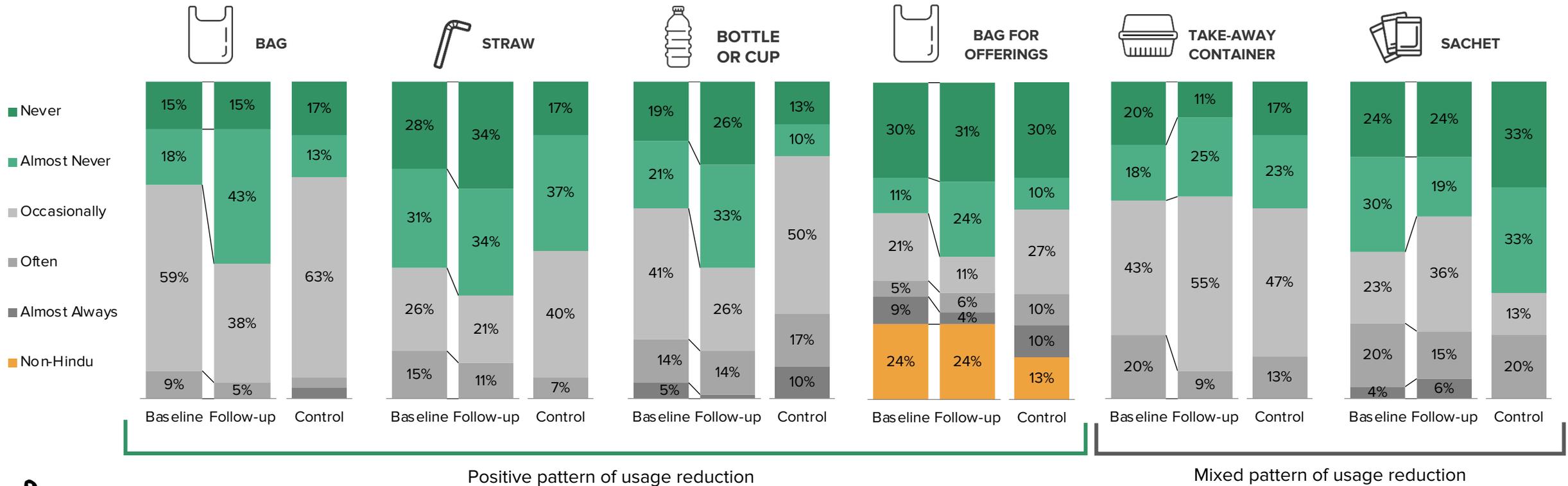
1. Executive Summary
2. Introduction
3. Methodology & Demographics
4. Behavior Predictors
- **5. Behaviors**
 - I. Single-use Plastic Usage
 - II. Waste Sorting
 - III. Waste Disposal
6. Advocacy & Other Issues
7. Conclusions & Next Actions



BEHAVIOR MEASUREMENT: SINGLE-USE PLASTIC USAGE

Based on the respondents' reports on their single-use plastic usage one month after the screening, we observed a consistently positive pattern of usage reduction of: single use plastic bags, straws, bottles, and cups. The most significant decrease occurred in the usage of plastic bags, where 50% of respondents reduced their usage. Followed by plastic bottles or cups, where 34% of respondents reduced their usage. We presume that these changes are also attributable to the introduction of government regulations regarding single-use plastics in Bali

On the other hand, this pattern did not occur for take-away containers and sachet usage. For the usage of take-away container, 11% of respondents reduced their usage, 11% increased their usage, and the rest (78%) stayed the same. For the sachet usage, 3% of respondents reduced their usage, 14% increased their usage, and the rest (83%) stayed the same



Positive pattern of usage reduction

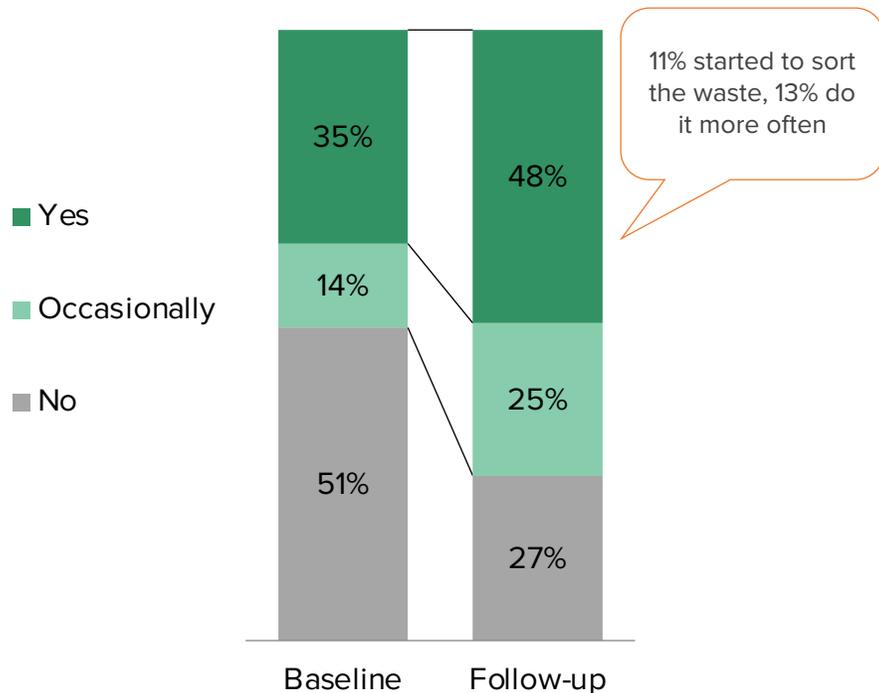
Mixed pattern of usage reduction

BEHAVIOR MEASUREMENT: WASTE SORTING

At the follow-up one month after the screening, 73% of respondents were sorting their household waste, an increase compared to the baseline (49%). 11% of respondents started to sort their waste and 13% others were doing it more often.

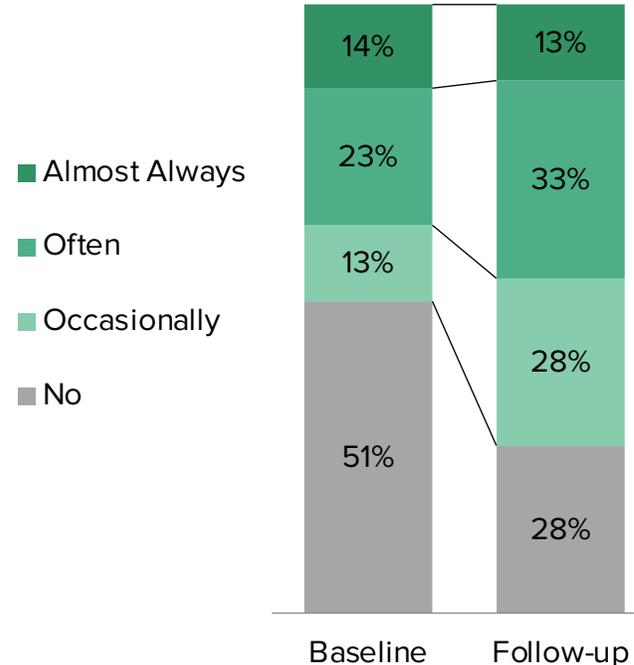
Household Waste Sorting

“At my household we separate recyclables (plastic, metal, paper) and/or organic waste”



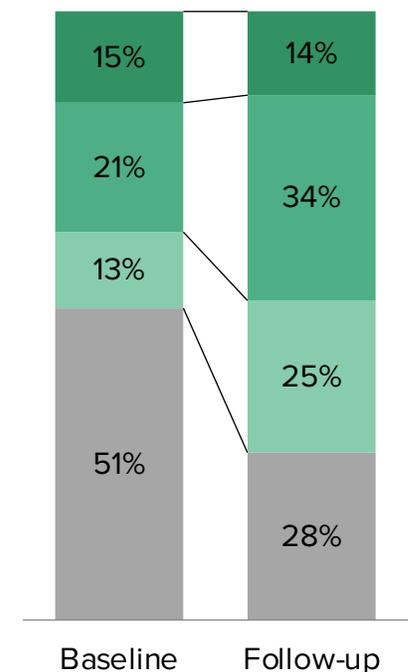
Recyclables Sorting

“I separate recyclables (plastic, paper, metal)”



Organic Waste Sorting

“I separate organic waste”

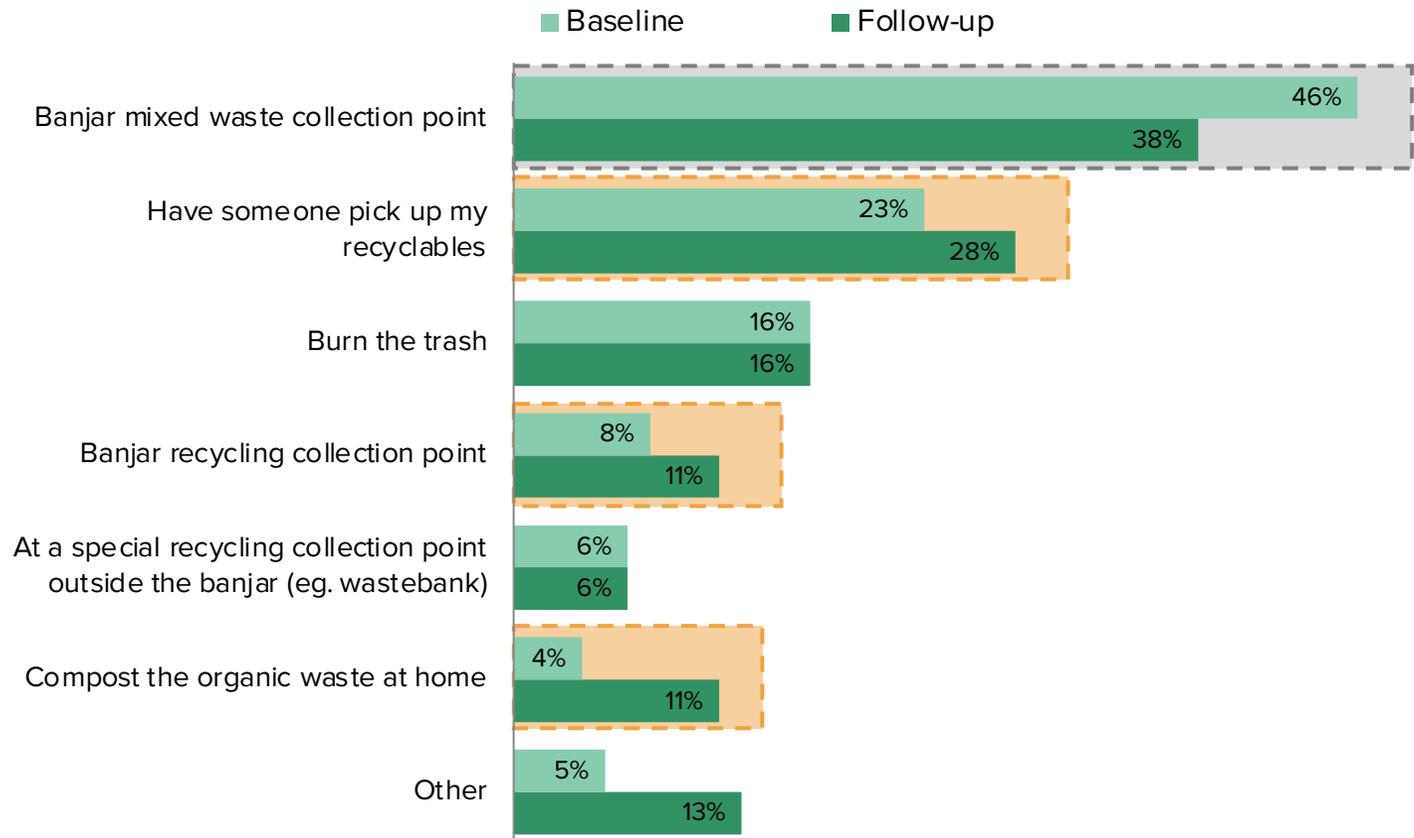


BEHAVIOR MEASUREMENT: WASTE DISPOSAL

We found positive changes in terms of respondents' waste disposal. 8% of respondents stopped disposing of trash at the local mixed waste collection point. More respondents disposed their waste better, such as: having their recyclables picked up by formal or informal waste collectors (5%); bringing recyclables to local recycling point (3%); and composting organic waste (7%).

Household Waste Disposal

"I dispose of the household waste in the..."



8% OF RESPONDENTS STOPPED DISPOSING OF THEIR TRASH AT THE LOCAL MIXED WASTE COLLECTION POINT

MORE RESPONDENTS STARTED TO DISPOSE OF THEIR WASTE BETTER:

1. Have their recyclables picked up by formal or informal waste collectors (5%)
2. Go to local recycling point (3%)
3. Composting organic waste (7%)

TABLE OF CONTENTS

1. Executive Summary
2. Introduction
3. Methodology & Demographics
4. Behavior Predictors
5. Behaviors
- **6. Advocacy & Other Issues**
 - I. Perception on Stakeholder's Roles
 - II. Willingness & Perceived Knowledge
7. Conclusions & Next Actions



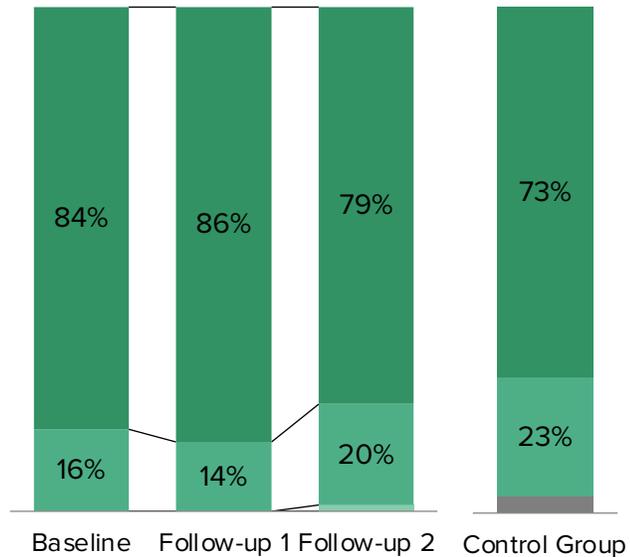
ADVOCACY: PERCEPTIONS ON THE ROLES OF RELEVANT STAKEHOLDERS

Role of Banjar. All respondents expressed that the Banjar (village) plays an important role in providing waste reduction and recycling options (84% strongly agree, 16% agree), although the level of their agreement slightly decreased at the second follow-up.

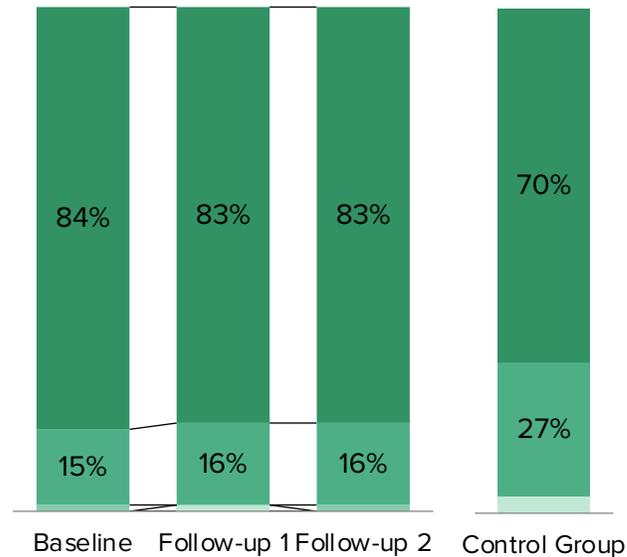
Role of Restaurant and Warung (Small Kiosks). All respondents agreed (83% strongly agree, 16% agree, 1% slightly agree) that it is important that restaurants and *warungs* should provide more sustainable take-away packaging.

Role of Producers. At baseline, there were 4% of respondents who did not think that it was the role of producers to provide more sustainable packaging alternatives. At the second follow-up, 99% of respondents agreed that producers should provide better alternatives although the level of their agreement slightly decreased (from 75% strongly agree and 20% agree to 73% strongly agree and 25% agree).

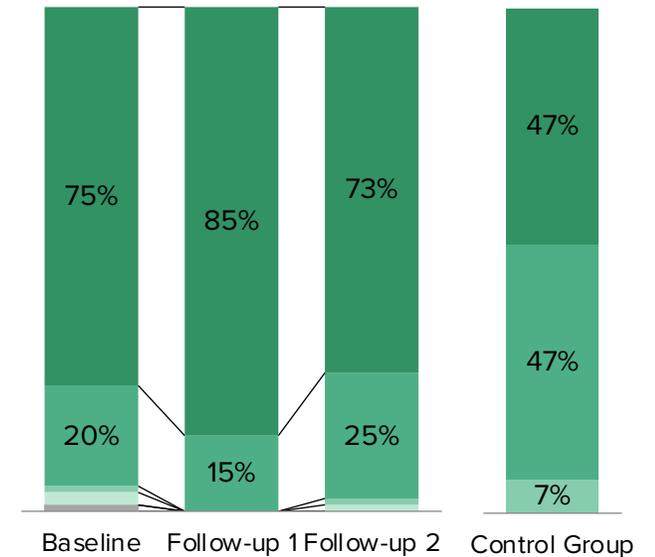
Role of Banjar (Local Government)
“It’s important that Banjars provide proper waste reduction and recycling options”



Role of Restaurant and Warung
“It’s important that restaurants and warungs provide greener alternative packaging for their take-away”



Role of Producer (Company)
“It’s important that consumer goods companies provide alternative packaging for their goods”



ADVOCACY: WILLINGNESS & PERCEIVED KNOWLEDGE

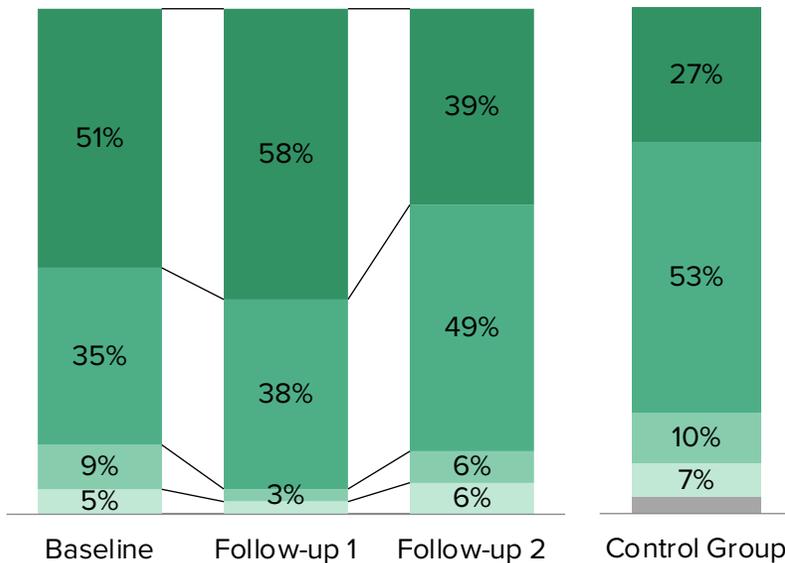
Willingness to Advocate. 95% of respondents expressed that they were willing to advocate for relevant stakeholders to change their practices after viewing the episodes. However their level of willingness to do so decreased slightly at the second follow-up (94%).

Perceived Knowledge on How to Advocate for Change. Immediately after watching the series, respondents expressed that they have more knowledge on how to lobby relevant stakeholders to improve their practices (from 24% strongly agree, 39% agree to 43% strongly agree, 28% agree). This change however, was not sustained, as at second follow up, respondents reported a lower level of knowledge on how to advocate for change (13% strongly agree, 28% agree).

Willingness to Advocate

“I want to help lobby my local government, companies and/or restaurants to change their practices”

- Strongly Agree
- Agree
- Slightly Agree
- Neutral
- Slightly Disagree
- Disagree
- Strongly Disagree



Perceived Knowledge of Advocacy

“I know what actions I can take to lobby local government, companies and/or restaurants to change their practices”

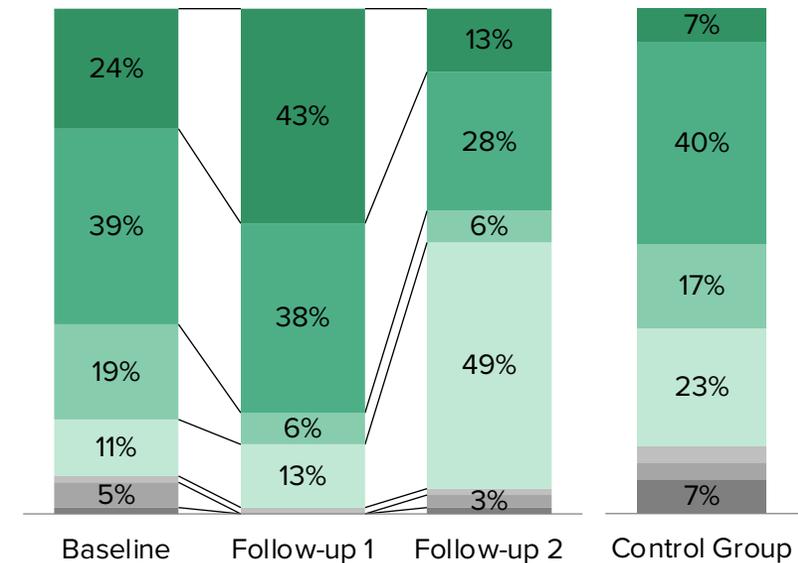


TABLE OF CONTENTS

1. Executive Summary
2. Introduction
3. Methodology & Demographics
4. Behavior Predictors
5. Behaviors
6. Advocacy & Other Issues
- **7. Conclusions**
 - I. Key Insights
 - II. Summary & Next Actions



CONCLUSIONS: KEY INSIGHTS



Behavior Predictors

Positive Reception. The Pulau Plastik series screenings received overwhelmingly positive responses from our audience, confirming that the format is appropriate for our target audience.

Short-term Changes. Immediately after the screenings, we found significant positive changes on audience awareness, motivation, knowledge, and perceived ability to take action. However, such changes did not last long, as seen in the results of the second follow-up where there is a reduction in the positive changes – in some cases even lower than baseline. This suggests that continued engagement and multi-stakeholders’ involvement beyond the screening is necessary.

Audience Self-selection. Generally, audience awareness, motivation, knowledge, and perceived ability are higher than their control group counterpart. This implies that audience self-selection may be occurring.



Behaviors

Reduce Single-use. We found a consistently positive pattern of usage reduction of: single use plastic bags, straws, bottles, and single-serve cups. So even though the positive changes in awareness and motivation did not appear to persist, there does seem to have been a positive influence on people’s actions and reduction of single-use plastic items. The reduction is also likely related to the impact of the Government ban on certain single-use plastic items in Bali.

Sort Better, Dispose Better. The improvements in respondents’ waste-sorting behavior corresponded with their waste disposal behavior.



Advocacy & Other Issues

Willingness to Advocate. In general, respondents understood that the issue of plastic pollution goes beyond individual behavior and must include the whole system of stakeholders. They expressed their willingness to advocate for change with those stakeholders, but are hindered by a lack of knowledge on how to do so.

What to Advocate. The wide use of plastic packaging and the unavailability of alternatives are seen to be the main factors that affect respondents’ ability to reduce their plastic waste.

CONCLUSIONS: SUMMARY & NEXT ACTIONS



Behavior Predictors

Positive Reception.

Short-term Changes.

Audience Self-selection.



Behaviors

Reduce Single-use.

Sort Better, Dispose Better.



Advocacy & Other
Issues

Willingness to Advocate.

What to Advocate.



1

Continue to screen the series in Bali and across other parts of Indonesia

2

Work directly with local communities and initiatives to connect our campaign tools (series, PSAs, and social media content) with practical action and locally available solutions

3

Develop and distribute action kits for schools and small businesses, and facilitate their implementation

4

Continue to work with the government to assist them to implement policy related to plastic waste reduction

5

Continue to engage in discussions with the private sector on redesign of packaging

Authors of the report:

This report was researched and written by Pulau Plastik Research Team, namely Gumilang R. Andika, Astrid Aristamaya, Ayumi Danuswari, Begawan R. Dewata, Raka Wulandari, Sheila N. Baity.

Photos by Ayyiex Falgunadi, Fadilah P. Haliyani, and Mikael Aldo.