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EVALUATION AND MONITORING

PROMAR-KAP SURVEY: ASSESSMENT OF KNOWLEDGE, ATTITUDES AND PRACTICES ON MARINE LITTER PREVENTION

A PRODUCT DEVELOPED WITHIN THE FRAMEWORK OF:



On behalf of:



Federal Ministry
for the Environment, Nature Conservation,
Nuclear Safety and Consumer Protection

of the Federal Republic of Germany



PROLOG

ABOUT THE PROMAR PROJECT

The PROMAR - Prevention of Marine Litter in the Caribbean Sea project aims at reducing the flow of plastic waste (mainly plastic packaging and single-use plastics) reaching the Caribbean Sea by promoting Circular Economy solutions in the Dominican Republic, Costa Rica and Colombia. The project is funded by the German Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (BMUV) and led by the German organization adelphi.

The project created the PROMAR BlueBox, a collection of various tools, guidelines, tutorials and materials to help you implement circular economy solutions to reduce marine litter in your municipality. This KAP (Knowledge, Attitudes and Practices Assessment) Survey is part of the PROMAR BlueBox.

The objective of the tool is to assess the knowledge, attitudes and practices on marine litter of participating communities prior to and after the implementation of awareness raising projects in order to analyze their effectiveness.

The survey is aimed at municipalities, educational institutions, environmental groups, NGOs, community organizations, private companies and the general public to evaluate the impact of projects related to ocean conservation and marine plastic pollution in the participating communities. We hope we can motivate coastal communities to use this tool and thereby contribute to the reduction of terrestrial waste streams that reach marine environments.

INTRODUCTION

The Blue Box has been designed to provide detailed insight into effective tools for combating marine pollution. This tool allows to assess knowledge, attitudes and practices on marine litter prior and subsequent to the implementation of circular economy solutions, analyzing their effectiveness in changing the behavior of participating individuals. The tool is divided into two main sections: the survey application instructions and the full survey in printable format.

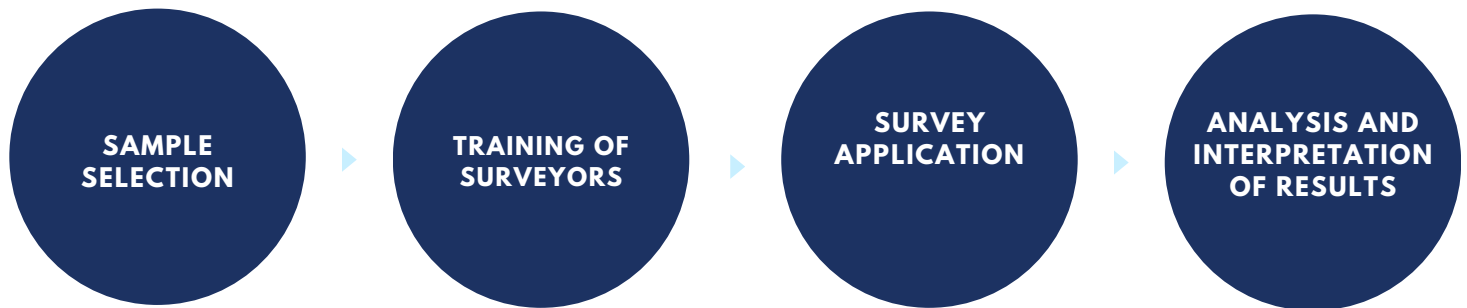
The survey measures participants' general knowledge of marine pollution, including their understanding of the causes of marine pollution and how it affects their community before, during and after project implementation. Thus, the survey is typically administered three times with the same group of people during the cycle of a circular economy project. Additionally, it measures respondents' attitudes towards marine pollution, specifically their level of concern about the problem, their perceptions of the importance of the various actions that can be taken, their perceptions of the actions being taken, their willingness to take action to address marine litter, and the actions being taken to address marine pollution.

The KAP Survey makes it possible to:

- Assess the impact of marine debris prevention projects on participating communities,
- Identify the participants' level of understanding of the marine debris phenomenon,
- Identify participants' attitudes towards the marine debris phenomenon,
- Determine whether participants engage in marine debris prevention practices.

With this survey, we hope to provide an effective assessment tool, thus advancing the fight against marine pollution in the Caribbean region. Let's start the journey towards a cleaner and more sustainable marine future!

INSTRUCTIONS FOR THE APPLICATION OF THE SURVEY



1 | SAMPLE SELECTION

Most surveys should be conducted with only a sample of the affected community, unless the entire community is small and sufficient resources are available to interview everyone.

The objective of the sampling process is to collect information from a representative segment of the population in order to draw conclusions about the entire population through statistical hypothesis testing. We recommend that having participated in circular economy pilots is the main inclusion criterion to be part of the sample.

Likewise, it is necessary to record the data of the respondents from the previous phase in order to be able to carry out the post-application, guaranteeing the reliability of the results. The sociodemographic form includes a section for recording the participant code, which should be assigned by the survey team prior to the survey application. This code will be recorded in a database along with the participant's contact information to be taken into account during the subsequent application.

To calculate the sample size when the total population is finite, you must first know "N" or the total number of people participating in the pilot interventions. For this, a statistical record of their data must be kept. If we know the total size of the population and we want to know how many people we should apply the survey to in order to obtain representative data, the formula would be as follows:

SAMPLE SIZE FORMULA

$$n = \frac{N * Z_{\alpha}^2 * p * q}{d^2 * (N-1) + Z_{\alpha}^2 * p * q}$$

- n = Sample size
- N = Total population
- Z_{α} = This parameter represents the Confidence Level (CN). In this case it is 1.96 squared (the NC is 95%).
- p = Expected proportion (in this case 5% = 0.05)
- q = 1 - p (in this case 1-0.05 = 0.95)
- d = Precision (in this case 5% = 0.05)

The following link performs the calculation automatically:
<http://www.berrie.dds.nl/calcss.htm>.

TABLE OF VALUES, WHICH CAN SERVE AS AN HELP AND GUIDANCE

Total number of people participating in pilot interventions / affected population.	Sample size
10	10
25	24
50	45
100	80
250	152
500	218
1000	278
5000	357
10000	371

2 | TRAINING OF SURVEYORS

Because the survey was not designed to be self-administered, a selection of enumerators must be made once the sample has been obtained. This selection will depend on the total number of people to be surveyed and the amount of human resources and time available within the project schedule. For the selection of enumerators it is necessary to consider:

**COMMUNICATION
(READING, WRITING
AND SPEAKING THE
LOCAL LANGUAGE
FLUENTLY)**

**TEAMWORK,
ORGANIZATION
AND LISTENING**

**EXPERIENCE
IN SIMILAR JOBS**

Once the surveyors have been selected, they are trained in the application of the survey.

1

Present the background, rationale and objectives of the survey. This will ensure that team members understand the principles of the survey.

2

Emphasize the importance of presenting the objectives of the interview to the respondent, answering related questions, and obtaining informed consent prior to the interview.

3

Review each question, discuss its meaning and why it is included in the survey. Explore each question and its response options with the surveyors so that they become familiar with them.

4

Emphasize the importance of explaining the questions to respondents and not forcing their answers to match the listed response options. If there is hesitation in answering a question, they should not suggest possible answers.

5

Ensure that enumerators understand that the questions should follow the order in which they appear in the survey. Any change in the order of the questions can have a significant influence on the responses.

3 | APPLICATION OF THE SURVEY

Once the sample has been obtained and the surveyors have been trained for its application, it is time for its implementation. For this, it is necessary to define the moments within the project schedule in which the pre-, during and post application will be carried out, as well as the places of application.

Each survey should be applied through the online form to facilitate the analysis of the results. Only in exceptional cases should the survey be done through another medium (e.g., printed on paper) and the surveyors are then responsible for uploading the data to the online platform.

STEPS TO FOLLOW DURING THE INTERVIEW

THIS PROCEDURE SHOULD BE THE SAME FOR EACH IMPLEMENTING COUNTRY.



4 | ANALYSIS AND INTERPRETATION OF RESULTS

Before analyzing the survey questionnaires, it is important to verify that they do not contain errors, omissions or inconsistent data. To do this, it is necessary to do the following:

- 1** Download database
- 2** Check each completed survey questionnaire for incomplete responses.
- 3** Verify that there are no inconsistent answers (e.g., two answers marked on an item that only admits one answer).

This instrument has been designed to be analyzed from the results of each question, and as a whole of the variable (knowledge, attitudes, practices). The analysis carried out once the survey has been applied before, during and after implementation will be of a comparative nature to evaluate the effectiveness of the project. For this purpose, the following indicators are proposed:

KNOWLEDGE INDICATORS

Knowledge (items 5-15)	Indicators
Basic	Identify and define the concept of marine debris.
Intermediate	Identifies and defines the concept of marine debris, determines the causes associated with the problem.
Advanced	Identifies and defines the concept of marine debris, determines the causes associated with the problem and recognizes its impact.

ATTITUDE INDICATORS

Attitudes (items 21-26)	Indicators
Desired attitudes	The company states that it is concerned about the marine litter problem and is willing to participate in measures to solve it.
Undesirable practices	Denies being concerned about the marine litter problem and/or is not in a position to participate in measures to solve it.

PRACTICE INDICATORS

Practices (items 21-26)	Indicators
Desired attitudes	Affirms intentional, voluntary and daily participation in practices committed to the prevention of marine litter.
Undesirable practices	Denies engaging in practices committed to marine litter prevention.

The online platform where the survey is to be filled out offers the correction of the questions according to the approach of the indicators for each variable.

It is recommended that this analysis of descriptive-comparative statistics is carried out by a skilled person in research and data processing.

ABOUT THE PROMAR-KAP SURVEY

Next, we will administer a survey to determine your knowledge, attitudes and practices related to marine litter prevention. We ask you to answer each question individually with the answer you think is correct.

We thank you for your participation and assure you that the responses will be analyzed anonymously and processed for research purposes only. This data is being collected by the Project for the Prevention of Waste in the Caribbean Sea (PROMAR) as part of its implementation actions.

**ACCESS THIS
ONLINE SURVEY**



bit.ly/EncuestaPROMAR-KAP

SOCIODEMOGRAPHIC DATA OF THE RESPONDENT

1. Name _____

2. Country _____

3. Municipality _____

4. Sex ☐ Male ☐ Female ☐ Other

5. Age

- ☐ Less than 15 years
- ☐ 21 - 30 years
- ☐ 31 - 40 years
- ☐ 41 - 50 years
- ☐ 51 - 60 years
- ☐ 61 years and older

6. Highest educational degree

- ☐ Elementary School
- ☐ High School
- ☐ Trained professional
- ☐ Bachelor's Degree
- ☐ Master's Degree
- ☐ PhD
- ☐ None

Next, we will ask you several questions about marine litter and what you have heard about it. Most of the questions are multiple choice, and in some cases you will have to tell me a little about the answer. Answer this section according to the options shown in each question.



KNOWLEDGE

(C1) Do you know what marine litter is?

- ☐ Yes ☐ No

(C2) Do you consider marine litter a problem for you and your community?

- ☐ Yes ☐ No ☐ I don't know

(C3) Is your community a source of marine litter?

- ☐ Yes ☐ No ☐ I don't know

(C4) Has your community been or is your community harmed by marine litter?

- ☐ Yes ☐ No ☐ I don't know

(C5) Of the following actors, which would you say is the main responsible for marine litter in your country?

- ☐ Industries
☐ Political Authorities
☐ Communities near rivers or the sea
☐ Schools and Universities
☐ Civil Society Organizations
☐ General public
☐ All of the above
☐ None of the above

(C6) Is marine litter mostly composed of...?
Select one option

- ☐ Mostly organics
☐ Mostly plastics (packaging and wrapping)
☐ Metals, aluminum and glass
☐ Garbage of varied composition

(C7) Of the following actors which would you say is primarily responsible for marine litter in your country? Select only one option:

- ☐ Central Government
☐ Municipal government (Mayor's Office)
☐ Industries
☐ Social organizations
☐ Schools and universities
☐ General public
☐ All of the above
☐ None of the above

(C8) Does your country have laws or public policies to prevent marine litter?

- ☐ Yes ☐ No ☐ I don't know



ACTITUDES

(A1) How concerned are about marine litter?

- ☐ Very concerned
 ☐ I am not worried about it
☐ A little worried
 ☐ I don't know

(A2) Below are some actions to prevent marine litter.

Please indicate how important each one is to you:

	Very important	Of little importance	Not important	I don't know
Making industries responsible for their products and wastes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Achieving efficient waste treatment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Educating about the causes and consequences of marine litter	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Banning the production of single-use plastics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Regulating the use of plastics on beaches and coastal areas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Establishing partnerships to address marine pollution	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Raising public awareness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



ATTITUDES

(A3) - Below are some statements about marine litter. Please indicate how much you agree with each action....

	Totally agree	Somewhat agree	Neither agree nor disagree	Disagree	Strongly disagree
The State must have a national plan that guarantees the proper management of waste so that it does not end up as marine litter.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The State recognizes the responsibility and encourages the participation of different sectors of society (education, economy, health) in initiatives aimed at reducing the impact of marine litter.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Large industries are the main cause of garbage in the seas, and therefore they should be held responsible for this problem.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Consumers are as responsible as industries for the amount of waste reaching the ocean.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Society in general has sufficient information to manage marine litter.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The problem of marine litter should be of concern to all sectors of society.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would like to receive more information on solutions to prevent marine litter.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have enough information to take action to reduce marine litter generation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



PRACTICES

(Q1) Have you taken any action to reduce the impact of marine litter?

☐ Yes ☐ No ☐ Don't know

(Q2) Have you participated in any talks, workshops or educational activities on marine pollution?

☐ Yes ☐ No ☐ Don't know

(Q3) Have you participated in any activities to address marine litter? For example: beach cleanups, recycling days, public awareness sessions?

☐ Yes
☐ No
☐ Don't know

(Q4) Below are some actions you can take to address marine debris. Please indicate how often you perform each action:

Research on the consequences of marine pollution.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I visit a river or beach, I avoid polluting it by leaving waste behind.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I do not consume products that have a high impact on the generation of marine litter.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I use my own thermos or reusable water bottle to avoid drinking bottled water.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I reduce the amount of plastic I consume.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I tell my acquaintances about the marine litter problem.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I separate my solid waste and deliver it for recycling.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



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