

Exchange Memory of experiences between Costa Rica and Panama coastal municipalities, focused on reducing single-use plastics

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# **PRESENTATION**

This document includes the systematization of the experience exchanges between coastal municipalities in Costa Rica and Panama on comprehensive solid waste management (ISWM), with an emphasis on the reduction of single-use plastics.

This process is part of the project: *Empowering coastal cities and local governments in Costa Rica and Panama to combat marine litter through refusal of single-use plastics and improvement of waste management systems*, funded by the Bureau of Oceans and International Environmental and Scientific Affairs of the United States Department of State (OES) and implemented by MarViva Foundation.

Between September 2018 and April 2021, the project was carried out in the coastal municipalities of Nicoya, Santa Cruz and Garabito (in Costa Rica), and those of Panama City, Las Palmas and Soná (in Panama), focusing on the problem of marine-coastal waste as a regional threat affecting the natural heritage, food security and livelihoods of coastal cities.

As a starting point, it was recognized that, although there is political will and a growing awareness between business activities and local populations, large quantities of plastic waste continue to reach the sea from Costa Rica and Panama every day.

This reality raises the need for urgent action by promoting articulated work between the authorities, the civil society and the private sector, in order to convert good intentions into concrete and tangible results.

For the implementation of this project, MarViva drew on the experience accumulated since 2014 in strengthening the capacities of municipal authorities on ISWM (Integral Solid Waste Management) related issues and the impact of plastic waste on the oceans, as well as in supporting both countries in the design of various regulatory mechanisms for reducing single-use plastic.

The process, which is presented here as a memory, consisted of a set of virtual meetings and trainings held between November 2020 and February 2021. It promoted the exchange of ongoing experiences and initiatives focused on the ISWM (Integral Solid Waste Management), with an emphasis on reducing marine pollution by disposable plastics. Representatives of the six aforementioned coastal municipalities participated.

The sense of community and inter-municipal accompaniment to environmental issues is important, because ecosystems are not governed



Plastic bag floating on water column

by political-administrative boundaries. And while it is true that problems communicate from one sector to another, the same applies to creativity and innovation aimed at solutions.

Knowing that each context is unique in every way (socio-economic, cultural and environmental), MarViva believes in the importance of enabling spaces where, like this one, local governments can expand and strengthen their network of contacts, improve their knowledge of local challenges, and promote the exchange of solutions (ideas and/or plans) and lessons they have learned in the long and complex journey of addressing the problem of solid waste, particularly plastics.

# **ACKNOWLEDGEMENT**

MarViva acknowledges the following people for their commitment throughout the process of exchange of experiences between coastal municipalities in Costa Rica and Panama on Integral Solid Waste Management (ISWM), with an emphasis on reducing single-use plastics. Their support and the generous participation of the designated workshop team, who, in addition to requiring additional information, shared doubts and concerns and provided proposals for solutions, enriched the initiative and made it a true collaborative learning experience.

COUNTRY	MUNICIPALITY	NAME	POSITION
Costa Rica	Garabito	Tobías Murillo	Mayor
		Laura Zumbado Ramos	Coordinator of the Department of Environmental Management
	Nicoya	Carlos Armando Martínez	Mayor
		Laura Vanessa Rivera	Vice-Mayor
		Jorge Isaac Esquivel	Coordinator of the Department of Environmental Management
	Santa Cruz	Jorge Arturo Alfaro	Mayor
		Dixabeth Matarrita Mendoza	Vice-Mayor
		María Daisy Viquez Zamora	Coordinator of the Department of Environmental Services

Sunset in Peninsula of Nicoya, Costa Rica



COUNTRY	MUNICIPALITY	NAME	POSITION
Panama Pa	Las Palmas	Edilberto Adames Camaño	Mayor
		Beatriz Gordillo	Vice-Mayor
		Stacy Arosemena	Municipal Engineer
		Leonel Valencia	Legal Counsel
		Maricarmen Barría	Mayor's Secretary
		Francisco Sanchéz	Citizen Care and Transparency
	Panama	José Luis Fábrega	Mayor
		Judy Meana	Vice-Mayor
		Luís Norato	Director of Environmental Management
		Edward García	Analyst at the Directorate of Environmental Management
		Jannia Samuels	Deputy Director of Resilience
	Soná	Alcides Hidalgo	Mayor
		Vielka Camarena	Vice-Mayor
		Arnold Santamaría	Municipal engineer
		Roxana Barría	Assistant Mayor
		Roshermy C. Higuera	Manager
		José S. Montero	Legal Counsel

We believe that recognition should be greater and let it be known, given that these activities took place between November 2020 and February 2021, when the authorities had to prioritize actions for the COVID-19 pandemic. They, however, made a great effort to open up spaces in their agendas and engage in activities, or accommodated the participation of staff in their respective institutions during the exchanges of virtual experiences, during which their commitment and awareness around the problem of pollution of our seas by disposable plastics was reflected.

The local governments that participated in this process were aware that by strengthening the technical capacities of their respective municipalities in ISWM and reducing the use of disposable plastic, they can benefit marine-coastal ecosystems and improve the quality of life of their communities.

MarViva also thanks the implementing team of this project, including consultants, for their dedication and effort; and the Bureau of Oceans and International Environmental and Scientific Affairs of the United States Department of State (OES) for its interest in financing actions that, like this one, positively impact the coasts and seas of our region.



# **MUNICIPALITIES**

# participating in the experience exchange process

### **COSTA RICA**

**Garabito:** canton with a surface of 316.31 km², located in the province of Puntarenas, in the Central Pacific. It has a population of approximately 18,648 inhabitants. The main economic activity is tourism, both national and international, since access to its numerous beaches from San José (the capital of Costa Rica), can take only 60 to 90 minutes by road. It houses protected areas such as Carara National Park (Executive Decree 27411, 1998), the Tivives Protective Zone (Executive Decree 17023, 1986) and the Playa Hermosa-Punta Mala National Wildlife Refuge (Executive Decree 27210, 1998), the latter of great importance for the protection of marine-coastal ecosystems. The Grande de Tárcoles river, which receives the waters and debris from the most polluted tributaries of the Great Metropolitan Area, flows into this canton.

**Nicoya:** canton with a surface of 1,333.68 km², located in the province of Guanacaste in the Peninsula of Nicoya, in the Pacific. It has a population of approximately 50,825 inhabitants. Its economy is divided between agriculture and livestock in the plains and tourism in the coastal area. Among the areas subject to some degree of protection, stands out for its importance to marine life the Palustrino Corral de Piedra Wetland (Executive Decree 22898, 1994), created for the conservation of wetland biodiversity and, in particular, aquatic bird populations.

Santa Cruz: with a surface of 1,312.27 km², located in the province of Guanacaste in the Peninsula of Nicoya, in the Pacific. It has a population of roughly 55.400 inhabitants. In recent decades the canton's economy has gone from agribusiness, livestock and fisheries, to a highly focus on tourism and construction. The Las Baulas Marine National Park (Law 7524, 1995), the Ostional Wildlife Refuge (Law 9348, 2016), the Riberino Zapandí Wetland (Executive Decree 22732, 1993) and the Río Cañas Lacustrine Wetland (Executive Decree 23075, 1994), are some of the areas with some degree of protection of crucial importance for the conservation of marine-coastal ecosystems.

#### **PANAMA**

Panama: district with a surface of 275 km<sup>2</sup>, located on the shores of the Gulf of Panama, in the Pacific. It is home to Panama City, the capital of the country. It has a population of approximately 1,115,083 inhabitants. The main economic activities are financial, tourism and logistics services. On the pacific coast of this municipality is the Panama Bay Refuge of International Importance for Wildlife and Wetlands (Ramsar Site number 1319), covered by Law 1 (2012), which contains estuaries, mangroves, flood forests, swamps and freshwater lagoons.

Las Palmas: district with a surface of 1,160 km<sup>2</sup>, located in the province of Veraguas, in the Pacific. Its population is approximately 18,500 inhabitants and its economy relies mostly on agricultural production. It houses part of the Coiba National Park, created by Law 44 (2004), protected area and site declared by UNESCO in 2005 as a World Heritage Site of Humanity (consisting of an archipelago of 39 islands), and part of the Special Marine Protection Zone of Coiba National Park, created for the protection and conservation of marine-coastal species, in particular to ensure its diversity, genetic flow and evolutionary mechanisms.

Soná: district with a surface of 1,519.1 km<sup>2</sup>, located in the province of Veraguas, in the Pacific. Its population is approximately 28,144 inhabitants and the economy is mainly agricultural and touristic in its coastal areas. It is home to part of the Coiba National Park, part of the Gulf of Montijo Wetland of international importance recognized by Resolution J.D. 015-94 (1994), as amended by DAPVS Resolution 001-2016 (2016), part of the Special Marine-Coastal Management Zone of the Southern Part of Veraguas created by the ARAP 07 Resolution (2008), and part of the Special Marine Protection Zone of Coiba National Park, covered by the Coiba Act. All of them are fundamental areas for the protection and conservation of marinecoastal ecosystems.



Panama City Architectural profile, Panama

# **BRIEF DESCRIPTION**

# of the experience exchange process



Dynamics in exchange workshops (1)

The municipalities that participated in the experience exchange process had as a common denominator: part of the territories they manage are covered by coastal marine areas, that is, human activities that develop in their territories have a direct impact on the health of marine-coastal ecosystems.

It is clear from the topics addressed during each session that the initiative's approach was to encourage municipal staff to share the challenges facing their respective jurisdictions in achieving the ISWM, including their focus on disposable plastics contamination. In addition, during the exchanges, a space was provided to learn about the solutions implemented to address the problem. To this collaborative aspect was added training on key issues for ISWM, which included the provision of information and the necessary tools for data systematization, contributing to decision-making processes.

In addition, the experience provided added value by serving as a space for the expansion and strengthening of the contact network between municipalities. The following are summaries of the work sessions:

#### DATE TOPIC DISCUSSED

#### November 18, 2020

Virtual Session

Introductory session to exchanges, detailing project progress, methodology and potential dates for the development of follow-up sessions, discussion of local challenges and improved waste management.

#### **December 3, 2020**

Face-to-face session between the municipalities of the same country and virtual between the two countries Initiatives linked to municipal agreements developed in the six selected municipalities of Panama and Costa Rica.

#### **January 14, 2021**

Virtual Session

Municipal plans related to ISWM, with an emphasis on the reduction of disposable plastic in the six municipalities selected.

#### **February 11, 2021**

Virtual Session

Technical training for data entry and management, using the "Susty" online tracking tool, validation of regional indicators for use on this platform, common goals and objectives on reducing the use of disposable plastics.



Collection of discarded plastic straws

## Work sessions conducted

### First session I November 18, 2020

We are facing a great opportunity, but the time window is small. We must act

**Main topic:** conversation between municipalities for the exchange of experiences, concerns, success stories and initiatives on the management and reduction of single-use plastic waste.

# Summary

### Presentation by MarViva

In this first workshop, MarViva Foundation began by introducing itself as a non-governmental non-profit organization, with offices in Costa Rica, Panama and Colombia. Its purpose is the conservation and sustainable use of marine-coastal spaces and resources at the national and regional level, and its work approach is comprehensive and multidisciplinary, seeking the involvement of all stakeholders, from a participatory approach with coastal communities. In its interventions, MarViva Foundation seeks to make replicable and scalable initiatives, hence the importance of documenting and disseminating success stories.

It also stresses that the initiatives developed throughout the project are supported by the Bureau of Oceans and International Environmental and Scientific Affairs of the United States Department of State (OES), financial supporter of the project in question called *Empowering coastal cities* and local governments in Costa Rica and Panama to combat marine litter through refusal of single-use plastics and improvement of waste management systems.

# Sharing basic concepts and problems

MarViva Foundation laid out basic work concepts for subsequent sessions.

Information from Palardy (2020) and Lau et al. (2020), was cited referring to the presence of plastics in the seas, the involvement of marine-coastal ecosystems and the negative effects on human health.

Another issue addressed was recycling which, although traditionally presented as the only alternative to plastic management, is extremely inefficient and insufficient: about 91% of the plastic discarded by humanity is neither recovered nor recycled.

The problem of the export of recovered plastic was also mentioned, citing an Interpol report (2020), which analyses the alarming increase in the illegal trade of plastic waste.

The presentation of the situation concluded with the following reflections:

- In the event that we do not take action, the annual flow of plastic into the ocean will almost triple by 2040 and reach 29 million tonnes per year (range: 23 million-37 million tonnes per year), which is equivalent to 50 kg of plastic per meter of coastline worldwide.
- We are facing a great opportunity to act, but also with a very small time window to address the problem.



Plastic realities worldwide

### The project: objectives, implementation

### logic and strategy

Following this scenario, the project **Empowering coastal cities and local governments in Costa Rica and Panama to combat marine litter through refusal of single-use plastics and improvement of waste management systems,** as an initiative to contribute to the urgent task of stopping (and hopefully reversing) the course of action that we as humanity have helped to produce.

One of the lines of action of this initiative is the development of positioning and marketing actions framed in the #ChaoPlásticoDesechable campaign, envisaged as an extensive campaign of awareness and citizen education. The concept of measurable reduction was emphasized, which establishes that impacts must be measurable to determine which actions are the most effective and deserve to be replicated. In order to provide municipalities with a simple and efficient way to measure actions and impacts, MarViva Foundation, in alliance with Susty.org, set up a specialized platform to establish and monitor indicators on sustainability issues. For the purposes of the project, Susty designed a special module for #ChaoPlásticoDesechable. Keeping track of actions will permit not only to evaluate their effectiveness, but also their costs.



MarViva introduced the importance of working simultaneously with both municipalities and businesses. Through a voluntary agreement, the project team set different reduction targets, validated by municipalities and concerned businesses. By April 2021, more than 60 trading partners were accounted for in both countries. Campaign membership involves a journey that includes training business staff and positioning and marketing actions (#ChaoPlásticoDesechable campaign).

# Characterization of participating municipalities

Ricardo Herrera (consultant for MarViva Foundation) explained that the six participating municipalities are in a different stage in relation to waste management. All assume a **multidimensional role in their respective jurisdictions**, i.e. they deal with topics as varied as education, culture and arts, development and management of community affairs, among others. This allows them to have a strong **ability to see problems from different perspectives and develop networks of equally multidimensional stakeholders.** 

Additionally, the importance of "humanizing" action plans to achieve maximum effectiveness was demonstrated. In short, humanizing means:

- I Identify strengths and capabilities.
- Contextualize the reality offered by each environment (some elements enrich, others limit).
- Articulate with all stakeholders in the community.
- Extract and share lessons learned with other stakeholders who can replicate them.

## Exchange space

In the exchange session, Daisy Víquez Zamora (Municipality of Santa Cruz) expressed concern about the **legal powers of municipalities when implementing regulations.** 

Alberto Quesada (MarViva Foundation) clarified that in Costa Rica municipalities do not legally have the power to prohibit the marketing of disposable plastic and actions are mainly limited to incentivize, for example, discounts on garbage collection rates to shops or homes that implement measures that result in the reduction or separation of waste. This is the case of the Colorado District City Council (canton of Abangares), which used Law 8839 (2010), to amend the ISWM regulations and make the above discount viable. Another option is the subscription of a voluntary agreement (between municipality and businesses), to reduce purchase and use of disposable plastic, which can then serve as the basis for the application of such a discount or for marketing strategies.

Daisy Víquez explained that in her municipality these types of incentives are applied through regulations, but she regrets not being able to exert more pressure to keep these materials from entering the municipality. Víquez also exhibited the Environmental Technology Park project, a landfill linked to a recovery center for valuable waste, an organic waste treatment center, a butterfly farm, a network of trails, a nursery and an environmental education classroom. Thanks to recovery and use of valuable waste, what reaches the landfill is considerably reduced, thereby increasing the lifetime of the landfill and, at the same time, having a social impact: all components - with the exception of the landfill - will be managed by the communities. This initiative awakened the interest of other participants who requested additional information.

Edward García (Municipality of Panama) mentioned the agreement signed by his municipality with MarViva Foundation to join the initiative. He stressed the importance of **municipalities leading change by example and changing their own consumption habits** through institutional purchases of products alternative to single-use plastic. The municipality implements a Zero Garbage Program 2015-2035 (Municipal Agreement 124, 2015), which includes the promotion of recycling among the population. He also emphasized the need to educate citizens, which he called a "titanic but not impossible" task, in particular if actions are articulated with other dependencies.

For Arnold Santamaría (Municipality of Soná), adopting and developing the concept of **circular economy** in relation to plastic waste is fundamental, since these are currently conceptualized exclusively as a collection problem and not as an **element that**, **converted**, **can generate resources to the municipality**. He believes it is important to exchange experiences with municipalities in other countries (such as Germany) that have already managed to turn waste into wealth generators. In addition, he hopes that Panama will achieve greater decentralization in public policies in order to provide a local and contextualized approach to the ISWM.

Laura Zumbado Ramos (Municipality of Garabito) presented the ISWM work they do in their municipality and highlighted the interest of **focusing on the reduction** of waste (e.g. Panama's Zero Garbage Program) rather than the treatment and final disposal.

Leonel Valencia (Municipality of Las Palmas) made the recommendation to carry out **community education** to raise awareness about an adequate disposal of waste.

At the end of the workshop, the participants were reminded of the topic that would be addressed in the next exchanges, linked to the agreements and action plans at the municipal level focused on the reduction of disposable plastics, as well as the definition of regional indicators for the measurement of progress and use of online data management tools useful to monitor the goals set in each municipality.



Dynamics in exchange workshops (2)

**Main topic:** initiatives linked to municipal agreements developed in the six municipalities selected in Panama and Costa Rica.

# **Summary**

This session featured presentations by the municipalities of Santa Cruz and Panama in connection with ISWM municipal initiatives, and MarViva Foundation on the contamination by single-use plastics and guidelines for developing municipal public policy to address this problem.

María Daisy Zamora (Municipality of Santa Cruz) explained in detail the operation of the **Environmental Technology Park** (mentioned during the first session and of great interest to other participants). He addressed aspects such as:

- Legal and administrative requirements/processes for the creation of the park.
- I Site selection: technical criteria of the soil, conditioning and non-conditioning.
- I Costs associated with the site: selection, purchase and environmental impact study.
- Park components: cells for the disposal of waste and wastewater treatment plants, recovery center for valuable waste, organic waste treatment area, forest nursery, butterfly farm, trail network (forest area) and classroom for environmental education.
- Social inclusion: a search for positive impact in communities benefiting from the project.
- Costs associated with construction.
- I Agreement with the Rural Development Institute (INDER) for the construction of the recovery center for valuable waste.
- International cooperation funds for a waste characterization project.

Edward García (Municipality of Panama) presented the ISWM initiatives underway in his municipality. He referred to topics such as:

- I The problem of lack of awareness of the negative impact of waste, especially disposable plastics.
- I The existence since 2010 of the Authority of Urban and Residential Cleanliness (AAUD), responsible for the collection and disposal of solid waste in the district of Panama.
- Panama has enacted abundant legislation, but the challenge is compliance and follow-up:
  - Law 1 (2018) prohibits the use of plastic bags for items transportation.
  - Law 33 (2018) establishes Panama's Zero Garbage Policy.
  - Law 187 (2020) regulates the reduction and progressive replacement of single-use plastics, but must still be regulated.
  - I Municipal Agreement 124 (2015) adopting the municipal ISWM policy and the Zero Garbage Program 2015-2035 (Municipal Agreement 124, 2015): training of municipal staff, awareness/communication and signing of cooperation agreements for the implementation of actions.

Alberto Quesada (MarViva Foundation) presented "Pollution by singleuse plastics: proposal of municipal public policy" and addressed the following topics:

# Review of negative impacts caused by plastics throughout their life cycle

- I The importance of focusing efforts on reduction rather than disposition, as there is no possible manner to give adequate treatment to the amount of garbage we are generating.
- Recycling and "bioplastics" as false solutions:
  - I only 9% of the plastics produced have been recycled, because it is physically and chemically complex and expensive;
  - I "bioplastics" are not biodegradable under natural environmental conditions (UN Environment, 2018).
- Analysis from Duke University's Nicholas Institute for Environmental Policy Solutions, which systematically reviews policies around the world to address plastic pollution of the oceans (Karasik, 2020).

# Three guidelines for municipal public policy project

- **Municipal sphere** (institutional purchases for the work and events organized and promoted by the municipality): replacement of single-use plastics with renewable and compostable alternatives.
- **Business sphere:** replacing single-use plastics with renewable and compostable alternatives in shops and business establishments. The scope of these actions depends on the powers of the municipalities, according to the legal system in each country.
- I Citizenship sphere (general public and municipal staff): promotion of change of consumption and disposal habits. Awareness-raising and awareness campaigns.

# Elements for the Municipal Public Policy Project Legally and Constitutionally Viable (for Costa Rica):

- Prohibition of purchase of disposable plastics internally in the municipality under the National Policy on Sustainable Public Procurement (Executive Decree 39310, 2015).
- I Environmental fees should be managed at the Legislative Assembly through the enactment of a law. The setting of fines or higher fees to those who fail to comply with actions to reduce and/or separate waste is a double-edged sword, as it may result in the illegal disposal of garbage in rivers or other sites.
- Agreements (e.g. with the Institute of Aqueducts and Sewers (AyA, for its acronym in Spanish) or businesses) for the **construction of drinking** water sources in public parks or outside premises to prevent people from having to buy a plastic bottle when they move around.
- Agreements with businesses to **recognize** the reduction in the use of disposable plastics.

For her part, Tania Arosemena (MarViva Foundation) contributed to the presentation by talking about the **experiences in the development of agreements and action plans for the municipalities of Panama, Soná and Las Palmas**, and detailed their main pillars:

I Recognition of the legal framework that serves the powers of municipalities to implement ISWM actions (Law 153, 2020), which regulates government procurement and allows the inclusion of sustainability criteria in public procurement; inter-institutional articulation).

- Evaluation of the reality of each municipality (context, internal processes, projections).
- I Identification and assessment of opportunities for the ISWM with an emphasis on the reduction of disposable plastics in conjunction with businesses and citizens (marketing, positioning, awareness raising).

## Exchange space

María Daisy Zamora (Municipality of Santa Cruz) answered questions concerning the operational projection of the **Environmental Technology Park in relation to the management of solid and liquid waste**, citing the Wastewater Dumping and Reuse Regulations (Regulation 33601, 2006). She also referred to the **inter-institutional coordination actions required to bring the park project** to fruition and stressed the importance of first reaching agreement on the importance or prioritization to be given to the project internally in the municipality. Also emphasized the importance of convincing the community of the reason of project since "no one wants a landfill in their garden."

The staff of the Municipality of Las Palmas, in particular the Municipal Engineer, Stacy Arosemena, expressed their interest in following up on this initiative and maintaining contact with the representation of Santa Cruz.

Edward García (Municipality of Panama) was asked for more information on the implementation of the Zero Garbage Policy and on the respective program developed by the Municipality of Panama, as well as its impacts on the reduction and/or recovery of solid waste. It recognized that the impact on material recovery and logistics needed to be improved, as it is currently high in greenhouse gas (GHG) emissions.

The next topic addressed was **possible sources of funding for ISWM projects** in municipalities that cannot finance them on their own. Tania Arosemena (MarViva Foundation) mentioned that it is important **to build bridges across stakeholder networks** to establish the importance of these projects before various instances (government agencies or cooperation agencies) that can finance the projects.

Finally, this session reflected the richness of exchanges between municipalities in different countries and increased the interest of identifying contacts that would enable them to learn about initiatives and projects that contribute to improving the integrated solid waste management in their territorial constituency.

### Third session I January 14, 2021

Establishing agreements is important, but implementing them is more important

**Central theme:** initiatives linked to municipal agreements developed in the six selected municipalities of Panama and Costa Rica.

## **Summary**

The session began with the welcoming remarks of Katherine Arroyo (MarViva Foundation) emphasizing the importance of the participation of stakeholders from the municipalities to supplement the exchanges.

"The best residue is never generated", i.e. actions should be aimed at addressing the problem from the source, reducing consumption and usage.

From this principle, Alberto Quesada (MarViva Foundation) recalled that the objective of the workshop is to advance in the design of action plans for the implementation of municipal agreements (which constitute municipal public policy).

A review was made of the three public policy guidelines for the conceptualization and implementation of municipal agreements for the ISWM and reduction of plastic waste in municipalities: municipal sphere, business sphere and citizen sphere (for more detail, see Summary of the second session).

Quesada explained that in Costa Rica the municipalities of Garabito and Santa Cruz have already conceptualized their municipal agreements (which are under review to be formalized) and Nicoya has already formalized it.

While having municipal agreements is an achievement in itself, it is implementation what will truly generate the necessary transition.

Therefore, MarViva Foundation **shared model action plans** that serve as support in the implementation of municipal agreements. Generally speaking, action plans consist of the following elements:

- **General Objective:** summarizes the overall idea of what will be achieved with the implementation of the plan: promote joint actions aimed at improving local environmental management, avoiding marine pollution and promoting sustainable use of marine and coastal resources.
- **Specific objectives:** implement administrative acts that have both internal and external municipal impact.
  - **Priorities:** seek to modify environmental management plans and, with it, institutional purchases:

- **Expected results:** specific, measurable, achievable, relevant targets within a particular time frame.
- Activities: are contextualized with the reality (internal and external) of each municipality, regulatory framework, budgets, etc. They may include reforms to municipal regulations (patents, construction, fee discounts), institutional purchases, agreements and business recognitions, awareness campaigns, etc.

#### **I** Timeline

Ricardo Herrera (consultant for MarViva Foundation) intervened to emphasize the need to establish the objectives of the plans according to feasibility and feasibility criteria according to the reality of each municipality. The knowledge that the staff of each municipality has of its context is essential to adjust the objectives and provide them with realism, which in turn will make them more executable.

Recommended taking into account three aspects when designing plans:

- **Actual contribution of proposed activities:** assess the capacity and cost of implementation (budget, human resources, available infrastructure) versus the impact of the activity within the plan.
- I COVID-19: Measures to be weighed in light of the change in scenarios due to the pandemic.
- I Validation/legitimization of commitments: make concepts and goals clearer and more attractive for decision makers and the population.

In turn, he stressed the need to first identify those actions that do not require a budget and that can be implemented in the short term. In this way, changes in habits can be generated and **results can be achieved** giving the issue of the reduction of single-use plastic traction both internally and externally.

## Exchange space

Laura Zumbado Ramos (Municipality of Garabito) appreciated the action plan, as detailed and clear. Expressed interest in incentives for businesses and commercial areas that joined to the initiative. She also recognized that in her municipality **monitoring and measurement is a weakness** and wanted to know the possibilities of using the Susty platform for a longer period.

Alberto Quesada (MarViva Foundation) clarified that, in Costa Rica, a law by the Legislative Assembly is necessary for incentives to be linked to the patent or operating permit. The alternative is **to create voluntary programs with businesses (agreements signed between municipality and businesses).** Susty, being a platform to record purchases of disposable plastics month by month, can be a tool to help in this process. This commitment, however, is voluntary and an act of good faith (does not constitute an affidavit).

Roshermy C. Higuera (Municipality of Soná) expressed concern about incentives, as the **municipality relies entirely on the proceeds to operate**, suggested exploring non-monetary incentives.

Tania Arosemena (MarViva Foundation) suggested using **good practices marketing as a mechanism to involve businesses (especially those linked to tourism),** action that should go hand in hand with population awareness and education, so that they are willing to prioritize their purchases in shops that implement good practices.



Dynamics in exchange workshops (3)

For Ricardo Herrera (consultant for MarViva Foundation), the incentive strategy must be accompanied by the use of **social networks as a channel to market good practices**, both for municipalities and businesses.

Roxana Barria (Municipality of Soná) mentioned that in her municipality they explore ways of involving the Communal Boards in the initiative, implementing actions to raise awareness among the population and articulating with other institutions. She mentioned the idea of signing a cooperation agreement with agreement with the National Institute of Vocational Training for Human Development (INADEH, for its acronym in Spanish) to provide training to the population in the field of handicrafts taking advantage of plastic waste input.

At the end of the workshop, participants recognized the value of MarViva's Foundation support during the generation of action plans based on the realities and capabilities of each municipality, the implementation of which will depend on being able to obtain the support of other sectors (public, private, non-governmental and civil society in general). In this process, the team of MarViva Foundation indicated that awareness-raising actions will continue to be supported and are willing to collaborate with municipalities that request assistance in capacity-building actions to support the implementation of single-use plastic reduction action plans.



## Fourth session | February 11, 2021

We cannot change what we do not know. Action measurement, monitoring and reporting

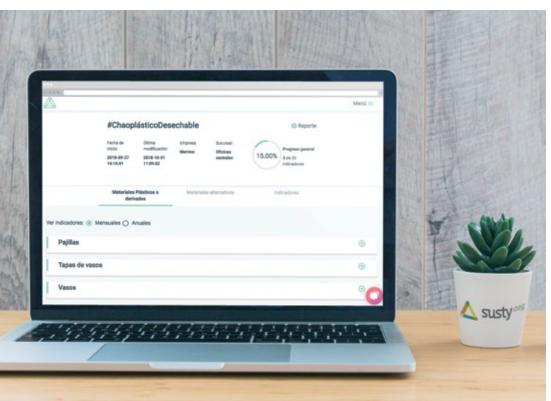
**Central theme:** single-use plastic consumption monitoring and reporting system via the Susty.org support tool (sustainability software and business management systems).

## **Summary**

Data management (collection and analysis) for decision-making is an aspect that is sometimes neglected in initiatives that seek to generate transformation. However, you cannot change what you don't know. Without reliable data, decision-making can have insufficient effects at best and, at worst, even counterproductive ones.

For this reason, MarViva Foundation included the use of Susty as part of this exchange of experiences for municipal capacity building, as it is a tool that allows the collection of data on site and the generation of statistics.

Susty generates information that contributes to decision-making processes, for example by setting goals that respond to the realities of each context and are more feasible and likely to achieve.



Visualization sample of the software used for monitoring



Dynamics in exchange workshops (5)

In this session, the municipal staff had the opportunity to get acquainted with the platform, following the review of all the functionalities demonstrated by Abigaíl Guzmán Umaña and Julián Trussart Gutiérrez, Susty.org.

In order to align itself with the objectives of this project, Susty made a series of adjustments to the platform, so that the version they offer responds to the needs and specificities of the municipalities previously identified by the Foundation. Still, it is important for MarViva that municipalities validate Susty's usefulness and the real possibilities of adopting it as a tool that can become part of the institution's normal work.

The tool allows users to:

- I Keep a record of disposable plastic that your establishment, institution or home, buys and consumes (including quantities and costs), as well as alternative materials.
- I Generate **reports that in turn will show trends and contrasts**, by month or year.
- Establish the **baseline to set ambitious and realistic reduction targets**.
- Add photos as evidence of the uploaded information.

## Exchange space

Ricardo Herrera (consultant for MarViva Foundation) raised three guiding questions to direct the discussion towards susty's practical uses in the work of municipalities:

- In relation to municipal actions, how do you think you can integrate this tool into your work routines?
- I What do you need to start using this tool?
- Do you think they will require the accompaniment of MarViva Foundation while they get acquainted with the tool?

The municipal staff took the opportunity to clarify doubts about the operation of the tool.

Among other aspects, it was stated that:

- It is not necessary to download the tool to a computer, the work is done directly in the cloud, requiring only a user and password for access and use.
- In this first phase, it is intended to include data management for the municipal sphere, that is, the consumption and use of single use plastic in the institution during its daily work and events, constituting a tool for self-regulation.
- I Susty's institutional use should be covered by municipal agreements and action plans. In this way, the platform is legalized and legitimized, avoiding possible legal and/or administrative discrepancies.
- As part of supporting municipalities for the adoption of the tool, MarViva Foundation has planned promotional and accompaniment actions.

Roxana Barría (Municipality of Soná) was enthusiastic about the results of the first measurements, as she believes that they will be decisive in understanding what the current situation is and deciding whether as an institution, they need to be strengthened with training or coordinate with other municipalities. To conclude, she addressed a fundamental topic, lead with the example: "We must start at home so that we can then bring it to the district level".

Francisco Sánchez (Municipality of Las Palmas) mentioned that the tool also has **potential to promote a rational use of the municipal budget**, as it will help to keep a better control of institutional purchases.

At the end of this workshop, it was recognized that in spite of the limited resources of municipalities and the challenges they face disposing properly of their solid waste, including disposable plastics; raising awareness and providing training on this subject is essential, beginning internally in the municipalities, and then replicating with other local bodies and communities can help improve the situation. In addition, participation in these workshops demonstrated the growing interest in strengthening their capabilities and considering actions in the short, medium and long term focused on reducing single-use plastic pollution in land, river and marine environments.

# CONCLUSIONS

What matters is always having someone to turn to when we don't know the correct answer. The strengthening of the municipal contact network is an added value of this exchange process. It gives people access to multidisciplinary knowledge, lessons learned from real experiences implemented by others, and ideas that could well adapt to their own realities.

Changes are not generated on the basis of good intentions. Municipal agreements are a fundamental and necessary first step in formalizing and legitimizing goals. But implementation is what will achieve the real transition. For this reason, action plans are so important and, moreover, their contextualization to the reality of each municipality and institution. It is essential to add a human component before a technological one. A technically and legally perfect plan can be full of obstacles, if the socioeconomic, cultural and environmental context is not ready for its implementation.

**From lower to higher.** When establishing activities, it is advisable to first choose the path of least resistance, identify actions that do not require a large budget and that can be implemented in the short term. This will generate tangible results that can have a multiplier effect, leading to a better response to the reduced use of disposable plastics in order to propose increasingly ambitious targets.



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Volunteer on a beach cleanup day

Agreements before sanctions. Setting fines could be a natural preference when thinking about responding to non-compliance with regulations or conventions. However, sanctions can be a double-edged sword by enabling people to choose the illegal disposal of waste to avoid a fine. Working with citizens by raising awareness and with businesses by positioning disposable plastic reduction as a valuable marketing element can lead to better and more lasting results.

**Cannot change what is not known.** Measuring and monitoring is essential in the transition stages. To understand where we are, decide where we should go, determine what actions to take, and know how effective we are being, it is important to have data that allows us to adjust and/or change a certain process.

**Begin at home.** It is important that municipalities lead by example. Becoming agents of change in the municipalities will facilitate agreements with businesses and public awareness campaigns. It not only demonstrates its feasibility, but also provides moral authority when asking other stakeholders to join the initiatives.

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Better than picking up, is not to pollute



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