

Contribution of environmental interpretation activities to the Sustainable Development Goals in Mazatlán, Sinaloa (Mexico)

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INTRODUCTION & AIM

An informed society can contribute to the conservation of nature. Environmental interpretation encompasses experiences and topics that involve direct interaction between visitors and nature, and such interaction promotes ecological awareness. Exhibits in public places constitute educational settings that complement traditional institutions, promoting learning that involves not only teachers and students but also society at large, including visitors and tourists.. The objective was to evaluate the themes in the interpretation of Ambiental activities and determine their contribution to the Sustainable Development Goals.

METHOD

The city of Mazatlán, Sinaloa (Mexico), presents a landscape dominated by wetlands, which are a representative ecosystem of this city. However, their conservation requires the active participation of the population. Currently, Mazatlán has 501,441 inhabitants, who affect the wetlands. By 2030, it is expected to have around 756,823 inhabitants, and by 2050, 1,306,423. Additionally, Mazatlán receives 3,872,691 tourists per year [1]. Three sites were analyzed to collect information on the topics and develop a correlation matrix.

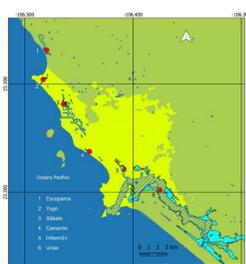
Aquarium: Mangrove Exhibit



Shopping Plaza: Exhibition and artificial wetland



Yugo Estuary: Guided Tour



Mazatlán

RESULTS & DISCUSSION

Three sites were analyzed to collect information on the topics and develop a correlation matrix.

Sustainable Development Goals	Mangrove exhibition in Aquarium	Exhibition and Artificial Wetland in Shopping Plaza	Guided Tour of the Yugo Estuary
1 No Poverty	The mangrove as the most productive ecosystem.		
2 Zero Hunger	One hectare of mangrove yields 800 kg of shrimp.		
3 Good Health and Well-Being	They are a defense against hurricanes and erosion.	Primary wastewater treatment.	Protected Natural Area, and Ramsar Site Playa Tortuguera El Verde Camacho [2]
4 Quality Education	Dissemination of knowledge and appreciation of mangroves.	Disclosure of knowledge and valuation of wetlands.	Environmental Education and Interpretation Program
6 Clean water and sanitation	Purify the agua.	The largest and most complete water treatment system in the region.	
8 Decent work and economic growth	Fish and shrimp hatchery 7 out of 10 types of fish caught in the sea are raised in mangroves.		
9 Industry, innovation and infrastructure	They capture the CO ₂ polluting gas.	Primary Wastewater Treatment.	
11 Sustainable cities and communities	The mangrove swamp as a defense of the coast and beaches. Prevents flooding.	Production of oxygen from the nutrients of the treated water.	Mangrove wetland and conservation
12 Producción y consumo responsables.	The mangrove as the most productive ecosystem.	It reuses more than 90% of wastewater for irrigation of green areas.	
13 Climate action	It buffers climate change.	Water savings by reusing treated wastewater in constructed wetland. Oxygen production in constructed wetland.	Cushioning climate change.
14 Life below wáter	Fish and shrimp hatchery 7 out of 10 types of fish caught in the sea are raised in mangroves.		Wetland protection
15 Life on land	They are forests that are in the sea and the land.	Creation of wetland for natural wastewater treatment.	Conservation of families, 275 genera and 393 species of angiosperms,
17 Patnerships for the goals	Recreational tourist site contributes to the knowledge and value of mangroves.	Commercial site contributes to the knowledge and value of mangroves.	Guided tours with schools and tourists

CONCLUSION

The results showed that the information provided contributes to 13 of the 17 Sustainable Development Goals:

FUTURE WORK / REFERENCES

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2. RAMSAR. (09 de 10 de 2013). Ficha Informativa de los Humedales de Ramsar, El verde Camacho. Recuperado el 03 de 06 de 2024, de Playa Tortuguera El Verde Camacho: <https://rsis.ramsar.org/RISapp/files/RISrep/MX1349RIS.pdf?language=es> (6ta. ed.). España: McGraw Hill España.