EFFECTIVENESS OF FOUR MARINE PROTECTED AREAS OF THE GULF OF BAJA CALIFORNIA.
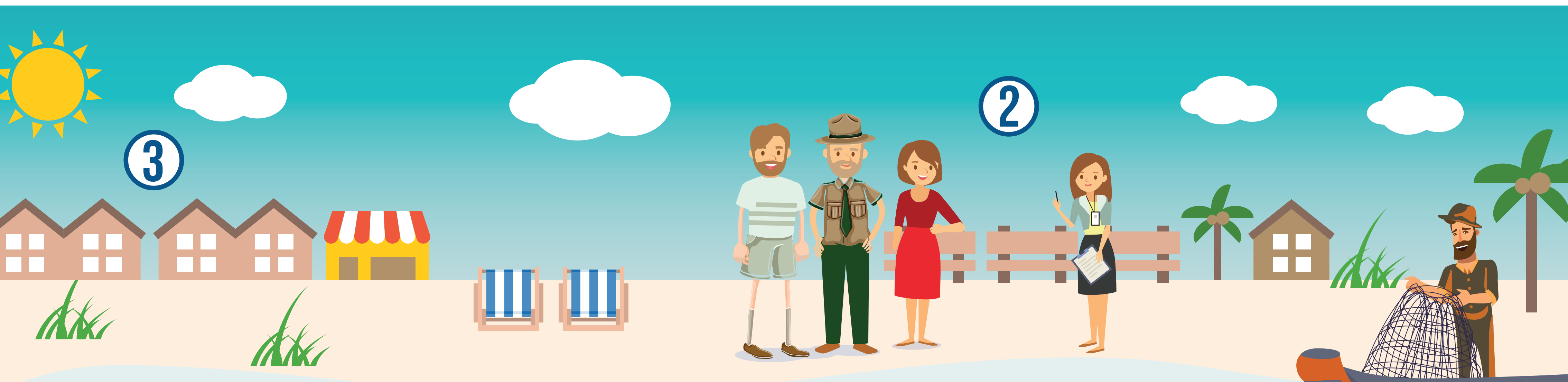
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CICIMAR-IPN

INTRODUCTION

In Mexico, the Marine Protected Areas (MPA) are created in order to achieve goals and objectives related to conservation, biodiversity management and provide social benefit through the protection of species.

OBJECTIVE

Evaluate the efficiency of four Marine Protected Areas in the gulf of Baja California (Bahía de los Ángeles Biosphere Reserve, Bahia de Loreto National Park, Archipielago Isla Espiritu Santo National Park and Cabo Pulmo National Park) incorporating biological, governance and social components.

METHODOLOGY

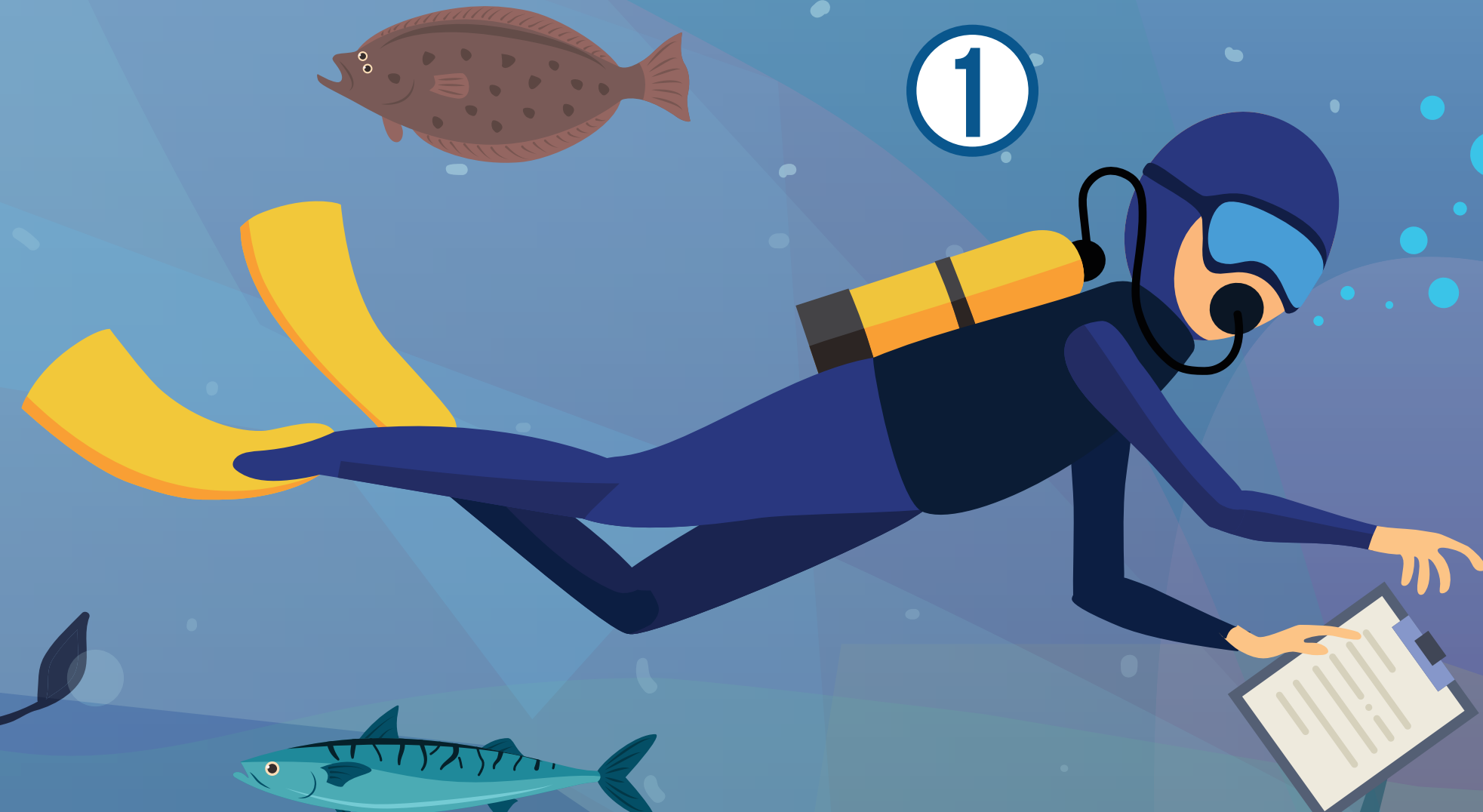### ① BIOLOGICAL:

The ichthyofauna was analyzed by the following indicators, comparing the year 2008-2016
- Richness (S)
- Diversity (H')
- Taxonomic distinctness (Δ^*)
- Density (ind/m^2)
- SST anomaly

② GOVERNANCE:

Interviews with Authorities, ONG'S, local tourist service provider and fishermen.

③ SOCIAL:

Socioeconomic indicators of INEGI were compared in the years 1990-2000-2010
- Employed population
- Economically active population
- Population with piped water
- Population with electric light
- Population with floor other than land
- Population with drainage
- Population of 15 years old or more with primary education.

RESULTS:

EFICENCY OF MPA INDEX

Very High	4.3 - 5.0	
High	3.5 - 4.2	
Medium	2.7 - 3.4	
Low	1.9 - 2.6	
Very Low	1.0 - 1.8	

Bahía de los Ángeles:	2.74
Bahía de Loreto:	2.51
Cabo Pulmo:	4.56
Isla Espíritu Santo:	2.52

25 M   4 M