



GRD



Proposal

Building a new Environmental Interpretative/ Marine Conservation Centre

in Pisco, Paracas

Southern Peru

Architecture Plans, Location, Technical Details, Logistics and Costs

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Short introduction

On August 15, 2007, a terrible earthquake with a magnitude of nearly 8 on the Richter scale struck southern Peru. Its epicenter was located in the Pacific Ocean off the city port of Pisco. In just 3.5 minutes, nearly 80 percent of the city and large parts of the Ica-Paracas region were devastated, leaving damage, death, pain and more poverty. By this strong earthquake also the Environmental Interpretative and Marine Conservation Center in Pisco (operated by ACOREMA, supported by GRD) was destroyed, the heart of our joint marine conservation project. Until today it could not be rebuild. The dolphin conservation work and school projects could be continued on a lower level, a small office was rented therefore. But for the future a new Centre is necessary to long term establish Nature conservation efforts in Paracas.



The former EIC/Marine Conservation Centre was destroyed by the Earth Quake 2007



Nearly 70% of the Town Pisco was destroyed, too

Among that many school buildings; lessons must be held outside



Living conditions after the Earthquake

Building a new Environmental Interpretative/ Marine Conservation Centre

I. INTRODUCTION: THE HISTORY

The former EIC/Marine Conservation Centre - what was lost and why it is so important to have a new one

In 1998 ACOREMA opened a small Interpretive Centre in Pisco, a coastal town in southern Peru, to show the marine life and the conservation problems it faces. Through the time the Centre was growing in expectations and interest by the visitors, becoming the only environmental interpretive centre of its kind in Peru. The aim of the Centre was to raise awareness about the coastal and marine environments, with emphasis on threatened species such as dolphins, whales, Humboldt penguin, Peruvian diving petrel, marine otter, marine birds and sea lions. Between the years 2000 and 2006 the number of visitors averaged 9,000 / year, including local and national students, teachers, scientists, undergraduates, guides and tour operators, fishermen, authorities, park rangers, tourists (both national and foreign) and local residents.



In a visit to the ACOREMA Environmental Interpretive Centre one could find information on the Peruvian marine ecosystem, its richness and resources, how important is the sea for the country's economy and how everyone's actions may either save or jeopardize threatened species and the marine environment that support all life. The presence of the Paracas National Reserve was highlighted as the main marine protected area in the country. Information was presented to visitors in a clear, concise and friendly language directed to all publics, each theme motivating to reflection. To accomplish this, diverse visual elements were used, including panels with raised texts, infographies, pictures and interactive spaces, three-dimensional models of marine species (both full-

sized and scaled) and the complete skeleton of a young humpback whale. The visit, which could be self-guided or assisted, was complemented with lectures, conferences and video sessions on the themes of the Centre, as well as free distribution of informative materials (leaflets, booklets, teacher guides, stickers, posters, etc.). Artwork on marine issues made by local children and youngsters were exhibited in a designed area, and there was a space where they could use a computer and basic equipment to analyze the samples collected during their field trips. Besides, the Centre provided access to a marine issues library as well as advice and guidance to conservation initiatives proposed by the visitors.

The location of the Centre was strategic. The Pisco – Paracas area embrace the territory of the **Paracas National Reserve**, the main marine protect area in Peru. This Reserve and the Ballestas Islands (now part of the new System of Guano Islands, Islets and Points National reserve) receive each year about 100,000 visitors, both national and foreign. With activities directed to this public, the Centre was able to expand the coverage of the conservation messages about the marine biodiversity and the threatened species. Once its existence was known, several visitors from cities such as Lima, Ica, Chincha, Ayacucho and others chosen the ACOREMA Centre as a “must to see” place in Pisco. Some of the main private schools and universities from Lima scheduled annual visits to the Centre as part of their study trips to the Pisco area.

II. IMPORTANCE OF THE ACOREMA CENTRE

During its existence (November 1998 – August 2007) the Centre had a positive impact in education and awareness on marine conservation beyond the limits of Pisco. It leads the first steps in the process to insert quality marine education in the regular education system. This was an important issue to be imbued in the educational system in a location where several economic activities depended on the marine biodiversity and where students finishing the school would continue studies on or would become directly involved in economic activities linked to the use of marine resources, either through the tourism, the fishery or providing services to these. Being in a coastal province, the students from Pisco and by extension de general public need to know the marine resources they have available, the relationships between the several elements of the marine ecosystem, how these sustain a large part of the province’s economy and the impacts that these activities may have on their source of incomes if not conserved on a sustainable way. The information included in the Centre came from studies carried out by ACOREMA in the area, so visitors could have a better perception of what was happening right outside their urban limits.

The Centre had an important effect as a link between the community and the ocean; favoured discussions that in many cases resulted in planning and implementation of actions to help mitigating threats to the marine biodiversity. It sowed in the children and adults values and the interest for the marine environment, the change of attitudes, consumption habits and the development of activities for the benefit of the marine life and the environment. It turned in a very much appreciated place, especially for the local community.

III. THE 2007 EARTHQUAKE IN PISCO

The situation of the ACOREMA Environmental Interpretive Centre dramatically changed on 15 August 2007, when a 7.9 Richter scale earthquake destroyed almost 80% of Pisco city, the epicentre of the disaster.

In Pisco, several blocks of houses fall off, large buildings like hotels, churches, banks, hospitals, firemen department, and most schools either collapse or suffered severe damage.

The former church in Pisco was destroyed, many people died inside



Among the affected buildings there was the ACOREMA Environmental Interpretive Centre that collapsed in less than three minutes. As a result of the earthquake, most exhibits at the



Centre were destroyed by the collapse of walls and part of the roof; the conference room disappeared, the library and offices were so damaged that made very

risky the later work to recover the books and furniture. The recovered goods were transported to Ica (some 50 km south of Pisco) and kept at a member house. Soon after the disaster, ACOREMA dedicated efforts to help the people living around the Centre, whose homes were lost and from which many of the children visited the Centre on a regular basis.

IV. THE PROJECT FOR THE NEW ACOREMA CENTRE

Despite the Centre lost, ACOREMA reassumed its activities immediately after the earthquake, organising distribution of food and kitchen sets for the children's families living in tents in the streets nearby the Centre. Also, in a joined effort with the Paracas National Reserve rangers, puppets shows were taking to the main camps to provide some relief to the children that lost their homes.



After a few months a small office in downtown Pisco was rented and lectures on marine species were dictated again, this time visiting the local schools, a practice that continues to the present. However a recurrent question arose from the children: *When the ACOREMA Centre will be open again?* The local children expressed their concern of about the fate of the old Centre and their wish to have this facility again.

Also, several groups from Lima and other cities called asking if the Centre was operational and if they can program a visit to the facility. With all this in mind and considering the already strong relationship with the community, it was decided to build a new Centre in a new location that will be named *ACOREMA Marine Education Centre*. Between 2008 and 2010 achievements on this respect include:

The campaign, which represents a sum of efforts, seeks to fulfil the aim of building a new Marine Education Centre in Pisco that takes the best of the old centre incorporating the modern tendencies of sustainability in both the physical and the educational aspects.

Advances

Nearly three years after the earthquake and thanks to the support from individuals, companies, organizations and schools that chosen to be part of this effort the achievements are:

- Purchasing of the land needed to build the new ACOREMA Marine Education Centre just two blocks from the Pisco Main Square (Progreso Street N° 374, 376 and 378).
- To contract an expert team on sustainable building for the architectonic and museography design to carry out soil studies and elaboration of building plans for the new Centre (including plans for architecture, earthquake proof structures, electricity and plumbing). The design incorporated renewable energy systems (solar panels), energetic efficiency, and proper use of the water, air quality and thermal comfort. On each aspect the Non-toxic Building Materials Inventory was followed to avoid including hazardous materials in both the building and the exhibits. Part of the expert team developed the interpretive script and the museography plan for the Centre.
- Submission of the “Technical Dossier for Building the New ACOREMA Marine Education Centre” to the Pisco Municipality.
- Approval by the Pisco Municipality of the “Technical Dossier for Building the New ACOREMA Marine Education Centre”
- Obtaining the building permit for the new ACOREMA Marine Education Centre.

Current stage

The new ACOREMA Marine Education Centre could be a reality. The previous steps were completed and now the effort is dedicated to the building stage. This represents a great challenge in terms of endeavour and funds for all of us who share this dream ad for all those choosing to make them theirs. A total of 691 square meters need to be build. Sponsors are needed and Donations to this end are welcomed and appreciated.

ACOREMA is respectful of the Peruvian laws regarding non-profit associations and reception of foreign support. The National Tax Administrative Superintendence (SUNAT) includes ACOREMA in the *Good Taxpayer Group*, in merit to its efficient accounting management in accordance with Peruvian legislation. As always, all donations will be used for the purposes requested.

ANNEXES

Architecture Plans

Please find the Architecture Plans for the new ACOREMA-Marine Conservation Centre on the following pages. Regarding the Centre, these have been designed following the concept of green building. This means that the materials will not include those considered toxic (especially paints and varnishes). To this end the Toxic Materials Inventory was the guide for alternative, ecologic building supplies. Planning for using renewal energy systems are also a priority, and the recycling of wastes will follow the Ecosan international guidelines.

Besides the conservation benefit, the ACOREMA Centre is foreseen as a model for building ecological, sustainable structures in a city like Pisco, where reconstruction after the earthquake needs to follow patterns that will help mitigate the level of destruction faced by this area.

Location

Southern Peru, City Pisco: The new EIC will be built two blocks from the Pisco Main Plaza, a place in downtown among the safer zones in Pisco. Around the Centre are placed homes, restaurants, stores, banks, schools, National Police and Municipal police

For more information and a map see

“Technical Details about the Environmental / Marine Conservation Centre in Pisco – Peru”

Total Building Costs

Considering the construction of the facility and all the finishes including water-saving sewage, solar pannels and green/living roof the total cost is US\$ 460,000.00 (ca. 360.000 €). The building time once the funds are available would be around six month.

For more details please see the following budget.

Construction of the Interpretative/ Marine Conservation Centre in Pisco Paracas

BUDGET BY SPECIALTIES

(costs rounded to the nearest one)

Item	Description	Cost (US\$)	Cost (Euro) *
1	Architecture (include doors, windows, greenroof, finishings)	162,750.00	125,029.00
2	Structures	215,818.00	165,797.00
3	Electricity system (include solar panels)	47,787.00	36,711.00
4	Plumbing (including ecological sanitation system)	19,115.00	14,684.00
5	Administration, supervision during construction, management, visits, banking	30,000.00	23,046.00
	TOTAL (US\$)	475,470.00	365,267.00

(*) 1 Euro= 1.3017 dollars, January 2012