

# **Volunteering in Zavora**

**Helping to build a sustainable Marine Research and Education  
Centre in Southern Mozambique**

[www.zavoralab.com](http://www.zavoralab.com)



**Eco-Center Volunteer Project**

**Mozambique**

**2012**

## **Association of Coastal Conservation of Mozambique – ACCM**

### **Zavora Marine Lab.**

#### **General Information**

**Background:** Zavora Marine Lab. (ZML) is a small but dedicated research station working with marine and coastal conservation and education in one of the most beautiful and important areas for marine biodiversity in Mozambique. The Lab is in its third year of operating, and has already achieved outstanding results leading to important changes benefiting both the local marine life and the environment. The Lab, under the leadership of Iemanjá – a locally founded conservation organisation, is the research branch of newly founded NGO, Association of Coastal Conservation in Mozambique (ACCM). The Lab is funded mainly through monthly running internships, as well as international funding for individual projects.

**The Project:** To better facilitate our important research and environmental education for the area, we are now, together with Architect Andreea Gross who is specialised in sustainable building, designing a unique marine research and education centre using eco-friendly and zero-waste techniques. The eco-centre will be designed to use environmentally friendly techniques that are simple but well planned to reduce environmental impacts during both the construction phase and whilst the centre is operating, and constructed using sustainable and/or reusable local materials. For example, the walls will be made using compressed earth bricks, glass bottles and coconuts divisions, whilst parts of the foundations will contain pieces of litter collected during our monthly beach clean ups. Furthermore, we intend to fully maximize the use of natural light and ventilation, we will utilise the benefits of dry toilets, as well as employ a solar powered system which will ensure that the principles of sustainability in regards to climate change will be enforced.

**Social and economic benefits:** Being situated in a small village in one of the poorest countries in the world, social and economic benefits for the community is of high importance both during the building process, as well as after the centre is

completed. During the building phase, local community members will gain knowledge about the use of alternative building recourses including re-using materials, and get experience in sustainable building techniques. The glass bottles used for parts of the construction will be purchased through local waste management association ALMA, and thereby directly supporting the families associated with this organisation. Once the building is completed the centre will provide free weekly activities and workshops to engage and educate the local community and tourist alike in topics like coastal ecosystems, marine life, and sustainable use of natural resources.

**The proposal:** The building of our research and education centre will commence in March 2012, and we will need the help of capable, dedicated and energetic architecture or construction students (or others with relevant knowledge and experience) to supervise and assist in the field with the construction of the centre. We invite you to volunteer for a period of time (a minimum of 1 month is recommended) between March 2012 and November 2012. In return you will gain invaluable experience in the sustainable architectural field, as well as helping with conservation efforts in Mozambique. You will experience the pleasures as well as the hardships of living and working in a remote but stunning coastal village in rural Africa. You will be working 5 days a week, and can spend weekends exploring the wonderful area either above or under water! We offer simple tented accommodation during your stay. Should you want to stay in a room, we can help you arrange accommodation in a lodge at your own cost. Activities in the area include; Diving (reduced prices on dives and courses for volunteers), Ocean safaris with a chance of seeing Humpback Whales (june-november), Whalesharks, dolphins and more, Horseback riding, walks, birdwatching etc.

Dear volunteer, please keep in mind that we are a small group of conservationists and scientists, we are dedicating our life, time and energy to raise conservation in Zavora as much as we can. However, as scientists, we have limited to none knowledge about building. That is why we need you! With your help we are able to join different skills to make valuable changes. Your role in

Zavora will depend on your experience, but will range from daily building tasks, to training local people and manage the team.

The volunteer opportunity is a win-win situation where volunteers get practical experience and effectively helps to our conservation projects.

### **For all prospective volunteers:**

It is important to recognise that the project will demand a significant level of dedication from the participants. The project is challenging, but both enjoyable and exciting.

### **Financial support**

Unfortunately our financial resources is extremely limited, so as much as we would love to provide some financial assistance to reward your efforts, it is impossible for us as we are using all our resources to buy materials, to do the paperwork, etc. However, we can offer you a lifetime experience and we can guarantee that your efforts will be well used to conservation in Mozambique.

### **What can we provide?**

- Basic camping style accommodation on the land
- Free pick up on the 15<sup>th</sup> of each month at Inhambane airport or Inharrime town
- Discount on dives (through a partnership with Mozdivers)
- Free weekends to enjoy the beautiful natural areas
- We can arrange local food once per day, six times per week per 2000Meticaís

### **How do you apply?**

To apply please submit your CV and the Application Form to [yara@zavoralab.com](mailto:yara@zavoralab.com)

## **F.A.Q. (Frequently Asked Questions)**



- **Eligibility?**

The volunteer opportunity is designed for architectures, engineers and students from related areas aiming to effectively help conservation and to get practical experience in sustainable building in developing countries. You must submit your CV and application form.

- **For how long?**

We suggest a period minimum of one month but longer period is better. We are calculating that the whole building project should take from 10-12months.

### **Where?**

The land is about 800m from Zavora Beach, in southern Mozambique, approximately 1.5 hours south of Inhambane town and 9 hours north of the South Africa-Mozambique border. We are a remote destination with the closest town (Inharrime) around 30km away. Apart from mid-December to mid-January Zavora is very quiete and peaceful. It is an excellent place for people that enjoy close contact with nature and explore untouch reefs.

The location of the land was estrategically selected because is in the village closet o the local community, facilitating the educational projects and at the same time in a walk distance to the sea, where we develop our research projects.

- **How to get there?**

The best way to arrive in Zavora is undoubtably by flight. You can fly from your home to Johannesburg and from Johannesburg to Inhambane Airport. At this time LAM is the only company that flies to Inhambane. You can buy your ticket on-line at [www.lam.co.mz](http://www.lam.co.mz) When you book your returning flight, always consider a few extra hours in Maputo or Johannesburg since LAM is often late with the local flights.

A cheaper but a lot more tiring alternative is to get a 'chapa' from Maputo. You can also catch a shuttle from Johannesburg all the way to Inharrime, although this

option is not available everyday and can also be a bit difficult to arrange. For more information you need to contact Rudi by facebook (Shuttle Mozambique) or try one of his phone numbers. Unfortunately getting an answer from him can be sometimes challenging...

Rudi's contact is

+27 828291540 (South Africa) or +258 827576540 (Mozambique)

Email: [rudi@shuttlemozambique.co.za](mailto:rudi@shuttlemozambique.co.za)

For international flights we suggest you use the website [www.skyscanner.com](http://www.skyscanner.com) to find out the best prices available.

- **Arrival dates and arrangements:**

Pick-ups and drop offs on the 15<sup>th</sup> are free. Volunteers arriving or leaving outside this time will be required to arrange transport from the airport to Zavora our pay the costs of the petrol (1300Meticais – one way).

- **How much money should I bring?**

There is not much to spend money on in Zavora apart from a small souvenir shop, the bar and the restaurant. However, you might like to spend 2 days in Tofo to do Ocean Safaris or party, or go diving so depending on the applicant habits and lifestyle, we suggest to bring about (US\$500-800) for their souvenirs, dives, excursions, entertainment and other personal daily needs.

- **Can I cancel or change dates?**

Due to the number of applications and our need to organize the volunteers, we do not welcome cancellations or date changes after the final confirmation has been sent to us. Please, make sure that the dates you indicate in your application form suit your own schedule/budget before applying.

- **Do I need a VISA?**

Yes, but you can get it at the border. On entering Mozambique, you will be issued with a one month VISA (around US\$80: it can vary). The border visa is easier than applying from home but is only valid for 30 days, although extendable for another 30 days. If you get the tourist border visa and wish to stay longer you will need to

extend it in Maxixe (100 North from Zavora) or do a trip to the border at your own costs. If you plan to stay longer we recommend applying from your home and request a 3 months visa single entry. When you apply please highlight in the application form that you will be far from the border and therefore you would prefer a single entry harder than a multiple entry. Usually they give you a 3 months visa if it is single or multiple entries (which you will need to renew at the border every 30 days) will depend on how luck you are and your Embassy.

For volunteers who buy a one way flight we recommend to consult your airline and the Mozambican Embassy in your home country to ensure that you can get your visa at the border.

- **Do I need any specific vaccination or medication before coming to Mozambique**

Zavora is located in a malaria zone, some volunteers may prefer to use prophylactic medication, while others prefer to protect themselves using repellents and a mosquito net. It is up to you. Recommended medicines are: Malarone (side effects: damages liver so it is advisable to drink alcohol in small quantities or, even better, avoid it), or Doxycycline (side effects: short periods of increased photosensitivity, thus recommended to be taken around dinner with food). Malaria tests and treatment are also available on site. Bear in mind that SCUBA diving whilst using some prophylactic medications (such as Larium or Mefloquine) is not recommended – your choice of medication should be made accordingly.

In any case it is recommended to bring mosquito repellents to be used mostly during dusk and dawn periods.

Please consult your doctor for any other recommended vaccinations.

- **Do we have days off?**

Yes, you will have all the weekends off to enjoy Zavora or visit other places around.

- **Facts related to Zavora remoteness**

The remoteness of Zavora is what makes this place quiet, special and unexplored. Many things that for you might be considered basics (e.g. cheese, ham, red meat,

coffee), are luxuries here. We are about 30km from the closest town – Inharrime. Mozambique is classified as a least developed country (LDC), being one of the 20 poorest countries in the world. We are far from the capital, which means that products are scarce. Inharrime town, where we do the shopping is very small and a typical 'African village'. The only things that you can buy there are basic clothes and food such as: seasonal vegetables and fruits, chicken, eggs, rice, beans, pasta and milk (not always). You are therefore advised to bring everything that you need apart from basic food. Products such as batteries (apart from very poor quality AA), repellents and sunscreens are NOT available there.

- **Food Arrangement**

Unfortunately we cannot provide food for volunteers, but we can arrange a lady to provide local meal once per day, six times per week for a very low price (2000 Meticals per month about 75 US\$). She follows a week basic routine and cooks meals like pasta, chicken, matapa (a kind of spinach made with cassava leaves), cassava, etc. Moreover we can provide transport to Inharrime town once every 2 weeks to buy supplies.

- **Accommodation**

We provide simple camping style accommodation with beds and basic facilities. However if you prefer a different kind of accommodation we can organize for you at one of the lodges at your own costs. Please advise us if you prefer this option.

- **Electricity**

In Zavora there is no main electricity. The local community lives under the lights of the stars, but we are lucky enough to have electricity powered by solar panels. However solar power has its limitations, so please bring a torch (with lots of batteries!!!). Be aware that our actual solar power system will not give you as much electricity as at your home, but will allow you to recharge camera batteries and computers. At night, enjoy light from the oil lamp and the stars...

- **Money exchange**



You are advised to change your currency to the Mozambique Meticaís when arriving in Mozambique. You can also withdraw cash from the ATM in the closest town once every two weeks (VISA card normally works better than other cards). Few places as Zavora lodge can accept credit card, but a fee of 5% applies and the machine is not always working. The lodge can accept other currencies but the exchange rates are worse than in the bank. Please take care if changing money with people on the streets or at the border crossings.

### **A bit more about the history of the project**

We had a dream and an idea to share, that is how all started. ZML gives a weekly talk about the Marine Life at Zavora Lodge (where we are temporally based). During these talks we share our knowledge and our dreams and that was during one of these talks that we met Andreea Gross, and decided that we would make the eco-center happens doesn't matter what. The land process and paper work took over a year as things in Mozambique are not always easy and the paperwork process is particularly slow, but finally we are now ready to start. The actual challenge is to build an exemplar center that is environmental sustainable with very limited resources (mainly from donations and personal efforts).

We have being for years voluntarily dedicating our time to conserve the natural resources and increase environmental awareness in this remote place of Mozambique. Our biggest challenge has always being to not have a proper space to develop our projects. For example, it is very hard to do regular indoor activities (e.g. talks and workshops) with local communities as most of people feel shy to go to the lodge. Also to continuous with our projects in the long term we must make the center financially sustainable, the actual costs of being based in the lodge is too high and many times we end up spending our own resources if when don't have more two interns. The eco-center is a big step for us and surely will have magnificent positive impacts in the area and to our long term goals.

### **Social Benefits**

#### **Capacity Building**

We are inviting national architecture students to be involved in the project. Their involvement is critical to improve Mozambican practical skills about ecological building techniques, a new trend all over the world. This is an excellent opportunity to ensure that Mozambicans will be well qualified to engage in this new way of sustainable planning and development.

The socio-environmental benefits do not stop with the building project. Environmental education is crucial to raise the level of understanding about environmental issues and allow people to take decisions based on robust knowledge. For us, education is the baseline of sustainable development.

### **Economic Sustainability**

To keep the center economically sustainable, an internship program has been designed. Two to three international students paying a fee to stay in the center whilst doing an internship in marine science. This fee is used to cover part of the research and education costs as well as the costs of hosting one to two Mozambican science students.

- Interns will also help on data collection, environmental education projects and fund raising.
- **Diving - What can we see?**

Diving is the greatest attraction in Zavora, so we decided to include here a bit of information on what can you see. Zavora is a world class destination with miles of pristine sub tropical reef, much of it still to be explored. Over 250 fish species have been identified to date. Zavora marine life is extremely rich from mega to macrofauna. Our fish assessment added seventeen new species to the fish species record in Mozambique, proving that there are lots to be discovered!

#### **Megafauna**

##### ***Manta Rays***

Both species of manta ray (*Manta birostris* and *Manta alfredi*) are present all year round in varying numbers with periods of huge abundance. November to January seems to be the time that Mantas begin to engage in

mating behavior, with the opportunity to see many males chasing a female in a long 'train' across the reef.

### ***Humpback whales***

June to November is humpback season and to see these 16+ meters long animals from the boat or even on SCUBA is a real thrill. Every year we get multiple encounters in the water with these whales, and their song can be heard continuously on most dives. They are here to calve and breed so we also regularly see young calves as well as jostling bulls.

During land survey in 2011 we noted up to 60 humpback whale sighting per day. The whales were observed in groups, alone or with calves and we witnessed some spectacular behaviour, such as breaches, tail slaps and rolls.

### ***Sharks and Rays***

We have unfortunately seen a drop in numbers of larger shark sightings, probably due to fishing pressure, but we still do get encounters with Zambezi, Spinner and Hammerhead sharks on our off shore reefs. We can also see Bow Mouth Guitar, Leopard, Nurse and White Tip reef sharks as well as Jenkins, Fan Tail, Shovel Nosed and Eagle rays, to name but a few. Whalesharks are also present and we see these magnificent fish from time to time, more frequently in our summer months.

### ***Sea turtles***

Five of the seven species of sea turtles can be seen in Mozambique waters. Encounters with loggerhead, hawksbill and green turtles are frequent. Massive leatherbacks have been spotted in Zavora a number of times, particularly in November. From September to March is the nesting season and you might be lucky to see a turtle coming up from the water during a night patrol.

### ***Macrolife***

The macro life here is stunning! With over 120 species of Ophistobranch recorded, 7 of them yet undescribed, this is definitely 'Nudi heaven'. On our top Nudibranch inshore reef, scientific data shows an abundance of 1.2

Nudibranchs per 2 square metres. That equates to a lot of sightings in a single dive.

Mantis shrimps, octopus, pipe fish and many other little creatures are also often seen on the reef tops or hiding in a hole.

### ***Wreck***

The wreck of the Klipfontein is a big draw for the technically minded diver. A 10500 ton, 160 metre long ship, lying in 53 metres of water, she is more than your average wreck. Brindlebass, mantas and large schools of fish are often seen here, and there is plenty of opportunity for penetration. At 6 km from our launch, she is on the doorstep, and as no one else dives her, exclusive.

Please note that diving the Klipfontein requires either previous certification in decompression diving, or is as part of an IANTD Advanced Nitrox, or higher level course, conducted here in Zavora.

### **Environmental Benefits of the project:**

- The building will use eco-friendly techniques that are simple but well planned to reduce environmental impacts during the construction phase, as well as when the center is operating. The main materials used for the structure of the center will be glass bottles, wood from old and non-productive coconut trees, other recyclable materials, a small amount of cement and rocks. The combination of coconut wood with glass bottles will be a national and international example of sustainable use of natural resources and might be replicated in other areas reducing environmental damage.

### **After Building Project**

- After the building is completed, the center will be the base for marine studies and environmental education programs on Zavora Beach. At the center tourists and local communities will participate in talks about marine

life, workshops and training in sustainable use of natural resources. The Association for Coastal Conservation of Mozambique will also use the center for meetings, workshops, training and exposition of projects. The center will provide accommodation and facilities for science students to develop their projects on Zavora Beach.

- **How can I get more information?**

Further information is available on the Zavora Marine Lab. website: [www.zavoralab.com](http://www.zavoralab.com), or by writing to [yara@zavoralab.com](mailto:yara@zavoralab.com).