

## 2018 Africa Regional Advanced Workshop on Environmental Compliance and Environmentally-Sound Design and Management—Maputo, Mozambique

### Site Descriptions

Site	Description	Photos
<b>Wastewater Treatment Plant - Infulene</b>	<p>This site is the existing wastewater treatment facility in Maputo. Storm water from western and northern Maputo are collected to a drain that discharges into built wastewater ponds vegetated predominantly with <i>Typha domingensis</i> and <i>Hydrocley nymphoids</i>, for a natural breakdown of nutrients. The wastewater is then allowed to drain to a channel which discharges into the sea. No evidence of water quality monitoring to verify the amounts of nutrients prior to discharge at the sea. The site is surrounded by vegetable farms, which the farmers are irrigating with water from the ponds. Raw sewerage and sludge from private septic tanks are discharged to the site by trucks that bring the sewage from other parts of Maputo.</p> <p>The site is located about 30 minutes from the Southern sun hotel (average traffic)</p>	

			
<p><b>IIAM – Agricultural Research site</b></p>	<p>IIAM is located in Boane, which is approximately 35 km from the Southern Sun. This trip one-way would take approximately 1 hour and 20 minutes from the Southern Sun Hotel. IIAM benefits from USAID funding for research programs in USAID zones of influence (northern and central Mozambique) specifically in seeds production and dissemination of technologies amongst farmers. IIAM in Boane – Maputo, the proposed site received funding as part of the FTF Trilateral project (Mozambique, Haiti and Honduras) supported by US and Brazilian government to disseminate technologies in agricultural production. Funds were used to promote research at IIAM in Boane and now other funding sources are supporting the initiative.</p> <p>The IIAM group is conducting some interesting research into impacts of Fall Armyworm (FAW) on corn (with a controlled trial of multiple treatment combinations that include different varieties of corn and different types of pesticides). They also have good-sized plots with other crops, e.g., tomatoes, bananas. And they are teaching students and farmers about drip irrigation and growing seedlings in greenhouses.</p>		
			
			

Peak agricultural production will be in May during the workshop.



**Manhica  
Health  
Research  
Center—  
Centro de  
Investigação  
em Saúde de  
Manhica  
(CISM)**

The Manhica Health Research center (CISM) was created in 1996 to promote and conduct biomedical research in priority health areas. Since its creation, the center has been developing its activities under a bilateral cooperation program between the government of Mozambique and Spain, and with the support of the Hospital Clinic/Universitat de Barcelona (through the foundation Clinic per a la Recerca Biomedica).

Research areas include: malaria, HIV and AIDS and STD, Tuberculosis, Respiratory Infections, Bacterial Diseases, Diarrheic diseases and other areas.

USAID/Mozambique has been funding the CISM project for Support to Malaria and Maternal Neonatal and Child health (MNCH) project that has been working to produce vaccine against malaria.

CISM has also been working on malaria research to test the different pesticides with a view to determining the most effective insecticides to control malaria in different provinces and districts of Mozambique.



The Research site is located adjacent to the *Manhiça* district hospital and the project has been dealing with all cases of malaria and maternal and neonatal child health in support as part of research as well as supporting the district hospital.

The site is a well-equipped lab with an effective system for management of waste resulting from testing and treatment of diseases including malaria, HIV and Tuberculosis. Hazardous waste (used needles, sharps, and anatomical waste) is normally incinerated at the site in an existing incinerator under the responsibility of the District Government Hospital. Non-infectious waste (such as domestic waste) is directed to local municipal landfill/waste dump site).

There is an EMMP covering waste management and disposal for USAID-funded activities at CISM.

About a 90 min drive from the Southern Sun.



**Waste dump  
– Hulene**

For many years this site has been used as a waste dump for the Maputo city. With urban growth and demand for land the vicinities of the waste dump is surrounded by many households most of which are dedicated to the waste collection as source of income. More than 5 years ago, the municipal government identified the need to close the waste dump site due to public health issues, and this led to procurement of funding source to build a new landfill site. This initiative is being supported by the South Korean government, and led to identification of a new site to build appropriate landfill.

During the peak of the rainy season in February 2018, a waste slide event crushed buildings adjacent to the waste site and 17 people were killed. The waste pile is more than 15 meters, and the wet conditions shown on the pictures were taken from the lowest point of the waste dump and could be associated to leachate collection. The municipal authorities are currently fixing a gravel road that was washed during the rubbish slide and kids could be seen walking from and to school at the site, obviously unaware of any health implication.

There is also an active collection of PET materials which are exported to China.

About 20 mins from the Southern Sun

