

(Excerpt from the article in “EM Journal” published by [EM e.V.](#) in Germany)

## APPLICATION OF EM™ IN HAITI

~Before and After of the Earthquake 2010~

EM™ (Effective Microorganisms™) has brought to Haiti on 2004 by Ms. Paula Iten who belongs to an NGO. With her experience and knowledge of EM™ application, she provided disaster assistance at Port-au-Prince, the capital of Haiti, damaged by a huge earthquake in 2010.



AEM is sprayed to human waste to reduce the foul odor and prevent infection.

### « A talk from Ms. Paula Iten on 18 April, 2010 »

It was 7 years ago at Port-au-Prince when I met EM™ through a friend of mine whom I have not seen for the past 30 years.

At first I obtained EM·1® in Switzerland, 2004, and I made Activated EM·1® (AEM) and brought it into Haiti, and later I also brought EM·1® and EM™ ceramics products. I became a member of IGEM, a Swiss NPO group and conducted seminars and site visits frequently there.

I met many people from various countries, who are engaging in EM™, at the “EM Festa” held in Germany 2006, and I especially kept in touch with people from Earth University, Costa Rica and later visited Earth University two times.

### The emigration to Haiti in 1970s and the start of using EM™ from 2004

Haiti is a country recognized as poor and prone to earthquakes, but the earthquake happened in 2010 was extraordinary. I did not even know what I could do for the damages due to the disasters without AEM, EM·X®, and other EM™ products, ceramics powder.

From February 2010, I was able to purchase EM·1® from the Dominican Republic because EM·1® was started to manufacture there a year ago. Until that time, I had to purchase EM·1® from the United States at an extremely high cost because there was no economic exchange between Costa Rica and Haiti.

The activities with EM™ in Haiti were reported in the “EM Journal” in 2007.

I started to organize a seminar for the young at Environmental Center in Bassin Magnan, a town 12km far from Gonaives (150km north from Port-au-Prince). People can learn the ways to separate

trash, plant trees, or make compost/Bokashi for environmental conservation, and the Center offers some other projects as well. However, because Haitian people usually do not get attracted to new things, the dissemination of EM™ did not go well at the beginning.

In the middle of year 2006, two trainees who knew how to use EM™ joined the Center. With their knowledge, EM™ was applied to grow herbs, young trees, and vegetables. The trainees participated in various seminars, and now they can give a seminar by themselves with themes focused on how to make AEM and EM™ Bokashi, the applications of EM™ to soil and vegetable farming, and etc.

Not only EM™ seminars are given in the local language, but also many materials/handouts for EM™ application are also available in the local language. There is a small EM™ shop. Moreover, a volunteer group I co-founded 15 years ago received financial assistance in 2008 so that we could give a group of women, which belongs to the volunteer group, a lecture about EM™ application in livestock such as rearing of goats, horses, or donkeys. Also, animals increased their natural hearing ability in order to add EM to their feed: For example, to rinse with AEM and treat with a mixture of aloe vera and EM™ ceramics powder when injured helps to heal up fast.

Not only working animals, but also EM™ is applied to pigs, rabbits, or birds. In fact, it is not easy for birds to survive in this area, but I feel that they have been getting to overcome the environmental disadvantage in giving them AEM with water.

### **Natural Disasters**

- ◆ Hurricane Jane gave a serious damage to this area on 11 September, 2004. At the same time, more than 3,000 people lost their lives due to the flood happened along with the hurricane. The foul odor, a big problem in the affected area, was reduced with EM™.
- ◆ After 4 years later, in September 2008, 4 hurricanes hit this town; the largest of them caused one thousand deaths. EM™ gradually spreading among people was used in hospitals, clinics, and schools, and it was used to reduce foul odor even in police stations and prisons as well.
- ◆ On 12 January, 2010, the massive earthquake hit Haiti, and it made headlines around the world. I myself survived in Port-au-Prince and realized that EM™ was the best way to support the affected area.

### **Diary of the earthquake in Haiti on 12 January, 2010**

#### ➤ The First Day

First, I managed to obtain a car and went to bring EM•1® and molasses, and my next task was to make AEM. After making it, I filled the small bottles up with AEM and gave out the AEM to people

who were carrying the remains to tombs.

➤ A week later

Tents, trash cans, and temporary restroom facilities were placed at many affected areas. I heard from the International Red Cross that there was the foul odor coming from the temporary toilets. So, we started to spray AEM to the toilets; however, we could not cover the whole area because there were more than 400 of them there.

We also sprayed AEM to the remains giving off an unpleasant odor in cooperation with the Ministry of the Environment. Moreover, the Ministry of Public Health used AEM for control of communicable disease.

➤ Three months later

Although we applied a couple tons of AEM so far, there still existed a problem to solve how we could distribute AEM throughout the country.

Luckily a sugar factory was resumed its operations; therefore, the sugar could be delivered not only for making AEM, but also for helping the children suffering malnutrition.

I will proactively work on utilizing EM in a temporary drinking-water making machine, which WHO recommends in the future.

In the name of EM Haiti, I would like to thank you all EM people for the spontaneous support for people living in difficult circumstances here in Haiti.



Spraying AEM to garbage dumping sites  
in 2008



Spraying AEM to temporary toilets



Garbage giving off the foul odor in tropical temperature. This is where EM™ should be applied.



EM™ was used in temporary tents due to poor sanitary conditions.



Many buildings were destroyed.



Collapsed Presidential Palace



Plants cultivated with EM™ at the Environmental Center



Conducting a lecture on environmental education at the Center