

5

Environmental Awareness and Education in The Gambia

Michael Scott Sigelman

As the traveler who has once been from home is wiser than he who has never left his own doorstep, so a knowledge of one other culture should sharpen our ability to scrutinize more steadily, to appreciate more lovingly, our own.

-Margaret Mead

What Africa is to Me

A trip to Africa had been a dream of mine for many years. From about the age of ten, I dreamt of traveling around the world, with my first stop in Africa to see the wildlife and meet the people inhabiting the vast continent. Then as I grew up and began showing an interest in anthropology as part of my future, it occurred to me that I still wanted to go to Africa, but for even more reasons than previously.

Africa, to me, is where I should go since it is where human existence all began. My visions of Africa were filled with many types of wildlife, vast wilderness areas comprised of deserts, oases, mountains, and long stretches of land sprinkled with knotted, twisted trees. I could sometimes see an elderly man teaching his great-grandchild about life, sharing all of his wisdom, the result of a lifetime of trials and triumphs.

In a sense, I got most of that in my five-and-a-half week experience. I got to see beautifully silhouetted trees in front of a setting sun surrounded by an endless stretch of land. There were all varieties of landscapes everywhere we went, sometimes full of many people, and other times completely empty, providing evidence for my stereotypical view of an “empty” Africa. Quite often I saw the elderly either in the streets of a market or walking on a dirt road, and as we got closer to each other, I got to look at that individual’s face, which always seemed to have a story to tell. I got the chance, although usually just for a few seconds, to take a really good look at them and see into their eyes. It sometimes felt as if I was back in a time when people were just learning about human diversity, mainly because this was my first experience in Africa, and I was ‘doing’ real anthropology. I began to imagine that this was only the beginning of many more trips and experiences in my career in anthropology and Africa.

Going to Africa where it all began was in a sense both an experience and an honor for me. It was an experience because it was my first time, and hopefully not the last, going to a land I had previously only dreamt about. It was an honor because I was on the

continent, as vast and widespread as it was, where humans originated, migrated and diversified, and I was lucky enough to witness a tiny part of the area from which the first people later spread throughout the world.

West Africa was an experience that I will never forget. New faces, new stories, new landscapes, new people, and new friends...all of which are separated only by an ocean, and reachable through people and stories, just a bit of what makes up a culture.

Introduction

During my first full day in Africa, it took only a few moments to notice the trash heaps scattered throughout the roads, side streets, and shelters in Bakau. The ride from Bakau to the capital city of Banjul took a brief fifteen to twenty minutes by ‘bush taxi,’ what many people call the local taxis, even though some are Mercedes Benz. All around us we found school children, elderly people, tradesmen and beggars, and this same lot of people became the norm of our encounters during our five-and-a-half-week stay in The Gambia. It was not out of the ordinary to meet people at market stands trying to sell you something, claiming, “We are friends, I give you good price!” Often, little children held our hands as we walked through the streets of Bakau. Receiving a tour from the locals was a necessity in order to last in our new surroundings. During the first week, we learned about the language and culture of The Gambia through our appointed teacher, Ebrima Colley. We learned many customs of the surrounding people, such as the commonplace practice of drinking *ataaya*. This hot drink is a concentrated form of Chinese green tea, boiled over hot coals and mixed with large amounts of sugar. Occasionally, mint is added for extra taste. We experienced many events during our trip, but from beginning to end, the image that to this day still remains vivid in my mind concerns the future of their environment.

In retrospect, because of my Americanization to environmental issues and the concept of reducing,

reusing and recycling, I could not help but show concern for what was being done in The Gambia. At first, I did not know whether anything was actively being done to protect the land from being ‘trashed.’ Witnessing people throw trash onto the ground and then setting it on fire was a sight to behold. When garbage was burnt, the land and air suffered along with it. The land was littered with trash wherever we went and the air was filled with smoke. I watched people throw their trash everywhere without the slightest bit of concern for where it would end up. People would laugh at my attempts to find a trash can for my garbage, and if I could not find one, keep it in my pocket until I found a place to throw it away. Once I had disposed of it, I had no idea where my trash would end up.

During my second week in The Gambia, we headed to a



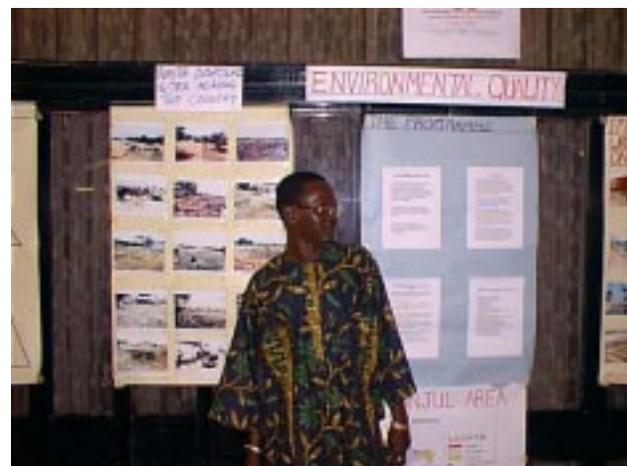
A dumping site down the street from where we stayed

conference that our professor was interested in. It was also National Environmental Awareness Day, so I retrieved some important information along with a topic of interest for my paper. By chance, I happened to notice among the many exhibits organized on the environment, one that dealt with waste management. This was the first real evidence I saw of work being done to deal with garbage and waste issues in

The Gambia. I was overjoyed at my discovery and decided that I wanted to study The Gambia’s approach to protecting their environment and whether any initial steps were being taken to rectify the damage already done.

The National Environmental Agency (NEA)

A poster that I saw during my trip to West Africa illustrated the situation that the environment is in by demonstrating three different scenes. It showed The Gambia in the past, present, and the imagined future, respectively. The past was full of all sorts of primates, wildcats and other wildlife, an abundance of trees, and plentiful land. Presently, the wildcat population has completely left The Gambia, and the plant and animal life is quickly dwindling. The future, as it is shown on the poster, looks very bleak. There were only a few trees, sparse vegetation, baboons and rodents left. When I asked some Gambian students whom I had befriended how they felt about their country’s environment, they replied that they were sad about what they had learned is happening to their land, but when they look around they do not see it happening. Surprisingly, this statement did not shock me. They did not realize that perhaps a mere three or four generations ago many more types of plants and wildlife lived in their country. It may have even been more recent than that. Although I myself do not know the exact dates when the environment began rapidly degrading, the National Environmental Agency (NEA) has obviously noted the trend in their changing environment and want to do something to make a



Solid Waste Management poster at National Environmental Awareness day

difference. The NEA put together a list of waste management options that had been proposed which are listed in order from most to least likely to be utilized in The Gambia. In that order they are: waste

reduction, reuse, recycling, composting, incineration with energy recovery, land filling, incineration without energy recovery, and encapsulation and stabilization (NEA 1997: 29).



Children at the landfill

Waste reduction can be accomplished when fewer materials are used, and thus the amount of waste is reduced. It is performed using a few different approaches. In the home, it is recommended that buying more durable goods will make less trash since they would not have to be thrown away as often. For industry, increasing the efficiency of machines and production techniques should result in using fewer materials. Finally, in the distribution services, it is recommended that fewer materials be used for product packaging, or that the reusable packaging be used (NEA 1997: 30).

In order to reuse and recycle, it is necessary for the materials to have been kept clean, since cleanliness is very important and a must for successful recycling to occur. These two processes are only an option if the cost of separation from waste or separate collection is less than the value attributed to the product. If this is so, then the total cost must be less than the cost of the disposal. Reusing and recycling are obviously very hard to accommodate for this area, although my first thought when I saw all of the trash was “Why isn’t all of this being recycled?” In the next section, recycling will be described in greater detail, including its advantages and complications.

Composting, which is specifically for organic/biodegradable materials, is also an option considered more economically viable in rural areas, since there are fewer contaminants being dumped into the trash. Trash is not regularly separated, therefore making it difficult to isolate the ingredients for composting. Retrieval of potentially useful waste materials is hard

to systematize, and therefore less advantageous to Gambians in the long run (NEA 1997: 31).

Incineration is not viable or affordable because of its great cost. The Gambian economy cannot currently accommodate the process for disposing of large amounts of trash. Burning products is also very harmful if the surrounding area is not clear of highly combustible products. It pollutes the air, and the potential problems for the people and wildlife in the surrounding areas could be extremely dangerous. Since the trash is not sorted through properly, the risks are even greater due to the highly flammable and toxic contents, such as batteries and containers with harmful ingredients, that could possibly be in the mounds of trash. Once again, the retrieval of those harmful products is unfortunately too costly to be effective. It is not thought of as an option on a large scale, even though it was proposed by the Gambia Environmental Action Plan (GEAP), the NEA and the Gambian government (NEA 1997: 31)

Landfills are becoming the most popular form of large scale solid waste disposal in The Gambia. If they are properly and efficiently managed, then they could be used to great advantage. The NEA does, however, point out that if the proper precautions are not taken, long-term damage could be done to the environment. The NEA cites contamination of the ground and surface water as one of the biggest problems, as well as the dangers of explosion due to gases leaking into the surrounding areas. The NEA has proposed a few ways to remedy these problems. They include adding a lining of clay, plastic or asphalt to the land designated to become a landfill, draining the land of water to reduce contamination and reducing running water from the surrounding areas. Next is collecting the contaminants and either removing them from the site or treating them as necessary. Another possibility that could possibly help increase landfill usage is the practice of compacting. It is very important to compact since it reduces the possibility of settling, which is extremely important if there is a plan to eventually build or farm atop the landfill. Once plans have been made about what the land is going to be used for, soil can then be used to cover the trash heap in such a way as to provide a foundation on which to build (NEA 1997: 32).

Lastly, encapsulation and stabilization are two of the least likely methods of use to dispose of chemicals and hazardous products safely and effectively with an acceptable cost. Simply stated, these two processes are not convenient or efficient for the Gambian environment. The cost of hazardous materials removal would surpass what The Gambia is capable of paying for, and in effect be a waste of money.

Recycling

There were many different forms of recycling that I saw firsthand while in Africa. The different methods of recycling seemed so obvious when I saw them, but I would have never even thought to use them in that manner. For example, people recycle both glass and plastic bottles and jars by reusing them to hold other things than what they had originally been used for. This is called secondary usage. Even broken glass from beer or soda bottles was used on top of walled fences as a deterrent to keep people out of private or restricted areas. The broken shards of glass were placed sticking out of the cement walls with the intention of turning people away from climbing over the wall. In this way people saved money on the purchase of either iron or steel fences, and kept broken glass off of the street. Scraps of paper were used by children everywhere for getting tourists' addresses and phone numbers, for use in school for homework assignments. People were also collecting old shoes and either selling them at stands, or melting the soles down and reusing the plastic materials. Reuse of fabric or other bits of different materials were also used to make objects of interest for the tourists that were visiting The Gambia. I noticed pieces of wood being scavenged from trash piles, as well as



Landfill site (notice the cows grazing)

bits of plastic, newspaper, comics, or other forms of paper products. During my last week, my professor and I went to a landfill site. I was amazed when I initially got there and saw how much trash there was. I was also amazed at how resourceful everyone was who was there. I saw children scavenging for shoes, clothes, and any materials they could use for their daily activities. There were also many adults searching for salvageable materials, as well as the occasional cow rummaging through trash for something to eat.



Toys exhibited in the National Museum of The Gambia

At the National Museum of The Gambia, I noticed many different toys made by or for children from trash similar to that found either in the streets or at the landfill sites. Toys were made of corrugated cardboard, sheet metal originally used for fences or roofing, pieces of wood, pens or pencils, colorful pieces of plastic, empty cans, and circular objects for wheels. We also saw suitcases and bags made from previously discarded wood, plastic, and paper. Some were made of layer upon layer of pieces of newspaper and comics glued together to form a thick-walled carrying case. Many of these creative items were used

by Gambians, but other objects were specifically made for tourists.

I also saw a fascinating project getting under way which was funded by the Peace Corps in The Gambia. The project involved the collection of the plastic bags given to people from grocery stores; these bags usually were thrown away and ended up in the trash heaps on the side streets. The Peace Corps held seminars to educate volunteers and prepare them to teach the public about a new idea to reduce litter and make money off the plastic bags. The plastic bags were collected, cleaned, cut into strips, and then braided together to form durable, practically waterproof carriers that could be sold to tourists as carrying bags. I slowly witnessed the beginnings of this moneymaking endeavor. However, there was some doubt whether or not their effort would be proportionate to the profit they would hopefully collect.

As the trip went on, I continued to meet people who I realized would provide me with a lot of information. I learned about waste management in the town of Basse, located in the Upper River Division, an area we visited during a weeklong trip to the eastern part of the country. I was given a tour of the town and shown where the trash is normally discarded. In the center of all of the garbage was a concrete container designed to hold trash so the area would be clean. The people were unknowingly discarding hazardous solid waste materials and chemicals, such as aerosol cans full of toxic fumes, along with everyday garbage. I was told that lack of education among the people about concerns for disposing of hazardous waste undermined any effort by authorities to clean up the environment.

While in Basse, I learned about one proposal focused on safe disposal of solid waste. People supposedly agreed that they would properly discard hazardous pollutants if metal containers, as well as huge ventilated-improved pit latrines, were provided. During one of my many tours I was shown some of the current uses of the metal containers described above. These uses included being a base for a table, and a storage container for leaves and sawed-off

branches, obviously not what the containers had originally been intended for. The situation was disheartening, but little was being done about it.

Educating the People

The NEA, an organization whose focus is the preservation of the environment of The Gambia, provided me with information concerning the education of the people of The Gambia. In *The State of the Environment Report – The Gambia*, there is a chapter about environmental education for Gambians in order to increase their awareness of what is happening to their land.

The environment is obviously of concern to the people and government of The Gambia, and the Gambian Environmental Action Plan (GEAP) is an example of its importance. The GEAP was adopted in 1992 and outlines the objectives necessary for educating Gambians and improving the environment of The Gambia.

Environmental education in schools begins early for students. Although the environmental improvements were relatively recent where we were visiting, I was lucky enough to witness ways in which environmental issues were introduced in schools. I saw examples of the environmental artwork that primary school children were creating at Bakau Primary School. Mrs. Jallow, a friend of Professor Roberts, who also became our friend, is the school principal. After providing dinner for the

entire group one evening, a fellow classmate and I went to visit Mrs. Jallow at her school. We were both amazed at how wonderful the school was about focusing on the children's needs to learn about the environment. Almost all of the supplies being used at the school were once used for another purpose and then were being reused at the school. An example included paper mache fruits and vegetables that were shown to students so they would know how to recognize them and where they came from.

Another example included the use of empty cans and bottles bought from the grocery to teach students practical math and the use of money (the *dalasi* is the currency in The Gambia).

Environmental Education (EE) is widely acknowledged to be a vital part of the environment conservation and sustainable development process. It aims at providing education and improving the public understanding of the issues that are central to better resource conservation and management. Public awareness is therefore the first step to full acceptance. The objective always is to produce an informed society that can participate actively in sound environmental planning and management.

(State of the Environment Report –
The Gambia 1997: 103)



Paper mache fruits and vegetables in the Bakau Primary School

Finally, the students also managed to construct woven baskets by using scraps of paper they had found during a field trip.

They had to identify the articles they had retrieved, and describe how they were contaminating the land. Next, they collected bits of paper and made baskets as well as small, bound notebooks for drawing, homework assignments, or journal entries.



Glass jars being reused, teaching children about recycling

I was very impressed by the work being done in the school. One cannot help but wonder whether one day the children may forget what they had been taught and continue practices harmful to their environment. They may forget either because environmental education did not continue throughout their school years, or simply because they end up focusing on things that may seem more important at the time. I think it requires plenty of commitment and resources to help children learn about their environment.

The members of the NEA are focusing a lot of their attention on educating the public. Although teaching the people will take a great deal of effort from many individuals, it is evident that people realize something must be done. They are beginning at the earliest stages possible, the primary school level, to reach the Gambian children so they can understand the nature and scope of the problem. Without proper knowledge, the environment (possibly on a global scale) may be in jeopardy.



Boxes recycled from paper

CONCLUSION

The examples described above are only a few of the many problems that The Gambia's environment will have to endure during the coming years. If something is not done soon, more problems may arise and possibly cause even greater damage to the land, air and water, and in these ways, the people. Along with these problems are some proposals for solutions many believe will possibly give The Gambia another chance and help reverse at least part of the damage that has been done to the country. Educating the public is the primary focus. If awareness, as well as knowledge, can be increased, then at least the beginning of change may be approached.

Actions are also important. If people learn to take action for a particular cause, then others will find out



Bakau Primary School

Recycling

From Old to New

Throughout West Africa, resources are scarce and money is scarcer. There is a need to make things last, and mend things which are broken, and when things are finally no longer serviceable, to make something else from them. In the West, recycling has been promoted as a means of conserving energy and environment. In Africa, it is a way of life and an economic necessity.

In the markets, on the streets, and in homes there are many examples to be seen of imaginative, creative and ingenious ways of putting goods no longer required or useful for their original purpose to another use.

The purpose of this exhibition is to show some of the ways in which scrap materials are recycled and take on a new existence as part of everyday life, such as aluminum cooking pots or rubber well-buckets, or become decorative objects and playthings, such as toys made from empty cans.

The resources of the world are limited, both in terms of raw materials and money, but increasing demands are placed on them. As well, bringing in new manufactured goods from abroad means that a country must find valuable foreign exchange (usually earned by exporting crops or raw materials) to pay for them. And the customers must be wealthy enough to buy. In Africa, many people are not wealthy, and therefore they find ways of recycling to save money and extend the useful life of materials which are otherwise waste.

Recycling makes both environmental and financial sense. It helps to slow down the usage of raw materials, such as aluminum or plastics, and to save money. And it brings employment to people who make and sell recycled good, and it can bring great pleasure to those who use and enjoy them.

about that interest and more may be done in the future for that cause. The people of The Gambia comprise only a small part of the inhabitants of our entire earth, and we all need to learn that the planet will not survive under such harsh conditions while still managing to sustain the inhabitants. Sacrifices must be made in order to survive. Those sacrifices may involve extra time spent on such actions as sorting through our trash, or cleaning containers and reusing them. If sufficient action is not taken soon, then our entire world will be in jeopardy, and not be able to hold up under the pressures that we have placed upon it.

One concept that an outsider may not understand is that individuals living in poverty are generally less

concerned with their environment. Their main concern is working day to day in an attempt to ensure their personal survival. They do not have the luxury of concern for their surroundings. Being a resident of the United States, I brought my concern for the environment and pollution, recycling, and waste along with me to West Africa. I forgot that many people around me just wanted a little more food or money for their families. All of us living on this planet must take a big step to insure that the goods essential for life are accessible to everyone. Although preservation of the environment is of primary concern to many, food and clean water may be the major concern for many others.

The examples described in this paper illustrate the numerous simple attempts to take the first step in maintaining preservation of the land, as well as convenient ways to help save money and goods through reusing and recycling. It is a first step, but a very important one that we all have to consider in order to preserve our world.

Works Cited

Grey-Johnson, Nana (editor) 1997 *State of the Environment Report – The Gambia*. Banjul, The Gambia: The National Environment Agency.

The National Environment Agency 1997 *Gambia Solid Waste Management Strategy*. Unpublished report.

Acknowledgements

I would like to thank everyone that took so much time to help me with my project while in Africa – the NEA, the Banjul City Council, the Peace Corps, and the people from The National Museum of the Gambia. I would especially like to thank Kanimang Bayo, Isatou Gaye and Seni Suso, Mustapha Jallow, and Beatrice Prom. I would also like to thank Bala and Denanie for their help and continued friendship. Additionally, thank you to Professor Bill Roberts for such a wonderful experience and my fellow SMCM “researchers” for your company. Last but not least, special thanks go out to my family for supporting me in my decision to go to Africa, and lastly, to Ndeye Altine Diop, for inspiring me (actually, it was more like using force) to go to her home.

