Environmental Education in The Gambia, West Africa

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In Partnership with the Nova Scotia-Gambia Association, the Community Conservation Research Network and the Community-Based Environmental Monitoring Network
Proposal Summary

The project proposal included three components designed to promote sustainable development in coastal communities in The Gambia, West Africa, by enhancing environmental awareness and stewardship through education. The primary component was to conduct in-school training, building upon the pre-existing Healthy Water Healthy People (HWHP) curriculum created by the Community-Based Environmental Monitoring Network (CBEMN) and the Nova Scotia-Gambia Association (NSGA). HWHP includes modules pertaining to water, health and environmental issues specific to The Gambia. The second component was to create a short educational film to be produced and facilitated by the NSGA’s drama troop and media unit. The third component included three different showings of the film, which would facilitate community discussion regarding local environmental concerns. The well-established NSGA Peer Health Education framework would facilitate implementation of all three components to ensure project success and sustainability. Finally, the background research needed to create the film would also inform the Masters research for both project facilitators.

Project Implementation

Before initial project creation, the NSGA’s executive director was consulted to finalize the overall theme of the project. At this time, it was revealed that the NSGA had recently received other funding for the creation of a film regarding water and health. Consequently, it was suggested that the focus of the Robin Rigby film be more concentrated on the effects of climate change in coastal communities. Next, upon consultation with a member of The Gambia’s National Environment Agency (NEA) it was disclosed that the NEA had previously produced a general educational film about the effects of climate change in The Gambia; therefore, it was recommended that the Robin Rigby film be more specific to one community. The NEA proposed that the film be created documentary style in order to tell a specific community’s story, as to stimulate discussion amongst the community, enabling them to relate the global phenomenon of climate change to their own reality. The NEA recommended Tujereng to be used as a pilot community for this project, as it is a coastal community with strong community involvement. The people of Tujereng depend primarily upon fishing and farming activities for their livelihoods, which have become threatened due to the effects of climate change, which have been amplified by deforestation and sand mining activities. Furthermore, Tujereng is very well organized and has a strong NSGA Peer Health Education team operating in the Upper Basic and Senior Secondary School with Teacher Coordinators who are actively promoting and teaching environmental education in the school and community.

Prior to project implementation Tujereng’s Alkalo, the head of the village, and Council of Elders were approached to seek their blessing to conduct the project in their community, showing respect for Gambian tradition. The information obtained at this meeting was extremely beneficial as it provided a foundation for understanding the overall environmental concerns in the community. From there, certain key members of the community were sought out, while other members were chosen at random to be interviewed for the documentary. Filming took place over the span of two weeks with two additional weeks needed for editing and the finalization of the documentary. The whole process was a collaborative effort between project facilitators as well as the NSGA Drama Troop and Media Unit.
Interview participants were asked to describe the environmental changes that had taken place in their community throughout their lifetime. Numerous men and women from a wide range of age groups and occupations, created the narrative for the documentary. The Teacher Coordinators, Peer Health Educators (PHEs) and community heads helped to connect the community’s environmental issues to the global climate change experience. The entire film was produced in Mandinka, one of the most widely spoken local languages, as to ensure maximum scope and understanding of the film’s message as well as to put it into local context. This was noted by one of the PHEs as an important aspect of the film night:

“The film show was successful because the whole village became aware of the club [NSGA PHEs]. Also, even the old ones who cannot speak English have an idea about it because it was translated in the local language, for everyone to understand even if you cannot speak English.”
The in-school component began with contact via e-mail with Tujereng’s Teacher Coordinators to set up a timeline for future training. While in Canada project facilitators conducted research on the subjects that were to be covered, as well as contacted the NSGA founders to discuss past projects relating environmental education in The Gambia. They provided invaluable learning materials previously created by Gambian professionals in collaboration with the NSGA. Upon arrival, a meeting was set up with Tujereng’s Teacher Coordinators, vice principal and principal. From there a relevant curriculum was developed through consultation with the Teacher Coordinators and the NSGA Drama Troop. The curriculum included the use of games, drama, multi-media and visual aids as well as lecture-style lessons on various aspects of climate change including: the greenhouse effect; deforestation and the carbon cycle; desertification and land use; erosion; sea level rise as well as the meaning of sustainability. Training took place over a span of two days and was taught primarily by project facilitators and coordinated by the NSGA drama troop and the Teacher Coordinators. The in-school component fostered environmental stewardship amongst youth, while providing insight into sustainable resource management and conservation practices at the community level. One of the NSGA staff members stated:

“The school training was successful because after the training most of the students were very comfortable in talking about almost all of the topics discussed. They were able to express or act skits on all of the topics discussed during the training.”

The lesson plan focused on the effects of climate change in coastal communities, designed with a significant emphasis on the Gambian context, while connecting local issues to the wider global phenomenon. There were two activities that stood out as successful teaching tools that were also quite enjoyable for the students. The first was ‘Photo Stories,’ where students were divided into groups and asked to take photos, using cameras provided by project facilitators, of things in the natural environment around their school that: 1) have undergone change, 2) are important, 3) are in danger or unhealthy, 4) are in need of protection. Each group then presented their findings to the class giving explanations for their choices. The students had a lot of fun with this activity as it provided an opportunity to connect in-class learning with their everyday environment. The second activity was ‘Change Over Time Interviews,’ where students were given a homework assignment where they were asked to interview five separate family or community members to determine the ways in which the environment had changed over their lifetime. The following day students presented their findings, acting as news broadcasters.
sharing what they had learned with the rest of the class. This was a great way to enhance the scope of the training to include the student’s family and community members. It allowed them the opportunity to share what they had learned in school as well as have meaningful discussions about environmental change with elders in their community. One of the students commented:

“[The training] was successful because we learned many things from you, especially climate change, deforestation and many more. It gave us the opportunity to ask our family members about their lives in those days. It is very important that we learn many things from them.”

Following the NSGA’s in-school training model, the students wrote a ‘pre’ and ‘post’ test at the beginning and end of the program to gauge student comprehension of the material covered. The class average of the pre-test was 43 percent, with the average for the post-test increasing to 74 percent. Part of the NSGA’s peer education model is using drama as a means of education. Throughout the in-school training the students had the opportunity to create skits on the material discussed. With the assistance of the Teacher Coordinators, these skits were rehearsed and refined, then presented for their peers at a school assembly. This presentation was an initiative organized by the students themselves and was not formally part of the in-school training.

The final component of the project was the community film night. Upon completion of the film, the Alkalo, along with the Village Development Committee (VDC), set a date for the viewing of the documentary, which was titled *Environmental Change Over Time in the Community of Tujereng, The Gambia*. The VDC publicized the event in the community and organized seating as well as food and drinks, which they suggested would attract a larger audience and be a good way of saying ‘Thank You’ to the community for their participation in the project. From the feedback we received, there were multiple comments indicating that the provision of food during both the in-school training as well as the film night was greatly appreciated. Approximately 250 people were in attendance including the PHEs, community elders as well as representatives from the NSGA, VDC as well as the NEA. The Teacher Coordinators, Drama Troop and Media Unit handled the logistics and helped to coordinate the entire event. In addition, the PHEs presented two of the skits that they had previously prepared as an introduction and conclusion to the film. Drama is an important part of Gambian culture and therefore,
this aspect of the film night added greatly to the entertainment of the evening. Project feedback revealed that:

“The film in the community was a very, very successful one. Although students from far distances were not able to attend, most people in the village attended including the Alkalo and the Council of Elders and many parents in the village and they also contribute a lot to this program.”

After all components of the project had been implemented a follow-up and assessment was done. Due to time and logistic constraints not all participants could be sought out for project evaluation. Therefore, NSGA staff, Teacher Coordinators as well as PHEs were solicited to provide feedback, as these people were involved in all three components of the project. With regards to the film show, the following are some of the recommendations that they offered in their own words:

“I think that [the film show] could be improved by informing all the surrounding villages before the show and take place in a wide place. And the sound was very low because others were complaining that they were not hearing, we should improve on that.”

“The sound system was not loud enough to get everyone. The light was not bright enough for the people to see the actors. There was also a lot of noise.”

“I think proper mics and speakers should be bought so that everyone can hear our words correctly.”

For the in-school training component, the following suggestions were given:

“I recommend that all of the coastal villages be involved and educated on climate change because it is affecting their lives. I will also recommend that the PHE reach communities to educate them especially the lower level schools close to the coast.”

“The training could be improved by visiting other schools and learning from each other. The training could also be improved by adding the number of days that we use to train.”
“The school training was successful because it was interactive, but the information was a lot, it should have been four days more. Also, more of the school should be involved and the project should not be limited to only PHE in school.”

“This training could be improved in the future by raising funds so that each and every one could go to the nearby school or village and sensitize people on the dangers of climate change so that each and every one can live in a healthier and successful life.”

All of these critiques and recommendations are very honest and accurate, and they should be taken into consideration if similar projects are undertaken in the future.

Collaboration and Partner Organizations

The primary partner organization for this project was the NSGA, who without their collaboration as well as the support of their experienced staff members, this project would not have been possible. The NSGA follows all traditional protocol when entering a community, which helps to ensure the ease of entry and willingness of communities to participate in projects. Moreover, they work in over 158 schools across the country so their resources and connections are advantageous for project implementation. Saint Mary’s University (SMU) has a long-standing relationship with the NSGA. This project helped to build upon and strengthen this relationship through continued collaboration on important environmental education initiatives. Should future Robin Rigby recipients wish to carry out work in The Gambia; the NSGA would be an irreplaceable collaborating organization. Their many years experience working in the country is an invaluable resource and their well-established peer education model serves as a successful tool for mobilizing knowledge and awareness on important health and environmental issues. With regards to the NSGA’s work in schools one of the PHEs said:

“NSGA is very aware and helpful to the whole world. The club has tried its best and we promise you that we will keep sensitizing the community and even the whole country. NSGA is an excellent club and I want to say a job well done to all the teachers and students of the NSGA. Thank you very much, keep it up!”
The CBEMN also served as an important partner organization as they provided key in-kind support through the provision of educational materials and expertise. They also assisted logistically with the organization of the in-school component, the filming of the documentary, as well as general photography and documentation of the project. The CBEMN is a non-governmental organization (NGO) housed within the department of geography at SMU. They work with individuals, community groups and other organizations in the initiation of environmental monitoring across the Maritimes as well as internationally, including Nepal and The Gambia. The CBEMN works closely with SMU students and would be a great partner organization for future projects as they are an instrumental source of knowledge and expertise regarding community-based environmental initiatives.

In addition to these partners, the Community Conservation Research Network (CCRN) also supported the project by providing supplementary financial assistance for Masters research, of which this project helped to inform. The CCRN is a network of experts and NGOs hosted at SMU that collaborate on strengthening existing knowledge regarding community-based conservation. Students are also actively involved in the CCRN work and through this network have access to innovative knowledge and expertise from around the world and across cultures.

**Project Goals and Outcomes**

The project’s original goal was to facilitate knowledge mobilization within the community of Tujereng, concerning environmental issues. The adverse effects of climate change are having a negative impact on the community, but these issues are not fully understood or discussed openly. This project was designed to create a dialogue within the community, concerning environmental changes affecting their daily lives. It also aimed to increase capacity building by enhancing the understanding of the complexity of these environmental problems from a local standpoint. The project was very well received within the community of Tujereng and could act as a model for implementing similar projects elsewhere. Project feedback revealed that:

“If the members of PHEs are active, we can go and educate many people. We can go to places like Sanyang, Tujereng, Tanje, Brufut and many villages.”

Prior to project implementation, some members of the community had an understanding of the ways in which climate change was affecting their community; however, it was not common knowledge. Following the completion of the project, environmental education and awareness had been increased—boosting environmental stewardship in the community—at the hand of the Peer Health Educators, teachers and elders of Tujereng. The in-school component successfully trained 30 Peer Health Educators on climate change as well as related environmental issues. Since the completion of this project, these students have already facilitated their own sensitization projects for their peers and other community members. The film component was successful in acting as a medium for community members to voice their concerns while offering possible adaptation strategies to the environmental changes occurring in their community. On the night of the community film show, due to a good turnout, many people heard the voices and opinions of the various community members in the documentary, leading to the potential for continued community discussion. It was mentioned in the project feedback that:

“The film show was successful because: 1) the characters in the film were all people from the community, 2) the messages put across were all issues affecting the community, and 3) the turnout was great and can help to easily send the messages across the village.”
Challenges

Although the project was completed successfully, it was not without its challenges. To begin, the dates for project implementation were constrained due to the project facilitators’ school schedules. This time of the year was not ideal, as it fell over the Christmas holidays. All schools, offices and businesses closed for the break, for different lengths of time, which shortened the time available for project work. Furthermore, this restricted the available time for film creation, as other components of the project, such as the in-school training depended on scheduling around the break. Filming and editing of the film in particular required more time, as although it did get finished; it added unnecessarily long working-hours to an already time-intensive project. Should the project be replicated, it would be advised that a different time of the year be chosen as to avoid scheduling constraints, or more time be allocated for the project.

Cultural differences also proved to be challenging at times, as it led to certain miscommunications due to differences in the concept of time, or in the way plans were confirmed, for example. Furthermore, gender roles and norms, as well as the expectations of women in society, often differed from the project facilitators’ own views and realities, which emphasized the need for cultural awareness and sensitivity while working in a country other than one’s own. Rather than female involvement being a given throughout the project, extra attention was needed in an attempt to achieve equitable participation amongst men and women without overstepping any cultural boundaries.

Managing expectations and setting accurate goals was another important aspect of the project, as to avoid unrealistic expectations on behalf of all those involved. The importance of sharing the results of the community’s participation, or the final product of project, cannot be emphasized enough. It was mentioned that in a past research study, in which certain members of the community were involved, the outcomes of their labour had never been disseminated to the participants and as a result they were slightly reluctant to fully participate. Thus, the showing of the film by project facilitators was essential.
in order for the community to see the fruits of their labour, as well as to build and sustain a relationship of trust between all those involved in the project. Steps have also been put in place to disseminate the results of the thesis research undertaken by project facilitators.

**Protocols for Sustained Cooperation**

The project was designed based on the idea of creating and enhancing partnerships between collaborating organizations and project facilitators, as well as maximizing local input as much as possible into project creation and implementation. Meetings were set with different partner organizations at all levels of the project, to discuss logistics and ensure that goals and objectives meshed with the local reality in The Gambia and more specifically the community of Tujereng. To begin, the project was designed with the assistance of CBEMN, as well as NSGA staff members in Canada, to ensure that the combined skills, knowledge and resources necessary for implementation were available. Next, the NEA was solicited to recommend a community that would be willing to participate. Contact was then made with the Teacher Coordinators in Tujereng via e-mail to discuss their possible participation, the relevancy of the training topic, as well as future collaboration on a curriculum, which took place once in country. While in The Gambia, logistics and outlines were created collaboratively with the NSGA for each component of the project. The VDC was also sought out to inform the project, facilitate community introductions as well as aid with implementation. However, before any activities took place in the community a meeting was set with the Alkalo, and later the Council of Elders, to seek permission to implement the project in their community. Cooperation between partner organizations was essential to the accomplishments of the project; however, the involvement of the community was also a crucial aspect that must be included at all steps in the process, to ensure successful implementation and sustainability.

**Future Potential**

Not only does this project have the potential for future replication, there are also certain actions that are being taken in order to enhance the sustainability of the project. First, it is important to mention that if this project is replicated, the collaborating community’s reality, including wants and needs, must to be taken into consideration. The general themes, processes and NSGA model can be utilized, but information and projects should not be generalized across communities as each community is unique and should be recognized and appreciated as such. In order to continue the outreach of this project, the documentary will be played at a general assembly for the Tujereng Senior Secondary and Upper Basic School and other schools in the region—the scope of outreach will depend on the security of future sources of funding. This will be facilitated through collaboration with the NSGA and Teacher Coordinators. Currently the film is only in Mandinka; however, steps are being taken to create a second version with English voiceovers or subtitles so that the film can be viewed in Canada. This film could be utilized to build awareness for partnering organizations, while illustrating the ways in which climate change is affecting coastal communities across the globe. In addition, the project facilitators plan to organize fundraising activities to assist the PHEs in their sensitization projects, as they want to continue educating other Gambians on climate change as well as environmentally destructive behaviours.
Moreover, the project facilitators are investigating the potential for creating a school partnership between Tujereng Upper Basic and Senior Secondary School and a school from Nova Scotia to foster the sharing of knowledge across cultures and communities as well as to find alternate means of fundraising. In the feedback many students mentioned funding as a major obstacle for sustained action and increased outreach. One PHE stated:

“This is a very good comment towards our future. We as PHEs should sensitise the whole world and as PHEs this can be done by us not only stopping in Tujereng or the surrounding areas but going further into the country. But none the less, financial problems are our major obstacle. Going to different communities can only be done with the help of funding. The most important thing is that people need to know what our work is as PHEs. We need to stop people from this negative practices that lead to our changing climate. The life you save may be your own.”

Conclusion

As a whole, this project enabled both project facilitators as well as partnering organizations to build upon and strengthen their skills and knowledge for successful collaborative initiatives. This project helped facilitators foster skills such as grant application; project planning, coordination, implementation and management; cooperation and team building as well as flexibility and adaptability in the field. This experience also provided the opportunity for facilitators to integrate academic theory, methods and techniques learned in the classroom into practice. Each component of the project allowed for the development of individual skill sets. The in-school component helped develop the skills necessary for curriculum creation and in-class instruction. The film component helped to cultivate proficiencies in conducting interviews and focus groups as well as filming and editing procedures. Finally, the film night
component fostered event planning and coordination skills. This project has provided an invaluable learning experience and all of the aforementioned skills developed throughout this project have been instrumental to professional career development in the field of international development. Although the project was designed to mobilize education and foster environmental stewardship in the community of Tujereng, it can be said that project facilitators learned even more from the community. All in all, it was an enriching learning experience for all parties involved as it truly embodied the guiding principle of the NSGA, which is to ‘Learn and Teach Others’.

“The [Robin Rigby] should be thanked for bringing such an important program to the village and the school of Tujereng. We hope this will continue and be extended to other parts of the country.”

–NSGA Staff Member
Summary of the Finances

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<th>Robin Rigby</th>
<th>CCRN</th>
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**32.081 GMD = 1 CDN**

CCRN Contributions

Accommodation: $920.00 USD = $980.00 CDN
Transportation and Translation: $604.00 USD = $650.00 CDN
Vehicle Rental and Gas: $1,780.00 USD = $1,900.00 CDN
Per Diems: $58.02 x 30 Days ($1,740.50 x 2) = $3,481.00 CDN

Total Spent: $7,011.00 CDN (*Over spent by $11.00)

Total Received: $7,000.00 CDN
Robin Rigby Contributions

Travel:

Flights from Halifax to the Gambia ($1,845.87 x 2) = **$3,691.73**

Personnel, Services and Activities:

NSGA Staff (Drama Troop and Media Unit) = $2,585.00 CDN

In-School Training = $365.00 CDN

Breakdown:

- Breakfast 30 people (50 GMD *2 Days) = 3,000 GMD
- Lunch 30 people (50 GMD *2 Days) = 3,000 GMD
- Sitting Allowance 30 people (100 GMD *2 Days) = 6,000 GMD
- Teacher Sitting Allowance 2 people (400 GMD *2 Days) = 800 GMD
- Total = 12,800 GMD ($365.00 CDN)

Community Film Shows ($150.00 x 3) = $450.00 CDN

Food and Refreshments for Film Premier in Tujereng (9,650 GMD) = $310.16 CDN

**Total:** $3710.16 CDN

Materials:

- Printing Manuals: $227.95 CDN
- School Supplies: $303.98 CDN
- Official Map of Tujereng from the Gambian Statistics Bureau: 260 GMD ($8.10 CDN)
- Data Cards for Internet/Phone: 1100 GMD ($34.29 CDN)

**Total:** $574.32 CDN

**Total Spent:** $7,976.21 CDN

**Total Received:** $8,000.00 CDN