

# Teachers' Training in Environmental Education

Kwale District, KENYA



July 2011 Seminar Report

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A Rocha



## **Executive Summary**

The program of teachers' training in environmental education (TTEE) has been carried out annually since 2003 with the aim of building the capacity of teachers to effectively carry out environmental education that addresses local concerns in areas where schools are situated. It is conducted through a seminar followed by implementation of school projects by participants prior to certification.

Initially, the training targeted actual or potential environmental/ wildlife club patrons. It was therefore carried out in the form of a 5-day seminar during which various aspects including development of a school project by each teacher, guided marine and terrestrial excursions, discussions, group sessions and experience sharing sessions were conducted. In 2008, the seminar was modeled to prepare teachers to support other teachers in environmental education through peer networks. Hence, participants of the 2008 seminar were drawn from those who had participated in earlier TTEE training. In order to encourage the support of participating teachers by school administrators, the 2009 seminar focused on head teachers with a view to demystify environmental education as well as project activities carried out by teachers.

This report gives an overview of the July 2011 seminar proceedings, participants' views on various issues as well as their suggestions and provides recommendations for the way forward.

Kwale, 2011

*Sarah Ater*

## **Acknowledgements**

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Specific sessions were facilitated by Mr. Wafula (NEMA), Mrs. Mangale (Wildlife Clubs of Kenya), Mr. Kathuri (Kenyatta University), Kennedy Osuka (CORDIO EA) and Mrs. Oguta (Kengeleni Primary) to whom I am grateful. Logistical support for the seminar was provided by Jane Atieno (CORDIO EA).

*To all of you – Asante sana!*

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# **1 Introduction**

## **1.1 Background information**

The concept of teachers' seminars in Environmental Education is adapted to meet environmental education needs of Kenyan primary schools in the Coast Province as well as schools from other parts of the country interested in learning more about the marine and coastal environment. Seminars are held annually since 2003 and participating teachers are drawn from different districts in the province. Additionally, different seminars have either focused on participants from a particular district or a range of districts.

The pilot seminar for the teachers' training program was carried out in 2003 as collaboration between ProZim Society (Switzerland) and Baobab Trust (Kenya) with focus on teachers in Bamburi area of Mombasa district. An evaluation carried out in 2005 indicated willingness of various institutions to be involved and support in various ways. Hence, Lafarge Eco Systems (LES), Watamu Turtle Watch (WTW), International Ocean Institute (Eastern Africa), Kenya Marine and Fisheries Research Institute, World Wide Fund for Nature (WWF)Kiunga, Assist a Child to School (ACTS), International Fund for Animal Welfare (IFAW) and A Rocha Kenya have supported different components of the training at different times.

Participation in the seminar leads to award of a certificate of participation which is upgraded to one of merit after implementation of EE transfer. Participating teachers develop a school project whose implementation is assessed and teachers are awarded a certificate of merit if deemed successful. Traditionally, the teachers training program has been carried out as a 5-day seminar for 10 – 15 teachers followed by EE transfer to their school communities. This is assessed over one school term after which successful teachers are awarded certificates of merit. From 2003, 57 participants have now been trained, 54 of them teachers and 3 from non governmental organizations.

Since 2009, 2-day seminars are also organized for school administrators (mainly head teachers). The head teacher seminars have the theme "Leading schools in environmental education" and cover aspects of leadership and management in order to promote environmental conscious behavior. Fifteen administrators have so far been trained and certified. This report focuses on the second head teacher seminar which was held in Ukunda, South Coast for Kwale head teachers.

## **1.2 Objectives**

The seminar focused on head teachers in recognition of the crucial role they play in providing an environment for staff and pupils to engage in activities that create environmental consciousness. The objectives were thus to:

1. broaden the teachers' understanding of Environmental Education (EE) and its importance
2. provide an opportunity for the teachers to reconsider their schools, cultures and level of environmental consciousness
3. provide knowledge and skills support to enable the teachers to effectively lead environmental education
4. to provide a forum for teachers to interact and share experiences

## **2 Participation**

As one of the main purposes of the seminar was to make the administrative heads of schools aware of environmental activities that we carry out and how they may support their schools' involvement; most of the participants were drawn from schools we already work with. Most of those schools have had their club Patrons trained during the 5-day seminars. A list of potential participants was thus submitted to the Kwale County Education Office (KCEO) for formal invitation through the District Education Officer. If the head teacher of a selected school was unable to attend, they could nominate the deputy head teacher to attend while if both were not available, the chance to participate in the seminar was given to another school.

### **2.1 Participating Organizations**

#### **2.1.1 Kwale District Education Office**

The Kwale District Education Office (DEO) oversees and provides guidance to primary schools within the county and is answerable to the Ministry of Education through the Provincial Director of Education (PDE) office. The education office at the local district level is instrumental in providing support for teachers involved in extra curricula activities such as environmental and wildlife clubs.

With respect to this seminar, The Ngomeni TAC (Quality assurance officer) communicated with nominated teachers and also attended the full seminar. The District Quality assurance Officer opened the seminar while the District Education Officer presided over the closing and certificate award ceremony.

#### **2.1.2 ProZim Society**

The ProZim Society is a Charity Organization involved in capacity building of Kenyan primary school teachers particularly in the area of environmental education (EE) in partnership with local organizations.

ProZim provided full funding to cover the seminar costs.

#### **2.1.3 Coastal Oceans Research and Development Indian Ocean-(CORDIO) East Africa**

This is a regional research organization involved particularly in research in the coastal area with respect to ecology, management and socioeconomics. CORDIO-EA also assists in implementation of national and regional coastal conservation initiatives.

CORDIO provided a base for the program as well as two facilitators.

#### **2.1.4 Other Organizations**

Facilitators for the sessions were drawn from collaborating institutions such as NEMA, Wildlife Clubs of Kenya (WCK), Kenyatta University and CORDIO.

## **3 The Proceedings**

The sessions were planned to run from 8:30am to 5:00pm daily. There were 21 participants on

the first day and an additional two participated on the second day. There was some delay in commencing on the first day as most of the teachers arrived late. Although the session began on time on the second day as the participants were accommodated at the venue, most had not completed their assignments and therefore worked on them before the first session.

English was the main language of communication with learning carried out through facilitated sessions, presentations, group work and discussions as well as individual work during sessions and as overnight assignments.

A pre-seminar questionnaire was filled out during registration to determine the environmental education activities within the participants' schools while a post seminar questionnaire handed back on the last day summarized the participants' perceptions on all aspects of the seminar. Each of the participants also put down their expectations on the first day, as well as prepared a school activity guide and gave presentations on how they intended to lead environmental change in their schools. Daily evaluations through individual questionnaires were used to determine relevance, level of importance and get suggestions for improvement regarding different topics and how they were covered on each day. The ratings and comments by participants provided useful insight into areas needing emphasis and improvement. Evaluations are highlighted in section 4.

## **4 Evaluation and discussion**

### **4.1 Pre seminar evaluation results**

All schools had environmental activities at school, with tree planting being the most popular activity. Other on-going activities mentioned included establishment of tree nurseries, waste disposal, peer education, art work and awareness to peers and community. Participants also reported incorporating EE in school lessons and involving the parents through meetings and other community activities such as open days and clean ups. This was expected as head teachers nominated to participate already had some environmental awareness activities ongoing at their schools. However, the participants mentioned that in some cases they were not effective as the resources that they had were inadequate or they were limited in knowledge of how to undertake some of the project activities effectively.

### **4.2 Daily evaluation feedback results**

On the first day, all participants indicated that they had a better understanding of environmental governance. The other sessions covered namely: Environmental issues at school/ society level, Schools and cultures, Harmonizing values and practise and group activities were rated as extremely relevant, relevant or satisfactory. Participants felt the day was well organised and facilitators were well versed with topics. However, they also felt that there were too many activities for one day and were disappointed that there was a one hour delay before starting while waiting for some participants to arrive.

On the second day, participants indicated that they had a better understanding of sustainable fisheries issues. The topics on Leading change and the dynamic role of education institutions in environmental conservation were rated favorably as either extremely relevant, relevant or satisfactory. However, two of the participants indicated that they did not find the session on sharing experiences and presentations useful. Participants felt the day was well organized and involving and that facilitators were well prepared. They also felt that there was some

improvement in management of time probably as participants were accommodated and therefore the morning session began on time.

One of the exercises done involved a reflection session where participants used a metaphor to describe their school in the present state. Their perceptions are shown in the table below:

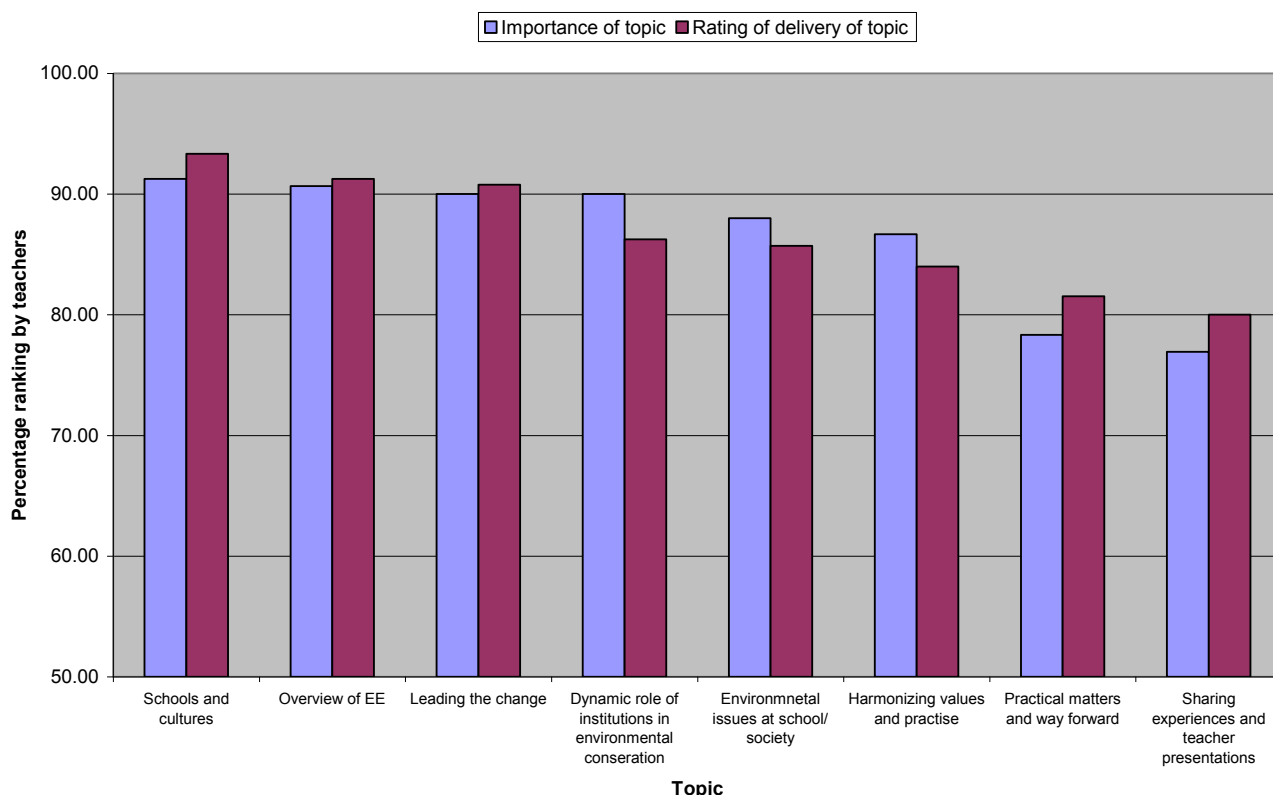
<b>School</b>	<b>Describing metaphor</b>
Waa Primary	A tree- grows in terms of environment
Pungu Primary	A tree- still growing Struggling- come to better heights Drowning- Learning not effective Ideal- Place for learning
Mwadinda Primary	Tree- An aspect of growth
Kwale school for the Deaf	Well oiled machine- work without friction
Denyenye Primary	A tree- still growing
Mwamgunga Primary	Well oiled machine- qualified staff
Mvinden Primary	A tree- all stakeholders involved
Mwaligulu Primary	A tree- gives benefits to society At large
Chirimani Primary	A tree- its growing
Tiwi Primary	Well oiled machine- runs smoothly for better ends
Mbweka Primary	A tree- has to be cared for
Ngonzini Primary	A tree- has department for proper functioning
Yeje Primary	Well oiled machine- well qualified staff

#### **4.3 Post seminar evaluation results**

Participants indicated that the most popular topics were: “Leading the change”, “Dynamic role of institutions in environmental conservation” and “Schools and Cultures”. Results of ranking of percentage importance of topics and percentage effectiveness of topic delivery are presented in the chart below:



Chart showing importance of topic and effectiveness of delivery of topic



The teachers also indicated that with the introduction of environmental goals in schools through the school policies, student learning and behavior would be influenced. They attributed this influence to the fact that 1) Students would need to be guided and encouraged, 2) Participation and sharing experiences would be encouraged hence activities would be enhanced, 3) EE would be covered in all subjects at school.

Participants gave an overall ranking of 88.25% for the entire seminar with specific areas ranked as presented in the table below:

Aspect	% Ranking
Atmosphere	92.5
Location	88.75
Facilitators	96.25
Timetable	76.25
Food	87.5

Suggestions for improving future seminars included incorporating additional topics like “Project management” and “Proposal writing”, provision of handouts immediately after each session as well as improved management of time and particular observation of time when sessions should end.

## 5 Monitoring

The seminar was conducted at the end of second term and monitoring was planned for the final term of the year. However, this began on a low key due to a teachers’ strike which affected

activities during the first two – three weeks of opening. It then took another two weeks for activities to resume back to normal. As the term is short and the one in which national examinations are done only a few school visits were conducted as teachers began to focus on preparation for the November exams. Contact with all participants was maintained through phone and more follow-up visits will be conducted in term one, 2012.

## 6 Conclusions and recommendations

The seminar provided a good opportunity to discuss effective leadership characteristics and obstacles to effective environmental governance with some of the challenges highlighted in the table below:

Weaknesses in environmental governance	Environmental problems faced
<ol style="list-style-type: none"> <li>1. Absence of environmental policies in schools</li> <li>2. Inadequate involvement of teachers</li> <li>3. Inadequate support from the community</li> <li>4. Inadequate resources for activities</li> <li>5. Lack of awareness of „what to do“</li> <li>6. Poverty issues in society</li> </ol>	<ol style="list-style-type: none"> <li>1. Sustainable waste management</li> <li>2. Insecurity</li> <li>3. Negative attitude by teachers, parents</li> <li>4. Inadequate sanitation</li> <li>5. Culture-traditional ways of doing things</li> </ol>

The importance of having school policies was acknowledged and all teachers committed to developing and supporting environmental policies in their schools. The teachers and District Education Officer also emphasized the importance of such opportunities where there is training and a chance to share experiences. They indicated that they looked forward and were willing to participate in similar seminars in future.

## 7 Appendices

### Appendix 1: List of participants

	Name	School	Address	Phone	Projects at school
1	Alice Mutah	Waa Primary	Box 96194 Likoni		Nursery beds, tree planting
2	Makame Mohamed	Pungu Primary	Box96206 Likoni		Tree nursery, waste management
3	Mnemo Salim	Mwadinda Primary	Box 1095-80400		Waste management, tree nursery
4	Mzungu John	Kwale school for Deaf	Box 89 Kwale		Garbage sorting, reusing and recycling
5	Bakari Mwamtenda	Denyenye Primary	Box 96128 Likoni		Tree planting and naming of trees
6	Mond Chidabuani	Mwamgunga Primary	Box 53 Kwale		Tree planting
7	Juma Mghanga	Mvinden Primary	Box 59 Ukunda		Nursery beds, school environmental day
8	Ali Chikukula	Mwaligulu Primary	Box 1587 Ukunda		Nursery beds
9	Hamadi Mwacheni	Mwaroni Primary	Box 114 Ukunda		Tree planting
10	Hamisi Mwagutsi	Nimuyumba Primary	Box 1213 Ukunda		Tree planting, nature trail
11	Kamwanthi Katiku	Chirimani Primary	Box 54 Kwale		Tree planting and tree nurseries
12	Fatuma Chitupa	Mbweka Primary.	Box 21 Matunga		Tree planting, fish pond, waste management
13	Mohamed Musa	Ngo'zini Primary	Box 72 Kwale		Tree planting, nature trail

14	Juma Ganzanza	Yeje Primary	Box 23 Matuga		Tree planting, nature trail
15	Mond Chidabuani	Mwagunga Primary	Box 53 Kwale		Tree planting
16	John Mwau	Matuga Primary	Box 2 Matuga		Tree nursery
17	Mishi Dola	Tiwi Primary	Box 551 Ukunda		Tree planting, recycling waste papers
18	Samuel Mbuva	Mkokoni Primary	Box 964558 Likoni		Garbage separation and management

## Appendix 2: Seminar program

### HEAD TEACHERS' TRAINING IN ENVIRONMENTAL EDUCATION 2011 Seminar program

#### *“Leading Schools in Environmental Education”*

Friday 22<sup>nd</sup> July 2011

<b>Time</b>	<b>Activity</b>	<b>Name</b>
8:30 – 9:10	Registration Pre-seminar questionnaire	J. Atieno
9:15 -10:25	Introduction- Welcome address Overview	S. Ater/ Mr. Nelson
10:30 – 10:45	Tea break	
10:50 – 11:50	Environmental governance	G. Wafula
11:55 – 12:30	Environmental issues at school/ society level	G. Wafula / S. Ater
12:30 – 13:30	Lunch break	
13:45 – 15:00	Schools and cultures	S. Ater
15:05 – 16:25	Harmonizing values and practice	J. Mangale
16:20 – 16:40	Tea break	
16:40 – 17:15	Moving forward, day 1 assignment	S. Ater
17:15 – 17:40	Daily feedback	J. Atieno

Saturday 23<sup>rd</sup> July 2011

<b>Time</b>	<b>Activity</b>	<b>Name</b>
8:30 – 9:00	Recap	Teachers
9:00 – 10:10	Leading the change	S. Ater
10:15 – 10:30	<i>Tea break</i>	
10:30 – 11:30	Sustainable fisheries and resource use	K. Osuka
11:30 – 12:45	Dynamic role of education institutions in environmental conservation and management in our society.	J. Kathuri
12:45 – 13:45	<i>Lunch break</i>	
13:45 – 15:00	Sharing experiences, teacher presentations	Md. Oguta
15:05 – 15:30	Feedback	
15:30 – 16:15	Presentation of certificates Closing remarks	Mr. Nyangweso
16:15	<i>Tea and leave at pleasure</i>	