

**Agulhas and Somali Currents Large Marine  
Ecosystems Project**

**Capacity Building and Training Component**

**National Training Plan for**

**SOMALIA**

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## **1) Summary of key training requirements**

- a) Skill training for fishers.
- b) To strength the scientific and management expertise
- c) To introduce an ecosystem approach to managing the living marine resources
- d) To enhance the local and international markets.
- e) To secure processing systems
- f) To upgrade environmental awareness and waste management and marine pollution control
- g) To create linkages between the local community and the international agencies

## **2) introduction:**

Somalia has 3,333Km of coast line of which 2,000Km is in the Indian Ocean south of Cape Guardafui and 1,333Km of north shore of Gulf of Aden.

Surveys indicate high potential for fisheries development with evenly distributed fish stocks along the entire coastline, but with greater concentration in the Northeast.

The fishing seasons are governed by two monsoon winds, the south west monsoon during June to September and northeast monsoon during December to March and two inter-monsoon periods during April/May and October/November.

In the case of Somalia, for the last two decades the number of people engaged in fisheries has increased from both the public and private sector.

Although, the marine fisheries potential is one of the main natural resources available to the Somali people, there is a great need to revive the fisheries sector and rebuild the public and private sector in order to promote the livelihood of the Somali fishermen and their families.

## **3) Inventory of current educational Capacity**

Somalia has an increasing number of elementary and intermediate schools, beside a number of secondary and a handful of universities. These include FPENS (Formal Private Education Network for Somalia), SAFE and Golis, FPENS's educational system is based on the Arabic language, where SAFE and Golis use the English language.

### 3.1 General Capacity, funding and Infrastructure

The Ministry of Education is officially responsible for education in Somalia, with about 15% of the nation's budget allocated to scholastic instruction. The southern parts, autonomous Puntland and Somaliland each maintain their own establishment of Education.

Following the outbreak of the Somali Civil War in 1991, the task of running schools in Somalia was initially taken up by community education committees established in 94% of the local schools. Numerous problems had arisen with regard to access to education in rural areas and along gender lines, quality of educational provisions, responsiveness of school curricula, educational standards and controls, management and planning capacity, and financing. To address these concerns, the regional authorities took the role of developing an educational policy to guide the scholastic process. This includes a gender sensitive national education policy compliant with world standards, such as those outlined in the Convention on the Rights of the Child (CRC) and the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW)

The educational system of most of the regions comprises two years of Early Childhood Development (ECD), eight years of primary education (four years of lower primary and four years of upper primary) and four years of secondary education. University education comprises an average of four years. Thus, it is a 2-4-4-4 system.

#### **Early Childhood Development (ECD)**

Early Childhood Development (ECD), as with primary education and non-formal education programs, falls within the category of basic education and entails the essential skills of literacy and numeracy upon which further learning is built. Qur'anic education also forms a component of ECD. ECD is offered to children in the under five years age, with the focus on stimulating and developing the cognitive, affective and psycho-motor skills of the toddler and his/her holistic development. It also prepares children for school and facilitates the transition from home to primary school

Primary education features nine compulsory subjects: Arabic, Islamic studies, Somali, mathematics, science, social studies, English, physical education and arts. Lower and upper primary students are taught for 36 and 42 lesson periods, each lasting 35 and 40 minutes, respectively, per week. The language of instruction is Somali in subjects other than Arabic and Islam; English is taught as a subject from Grades 2 to 8

#### **Secondary education**

Secondary school education is offered for four years to pupils between the ages of 15-18, and leads to a Secondary School Certificate Examination (SCE). Ten subjects are taught in secondary schools, namely: mathematics, physics, chemistry, biology, Somali, Arabic, Islamic studies, English, physical education, geography and history. All subjects, with the exception of physical education, are compulsory. English is the language of instruction in secondary schools, except in the Somali, Arabic, and Islamic courses. Each school week is composed of 40 periods of 45 minutes each.

3.2 Evaluation of training activities including short courses, on-going mentorship, training of trainers, language issues, availability and selection of trainees.

Mogadishu Marine Secondary School has three relevant areas of education, namely Navigation, Fishery and Mechanics. Over the four year course the following subjects apply: English, Fish processing, Navigation, Astronomy, Naval matters, Refrigeration, and Oceanography

### 3.2.1 Universities:

The southern parts, which are the most populated areas of Somalia have the largest number of university registered students. Mogadishu University and Benadir University are the two main universities in the southern. Other universities include Somali University, Indian Ocean University, Nilein University, Hamar University, Kismayo University and the University of Gedo.

At present no Universities offer marine subjects, however Benadir University is planning to introduce a faculty of Marine Biology, with the first intake in 2012.

Planned Curriculum:

First Semester		Third Semester	
Course Title	Credit Hours	Course Title	Credit Hours
English I	108	Naval	108
Math I	108	Marine Biology	108
Physics	108	Navigation	218
Chemistry	108	Refrigeration	180
Marine Biology	108	Education	180
Oceanography	108		
Second Semester		Fourth Semester	
Course Title	Credit Hours	Course Title	Credit Hours
English II	108	Naval	108
Math II	108	M/Biology	108
Physics II	108	Navigation	218
Chemistry	108	Astronomy	180
M/Biology	108	Education	180
Marine Tech.	108		

The Puntland region currently has five major universities: Mogadishu University Puntland Branch in Bosaso, East Africa University in Bosaso, Puntland State University in Garowe, Puntland State University in Galkacyo, and Nugal University in Las Anod.

In northwestern Somaliland region, tertiary academic instruction is provided by University of Hargeisa, Admas University College, International Horn University and Somaliland University of Technology in Hargeisa, Amoud University in Borama, Burao University in Burao and Berbera Marine University which offers Fishery and Navigation studies.

**3.2.2 Technical Training Facilities:** Although training facilities including campuses, workshops, boat building factories and marine laboratories do exist, training is sporadic. One operating laboratory is in FFC which certifies lobsters and fish for export.

**3.2.3 Research Institutions:** Research Department of the Ministry of Fisheries and Marine Resources, Fishery Department of Banadir University and Somali Port Authority.

Very limited research undertaken, with the last survey in 2007 on the availability of the fresh water fish (FWF) in 240 villages located on the bank of Shabelle River, particularly, Hiiraan, Middle Shabelle & Lower Shabelle regions (sponsored by FAO).

**3.2.4 Regional and International NGOs Programme with TCB Components:** There are a number of NGOs in the region e.g. Friends Fishing Cooperative, Somali Marine Resources Cooperative. These do provide alternative livelihood training through provision of vocational skills in south/central Somalia. Further training of fishers does take place, including training of fishers, provision of fishing gears, and net mending, marine pollution, fish processing and quality control assurance.

#### **4) National Needs and Capacity for meeting them, and Training requirements as per MEDA deliverables:**

4.1 Technical Training: All aspects.

4.2 Economics and Socioeconomics: Maritime high school graduates exist – require University training in Marine economics.

4.3 Numerical Expertise: required at all levels.

4.4 Data Management and Information Management skills required at all levels.

4.5 Legal Expertise required

4.6 Language Education: Available

4.7 Governance: required.

4.8 Fisheries Science: University Level training required

- 4.9 Oceanography: required.
- 4.10 Coastal zone management including expertise in GIS and MPA's: Required.
- 4.11 Aquaculture: Required. .
- 4.12 Environmental Education: Required.
- 4.13 Training of Inspectors and Observers: Urgently required.
- 4.14 Trans-Disciplinary training for managers including ecosystem approach: Required. d
- 4.15 Fishing technology, implementing of quality control industry: Required.
- 4.16 Environmental monitoring including pollution and remote sensing: Required.
- 4.17 Biodiversity: Not yet established
- 4.18 Taxonomy and Curation: Last done in 1996
- 4.19 Pollution land and marine based: Last done in 1990
- 4.20 Environmental impact assessment training: Last done in 1990

**5) Regional and International linkages and support: ASCLME**

**6) Proposed startup training projects and activities:**

***Budget breakdown for Warsheikh District***

S.N.	Description	Unit	Qty	Rate in \$	Amount in \$
1	Warsheikh District	Person	7x4days	10	280
2	El Ma'an Town	Person	7 x4days	10	280
3	Habai Village	Person	5 x4days	10	200
4	Bashaqle Village	Person	5 x4days	10	200
5	Mahay Village	Person	5 x4days	10	200
6	Waharolei Village	Person	4 x4days	10	160
7	Dallugta Village	Person	4 x4days	10	160
8	Dumar Village	Person	5 x4days	10	200
	<b>Total</b>	<b>Persons</b>	<b>42x4days</b>	<b>10</b>	<b>1,680</b>

**Budget breakdown for Adale District**

S.N.	Description	Unit	Qty	Rate in \$	Amount in \$
1	Adale District	Person	10x4days	10	400
2	Bo'o Village	Person	10 x4days	10	400
3	Meralei Village	Person	7 x4days	10	280
4	Harakai Village	Person	7 x4days	10	280
5	Jabal Village	Person	5 x4days	10	200
6	Abarei Village	Person	5 x4days	10	200
7	Kudkudalei Village	Person	5 x4days	10	200
8	Janyar Village	Person	5 x4days	10	200
	<b>Total</b>	<b>Persons</b>	<b>54x4days</b>	<b>10</b>	<b>2,160</b>

***Budget breakdown for Banadir Districts***

<b>S.N.</b>	<b>Description</b>	<b>Unit</b>	<b>Qty</b>	<b>Rate in \$</b>	<b>Amount in \$</b>
1	Abdiaziz District	Person	7x4days	10	280
2	Shangani District	Person	7 x4days	10	280
3	Hamarweine District	Person	5 x4days	10	200
4	Hamarjab District	Person	5 x4days	10	200
5	Madina District	Person	5 x4days	10	200
6	Dharkeinlei District	Person	4 x4days	10	160
7	Abaidhahan Village	Person	4 x4days	10	160
8	Waberi District	Person	5 x4days	10	200
	<b>Total</b>	<b>Persons</b>	<b>42x4days</b>	<b>10</b>	<b>1,680</b>

***Budget breakdown for Merca District***

<b>S.N.</b>	<b>Description</b>	<b>Unit</b>	<b>Qty</b>	<b>Rate in \$</b>	<b>Amount in \$</b>
1	Merca District	Person	7x4days	10	280
2	Jilibmerca Village	Person	7 x4days	10	280
3	Gerndershe Village	Person	5 x4days	10	200
4	Dhanane Village	Person	5 x4days	10	200
5	Jezira Village	Person	5 x4days	10	200
6	El-Ahmed Village	Person	4 x4days	10	160
7	Mungiye Village	Person	4 x4days	10	160
8	Lix moro Village	Person	5 x4days	10	200
	<b>Total</b>	<b>Persons</b>	<b>42x4days</b>	<b>10</b>	<b>1,680</b>

**Summary of Budget**

<b>S.N.</b>	<b>Description</b>	<b>Unit</b>	<b>Qty</b>	<b>Rate in \$</b>	<b>Amount in \$</b>
1	Transportation and allowance for the two Districts (Warsheikh&Adale)	Person	180	40	7,200.00
2	Philip Chart 150 Pages	Pcs	6	50	300
3	Note books	Pcs	300	2	600

4	Marker Pen	Dozen	8	3.15	25.2
5	Ball Point Pen	Box	8	4.25	34
6	Scotch	Pcs	16	3.05	48.8
7	Refreshment	Persons	192	2.45	470.4
8	Rent of Vehicle	Days	16	70	1,120
9	Nets with accessories 72mm	Pcs	8	120	960
10	Nets with accessories 36mm	Pcs	8	105	840
11	Needles	Doz	4	30	120
12	Knives	Doz	6	12	72
13	Gloves	Doz	16	6	96
14	Plastic Sheet	Yards	44	2	88
15	Ropes 72mm	Doz	40	1.2	48
16	Ropes 36mm	Doz	40	1.1	44
17	Permeable Shirts	Pcs	192	7	1,344
18	Contingent 10%				1,341.00
	<b>Total</b>				<b>14,751.40</b>

#### ASCLME Workshop Plan for Warsheikh and Adale

DAY	DATE	TIME	TOPIC
One		08:00-08:15	Registration/introduction
		08:15-08:45	Opening ceremony
		08:45-09:45	Fish Handling & Processing Hygiene & Waste Management
		09:45-10:15	Tea break
		10:15-12:00	Environmental Awareness Marine Resources Management
		12:00-01:00	Praying and lunch break
		01:00-03:00	Marine Pollution
Two		08:00-09:45	Community Awareness

		9:45-10:15	Tea break
		10:15-12:00	Freshness & Quality of Fish a) Pre-rigid phase b) Rigid phase
		12:00-01:00	Praying and lunch break
		01:00-03:00	Method of Conservation a) Drying b) Salting c) Freezing d) Smoking
Three		08:00-09:45	Net mending & Repairing
		9:45-10:15	Tea break
		10:15-12:00	Video Presentation of Fish handling and processing
		12:00-01:00	Praying and lunch break
		01:00-03:00	Practicing Net mending & repairing I
Four		08:00-09:45	ASCLME Project Activities
		9:45-10:15	Tea break
		10:15-12:00	Practicing Net mending & repairing II
		12:00-01:00	Praying and lunch break
		01:00-03:00	Practicing Fish Processing & Hygiene
		03:00-03:30	Closing ceremony