

**SOMALI**

**JOINT NEEDS ASSESSMENT**

**PRODUCTIVE SECTORS AND ENVIRONMENT CLUSTER**

**ANNEXES**

**Table of Contents (needs to be checked)**

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ANNEX A: Distribution Of Major Land Cover Classes In Somalia, 2000.....	115
ANNEX B: Trends In Gross Domestic Product (1980-1990) .....	116
ANNEX C: Trends In Shares Of Gross Domestic Product In Somalia By Major Sectors .....	118
ANNEX D: Crop Production In Somalia, 1982-2004 .....	119
ANNEX E: ESTIMATED LIVESTOCK NUMBERS BY REGIONS.....	120
ANNEX F: SHEEP FLOCK SIMULATION MODEL – SOMALILAND AND PUNTLAND .....	121
ANNEX G: EXPORT INSPECTION AND CERTIFICATION FOR SHEEP AND GOAT .....	123
ANNEX H: ESTIMATES OF SOMALIA’S FISHERIES RESOURCES.....	127
ANNEX I: REGISTERED MANUFACTURING AND INDUSTRIAL ENTERPRISES IN SOMALILAND.....	130
ANNEX J: REFORESTATION PROGRAMMES IN ARID AND SEMI-ARID AREAS IN SUB-SAHARAN AFRICA .....	132
ANNEX K: CONDITIONS FOR FISHING LICENSES IN PUNTLAND .....	133
ANNEX M: Issues Facing the Telecommunications Industry ..... <b>Error! Bookmark not defined,</b>	
ANNEX N: SUMMARIES OF SOMALI FIELD ASSESSMENTS IN SOMALILAND, PUNTLAND AND SOUTH-.....	<u>151</u>
CENTRAL ????? .....	<u>151</u>
LIVESTOCK – PRODUCTION.....	<u>171</u>
BIBLIOGRAPHY .....	<u>179</u>

Deleted: 134

Deleted: 137

Deleted: 137

Deleted: 157

Deleted: 165

## List of Tables

Table A 1: Distribution of Major Land Cover Classes in Somalia, 2000.....	115
Table B 1: Trends in Gross Domestic Product (1980-1990) .....	116
Table C 1: Trends in Shares of Gross Domestic Product in Somalia by Major Sectors, 1980-1990 .....	118
Table D 1: Crop Production in Somalia, 1982-2004 .....	119
Table E 1: Estimated Livestock Numbers By Regions (1999) .....	120
Table F 1: Sheep Flock Simulation Model – Somaliland and Puntland .....	121
Table F 2: Sheep Flock Simulation Model - Somaliland and Puntland.....	122
Table G 1: Current Procedures for Export Inspection and Certification of Sheep and Goats .....	123
Table G 2: Outline of Improved Export Inspection Process for Sheep and Goats .....	125
Table G 3: Export Inspection and Certification Procedures - Sudan .....	126
Table H 1: Best Estimates of Annual Fish Catch Potential by Somali Regions.....	129

**(there will be some tables here for Annex M)**

Table N 1: Summary of Somaliland Field Assessment for Productive Sectors and

Environment..... 151

Deleted: 137

Table N 2: Summary of Regional Priority Needs Ranking for the Productive Sectors and

Environment..... 158

Deleted: 144

Table N 3: Summary of Puntland Field Assessment for Productive Sectors and

Environment..... 159

Deleted: 145

## ANNEX A: DISTRIBUTION OF MAJOR LAND COVER CLASES IN SOMALIA, 2000

**Table A 1: Distribution of Major Land Cover Classes in Somalia, 2000**

(% share in total)

Aggregated Land Cover Groups	Bakol	Banadir	Bari	Bay	Gedo	Galgudud	Hiraan	M/Juba	L/Juba	Mudug	Nugal	Sanag	M/Shabelle	L/Shabelle	Togdher	N/West	Total in thousand Hectares	Area in %
<b>Rainfed</b>																		
Herbaceous Corps	0.36	18.89	0	9.91	1.55	9.08	2.85	1.84	0.98	1.86	0	0	17.82	15.49	0	0.04	1,997	3.13
Irrigated Corps	0	0	0	0.02	0.42	0	0.66	3.34	0	0.00	0	0.02	4.62	7.84	0.59	3.62	577	0.9
Trees(Open, very open trees, shrubs and woody vegetation	81.43	27.06	31.11	82.36	71.53	57.02	77.83	87.59	87.72	61.56	41.47	37.39	51.43	64.93	46.5	51.57	37,614	58.99
Aquatic with trees and woody shrubs	0	0	0.01	0	0	0	0	0.00	0.39	0	0	0	0	0	0	0.01	20	0.03
Grassland and Shrub Savanah	14.74	7.17	59.46	7.4	23.11	31.78	17.87	6.27	9.45	32.19	56.04	51.92	18.22	9.4	51.56	37.01	20,859	32.72
Aquatic with Open to Close Grasslands with Sparse Trees and Shrubs	0	0	0.06	0	0.01	0	0	0.58	0.96	0.01	0.68	0	0	0	0	0	103	0.16
Bare Rock, Hollow Sand Dunes and Beaches	3.47	29.16	9.35	0.3	3.38	1.96	0.78	0.13	0.26	4.35	1.81	0.06	7.91	2.18	1.32	7.69	2,554	4.01
Urban Areas	0	17.72	0.01	0.01	0	0	0.01	0.05	0.02	0	0	10.61	0	0.1	0.02	0.06	14	0.02
Water (Natural and Artifical)	0	0	0		0	0.16	0.00	0.2	0.22	0.03	0	0	0	0.06	0.01	0	25	0.04
<b>Total %</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>		<b>100</b>
<b>Total (Thousand ha)</b>	<b>2,582</b>	<b>21</b>	<b>6,833</b>	<b>4,393</b>	<b>4,524</b>	<b>4,892</b>	<b>3,418</b>	<b>1,875</b>	<b>4,779</b>	<b>6,844</b>	<b>5,678</b>	<b>4,883</b>	<b>1,850</b>	<b>2,563</b>	<b>4,224</b>	<b>4,404</b>	<b>63,763</b>	

Source: FAO-Africover Project, 2000.

**ANNEX B: TRENDS IN GROSS DOMESTIC PRODUCT (1980-1990)**

**Table B 1: Trends in Gross Domestic Product (1980-1990)**

**(1985 SoSh millions)**

<b>Sectors/Sub-Sectors</b>	<b>1980</b>	<b>1985</b>	<b>1986</b>	<b>1987</b>	<b>1988</b>	<b>1989</b> Est.	<b>1990</b> Proj.
Agriculture	43,522	55,583	54,868	59,378	61,613	62,644	64,470
Livestock and livestock products	28,665	30,893	28,469	32,945	33,474	33,099	33,751
of which: change in stocks	-362	2,498	515	2,871	3,419	1,934	1,992
Crop production	12,036	19,121	20,814	20,433	21,949	23,156	24,082
Forestry	4,376	5,060	5,220	5,385	5,555	5,723	5,894
Fishing	443	509	565	614	634	666	732
Mining	278	291	291	291	291	291	291
Manufacturing	4,952	4,145	4,595	4,821	4,580	4,717	4,953
Electricity and Water	51	71	77	62	57	50	83
Construction	2,299	1,889	3,289	3,486	2,963	3,141	3,266
Trade and Hotels	10,055	8,485	8,587	9,929	8,599	9,081	9,353
Transport, Communication	4,595	5,667	8,020	6,153	5,873	5,225	6,412
Finance and Insurance	1,887	481	359	575	546	437	446
Real Estate	2,675	3,254	3,384	3,520	3,344	3,428	3,565
Government Services	2,293	1,625	1,631	1,530	1,404	1,344	1,300
Other Services	2,280	2,620	2,698	2,779	2,863	2,949	3,067
Imputed Bank Service Charges	-1,527	-859	-737	-748	-748	-785	-785
GDP at factor cost, inc. stocks	73,130	83,252	85,063	91,775	91,385	93,531	96,401
Indirect Taxes	4,809	4,100	5,381	4,220	3,548	3,934	4,937
GDP at market prices, inc.stocks	77,739	87,352	90,444	95,996	94,931	97,464	101,338

(1985 SoSh millions)

Sectors/Sub-Sectors	1980	1985	1986	1987	1988	1989 Est.	1990 Proj.
GDP at factor cost, exc. stocks	73,492	80,754	84,548	88,905	87,956	91,597	94,409
GDP at market prices, exc. stocks	78,101	84,854	89,929	93,125	91,512	95,530	99,348
Memorandum item:							
GDP at market prices (curr. Prices, incl. stocks)	17,372	87,352	120,970	187,538	288,905	618,622	1,478,524
Change in percent		40.16	38.49	38.49	71.25	115.52	138.88

Source: World Bank, Crisis in Public Expenditure Management, 1991, based on official estimates by the Ministry of Planning.

**ANNEX C: TRENDS IN SHARES OF GROSS DOMESTIC PRODUCT IN SOMALIA BY MAJOR SECTORS**

**Table C 1: Trends in Shares of Gross Domestic Product in Somalia by Major Sectors, 1980-1990**

Sectors/Sub-Sectors	1980	1985	1986	1987	1988	1989	1990
						Est.	Proj.
Agriculture	56.0	63.6	60.7	61.9	64.9	64.3	63.6
Livestock and livestock products	36.9	35.4	31.5	34.3	35.3	34.0	33.3
of which: change in stocks	-0.5	2.9	0.6	3.0	3.6	2.0	2.0
Crop production	15.5	21.9	23.0	21.3	23.1	23.8	23.8
Forestry	5.6	5.8	5.8	5.6	5.9	5.9	5.8
Fishing	0.6	0.6	0.6	0.6	0.7	0.7	0.7
Mining	0.4	0.3	0.3	0.3	0.3	0.3	0.3
Manufacturing	6.4	4.7	5.1	5.0	4.8	4.8	4.9
Electricity and Water	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Construction	3.0	2.2	3.6	3.6	3.1	3.2	3.2
Trade and Hotels	12.9	9.7	9.5	10.3	9.1	9.3	9.2
Transport, Communication	5.9	6.5	8.9	6.4	6.2	5.4	6.3
Finance and Insurance	2.4	0.6	0.4	0.6	0.6	0.4	0.4
Real Estate	3.4	3.7	3.7	3.7	3.5	3.5	3.5
Government Services	2.9	1.9	1.8	1.6	1.5	1.4	1.3
Other Services	2.9	3.0	3.0	2.9	3.0	3.0	3.0
Imputed Bank Service Charges	-2.0	-1.0	-0.8	-0.8	-0.8	-0.8	-0.8
GDP at market prices, inc.stocks	98.9	96.3	97.3	96.4	97.1	95.7	95.9

*Source:* World Bank, Crisis in Public Expenditure Management, 1991, based on official estimates by the Ministry of Planning *Note:* Need to check totals – may not add to 100 because of rounding

## ANNEX D: CROP PRODUCTION IN SOMALIA, 1982-2004

**Table D 1: Crop Production in Somalia, 1982-2004**

	(thousands of tons)																						
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
<i>Sorghum</i>	169.2	62.4	166.64	168.4	212.93	214.59	234.7	247	250	145	100	80	252	172	122.3	165.4	62.5	93.3	168.2	118.9	79.4	116	145
<b>Maize</b>	149.9	235.7	270.1	277.14	322.04	275.63	346.6	362	315	100	100	45	141	92.7	119.7	131.1	132.2	165.6	154.0	146.8	129.0	170	121
<b>Rice, Paddy</b>	..	..	..	..	..	..	12	16	15	10	8	5	16	2	2	2	2	2	2	..	1	1	1
<b>Cowpea</b>	15	13	27.13	25.5	21.72	7	9.2	13	14	13	10	11	12.1	13	14	15	13	14	15	16.5	16.5	..	..
<b>Sesame Seed</b>	57.1	35.6	39.7	56.7	44.5	45.3	46	48	45	35	10	..	21.7	25	23	24	21	22	23	25	25	..	..
<b>Banana</b>	78.7	88.9	62.2	60	93.9	108	115.2	116	110	90	55	55	43	45	44	42	40	45	42	36	36.9	..	..
<b>Grapefruit</b>	..	..	..	..	..	20.6	27.6	28	28	15	..	17	18	19	13	12	10	9	5.9	6	6.1	..	..

*Source:* FEWS for sorghum and maize data, FAO, Middle Shabelle Regional Administration



**ANNEX E: ESTIMATED LIVESTOCK NUMBERS BY REGIONS**

**Table E 1: Estimated Livestock Numbers By Regions (1999)**

<b>Region</b>	<b>Livestock Species and Number ('000)</b>				<b>Total Numbers</b>
	<b>Camels</b>	<b>Cattle</b>	<b>Sheep</b>	<b>Goats</b>	
North-Western	1,308	309	5,837	4,790	12,245
North-Eastern	1,345	436	3,449	7,096	12,328
Central	1,003	462	1,099	371	2,934
Southern	1,217	1,341	707	1,860	5,125
Juba Valley	1,417	2,062	742	2,048	6,269
<b>Total</b>	<b>6,294</b>	<b>4,609</b>	<b>11,834</b>	<b>16,165</b>	<b>38902</b>

*Source:* Somali Livestock Sector Strategy, 2004; adapted from estimates prepared by the Somalia, Food Security Analysis Unit, FAO, 1999.

**ANNEX F: SHEEP FLOCK SIMULATION MODEL – SOMALILAND AND PUNTLAND**

**Table F 1: Sheep Flock Simulation Model – Somaliland and Puntland  
(assumed age of male turn-off is 3 years)**

Sheep Category		Assumptions		Year 1 <sup>a/</sup>	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	
		Surv %	Lamb %								
Rams				2	2	2	2	2	2	2	
Ewes	0-1 yr	0.85		25	18.6	19.2	21.5	19.9	18.6	18.8	
	1-2 yr	0.9		13	21.3	15.8	16.3	18.3	16.9	15.8	
	2-3 yr	0.9	0.6	16	11.7	19.1	14.2	14.7	16.5	15.2	
	3-4 yr	0.9	0.6	19	14.4	10.5	17.2	12.8	13.2	14.8	
	4-5 yr	0.9	0.6	17	17.1	13.0	9.5	15.5	11.5	11.9	
	5-6 yr	0.9	0.6	6	15.3	15.4	11.7	8.5	13.9	10.4	
	6-7 yr	0.9	0.6	4	5.4	13.8	13.9	10.5	7.7	12.5	
<b>Breeders</b>	<b>80%=100</b>			<b>100</b>	<b>105.8</b>	<b>108.8</b>	<b>106.3</b>	<b>102.2</b>	<b>100.4</b>	<b>101.5</b>	
Wethers	0-1 yr	0.85		15	18.6	19.2	21.5	19.9	18.6	18.8	
	1-2 yr	0.95		5	12.8	15.8	16.3	18.3	16.9	15.8	
	2-3 yr	0.95		3	4.8	10.0	12.9	15.5	15.2	14.0	
	3-4 yr	0.95		1	2.9						
	4-5 yr	0.95		1	1.0						
<b>Males</b>	<b>20%=25</b>			<b>25</b>	<b>39.9</b>	<b>45.0</b>	<b>50.7</b>	<b>53.7</b>	<b>50.7</b>	<b>48.7</b>	
<b>Total sheep equiv.</b>		(0-1yr = 50% others)		<b>107</b>	<b>127.1</b>	<b>134.6</b>	<b>135.5</b>	<b>136.0</b>	<b>132.5</b>	<b>131.4</b>	
Home Use	4% 1-2 yr										
Sacrifice	3% 1-2 yr										
Sakko	1% 1-2 yr										<b>Total Sales over 6 years</b>
Religious	5% 1-2 yr										
<b>Total</b>	<b>13% 1-2 yr</b>	Taken as 2-year olds			1.7	2.1	2.1	2.4	2.2	2.1	
<b>Sales</b>	Ewes				<b>4.0</b>	<b>5.4</b>	<b>13.8</b>	<b>13.9</b>	<b>10.5</b>	<b>7.7</b>	<b>55.2</b>
(no. head)	Wethers	Net of home use etc			<b>5.0</b>	<b>8.6</b>	<b>10.1</b>	<b>12.9</b>	<b>15.5</b>	<b>15.2</b>	<b>53.7</b>
<b>Turn-off as a % of total flock</b>					6.2	9.1	15.2	17.2	17.2	15.2	
<b>Turn-off of 2-3 year males as % of all males</b>					12.5	19.0	19.9	24.0	30.5	31.2	

a/ Starting flock based on "Ruminant Flocks in Central Somalia," in Pastoral Production in Central Somalia, Baumann (ed), GTZ, 1993

**Table F 2: Sheep Flock Simulation Model - Somaliland and Puntland**  
(assumed age of male turn-off is 2 years)

Sheep	Category	Assumptions		Year 1 <sup>a/</sup>	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	
		Surv %	Lamb %								
Rams	2-5 yr			2	2	2	2	2	2	2	
Ewes	0-1 yr	0.85		25	18.6	19.2	21.5	19.9	18.6	18.8	
	1-2 yr	0.9		13	21.3	15.8	16.3	18.3	16.9	15.8	
	2-3 yr	0.9	0.6	16	11.7	19.1	14.2	14.7	16.5	15.2	
	3-4 yr	0.9	0.6	19	14.4	10.5	17.2	12.8	13.2	14.8	
	4-5 yr	0.9	0.6	17	17.1	13.0	9.5	15.5	11.5	11.9	
	5-6 yr	0.9	0.6	6	15.3	15.4	11.7	8.5	13.9	10.4	
	6-7 yr	0.9	0.6	4	5.4	13.8	13.9	10.5	7.7	12.5	
<b>Breeders</b>	<b>80%=100</b>			<b>100</b>	<b>105.8</b>	<b>108.8</b>	<b>106.3</b>	<b>102.2</b>	<b>100.4</b>	<b>101.5</b>	
Wethers	0-1 yr	0.85		15	18.6	19.2	21.5	19.9	18.6	18.8	
	1-2 yr	0.95		5	12.8	15.8	16.3	18.3	16.9	15.8	
	2-3 yr	0.95		3							
	3-4 yr	0.95		1							
	4-5 yr	0.95		1							
<b>Males</b>	<b>20%=25</b>			<b>25</b>	<b>31.4</b>	35.0	37.8	38.2	35.5	34.7	
<b>Total sheep equiv.</b>		(0-1yr = 50% others)		<b>107</b>	<b>118.5</b>	<b>124.6</b>	<b>122.6</b>	<b>120.5</b>	<b>117.3</b>	<b>117.3</b>	
Home Use	4% 1-2 yr										
Sacrifice	3% 1-2 yr										
Sakko	1% 1-2 yr										
Religious	5% 1-2 yr										
<b>Total</b>	<b>13% 1-2</b>		Taken as 2-year olds		1.7	2.1	2.1	2.4	2.2	2.1	
<b>Sales</b>	Ewes				<b>4.0</b>	<b>5.4</b>	<b>13.8</b>	<b>13.9</b>	<b>10.5</b>	<b>7.7</b>	<b>55.2</b>
(no. head)	Wethers		Net of home use etc		<b>8.3</b>	<b>10.7</b>	<b>13.7</b>	<b>13.9</b>	<b>16.1</b>	<b>14.9</b>	<b>77.6</b>
<b>Turn-off as a % of total flock</b>						9.0	11.2	19.1	19.8	19.6	16.6
<b>Turn-off of 1-2 year males as % of all males</b>						26.6	30.6	36.2	36.4	45.3	43.0

a/ Starting flock based on "Ruminant Flocks in Central Somalia," in Pastoral Production in Central Somalia, Baumann (ed), GTZ, 1993

## ANNEX G: EXPORT INSPECTION AND CERTIFICATION FOR SHEEP AND GOAT

### Concept and Implementation Planning

#### Current Situation

1. Sheep and goats are currently required to go through a system which is summarized for Somaliland and Puntland in the table below. Sheep and goats coming from the South-Central region would also follow the same route. It is understood that the authorities in Somaliland and Puntland are aiming to improve the standards of inspection within the framework described below, and also to make major improvements to holding yards at inspection centers close to the port towns of Berbera and Bosasso.

**Table G 1: Current Procedures for Export Inspection and Certification of Sheep and Goats**

Activity/Location	Details of Inspection Process
1. Inspection close to production area	First veterinary inspection. Animals held in an inspection center under observation for 7-10 days – usually at a yard sale or similar location where sheep and goats are marshaled for export sale.
2. Inspection close to port area	Second veterinary inspection. Animals held in an inspection center under observation for 7-10 days – in an area set aside some distance from the port (such as in Hargeisa) or within the port city boundaries (such as in Bosasso). Animals are tested for brucella and inspected for clinical signs of other diseases such as rift valley fever.
3. Animals loaded on ships	A group of animals owned by a trader is issued with an export certification

2. This system is acknowledged to have a number of weaknesses because (a) animals come together at inspection centers from locations where certain diseases may or may not be endemic and cross infections between animals from different groups are likely; (b) even if each animal is inspected they may not exhibit clinical evidence of some diseases and hence infections will not be detected; (c) the costs of bringing animals to inspection centers is high because of the stress on animals and the costs of feed and water; (d) because inspection centers are often close to towns, there are also costs related to the pollution that takes place where many animals congregate.

3. The Pan-African Program for the Control of Epizootics (PACE) has conducted research and trials on infectious diseases, such as Rinderpest and Rift Valley Fever (RVF), in livestock in Somalia since 2002.<sup>1</sup> The “PACE Plan for Somalia” (2003) laid out, among

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<sup>1</sup> See, for example, the PACE, “Rinderpest Eradication Strategy”, February 2002.

other things, a proposal for the preparation of draft of legislation (Somaliland)<sup>2</sup>, and an update of existing legislation (Puntland)<sup>3</sup>, to establish veterinary laws and regulations in Somaliland and Puntland that would take account of modern technology and would also comply with the regulations of the International Office of Epizootics (OIE) and the World Trade Organization (WTO).

4. Conclusions from PACE research and trials in Puntland led to recommendations for the strengthening of the Ministry of Livestock, Agriculture and the Environment (MoLAE), a changed organizational structure for the ministry, improved public services to livestock producers, better linkages between the MoLAE and other ministries and agencies, as well as endorsement of revised veterinary legislation which has been passed by the Puntland Parliament as “The Veterinary Law-Code”.

5. The revised legislation was considered by the Puntland State Government and approved in 2003. This legislation is in nine sections, namely (i) Definitions; (ii) General Provisions; (iii) Disease Notification and General Provisions; (iv) Animal Disease Emergency Response Management; (v) Export/Import of Animals and Animal Products; (vi) Transport of Animals; (vii) The Veterinary Board; (viii) Veterinary Privatisation; and (ix) Financial, Penal and Other Provisions. This note focuses on exports of sheep and goats.

6. Following the work the Africa-wide PACE and its Somali branch, Somali Animal Health Service Project (SAHSP) aims to strengthen the capacity of Somali institutions to deliver animal health services, establish a surveillance system and implement measures for the eradication of Rinderpest from the Somali ecosystem, covering areas of North-east Kenya, Southern and Central Somalia and the Somali Region of Ethiopia. It is understood that the ultimate objective is to improve the efficiency of export inspection, certification and the care for all livestock during export marketing.

7. To implement any credible livestock export system, there is a need for a credible veterinary service in the form of a National Veterinary Service that can apply animal health measures and the international veterinary procedures recommended by the OIE. The concept for these improvements would build on provisions in the revised legislation which refers to procedures for animals coming from disease free areas and states that “Only animals that are correctly identified and which come from an establishment free from List A diseases and not situated in an infected area shall be authorized for export.” Simply put the improved ideal concept for ensuring the export of disease-free live animals from Somalia is based on the following strategy, which could be tested as pilot scheme in the medium term i.e., 5 to 10 years:

- Mapping of the incidence of all major animal diseases
- Eradication of the disease from mapped areas over the long term

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<sup>2</sup> The Italian NGO, Terra Nuova, had at that time already established a task force that had prepared a draft veterinary law, regulations and guidelines for Somaliland based on the earlier law of Somalia of 1967

<sup>3</sup> Puntland used the Somalia veterinary law and statutes of 1967.

- Inspection (on a sampling basis) of groups of animals destined for export within the disease free area, and the tagging of all approved animals in the group which would certify their eligibility for export
- Walking (along designated disease free stock routes) or transporting animals by truck to export locations from the disease free areas directly to an official quarantine area close to port for final inspection, export certification and almost immediate loading on ships.

8. The following table outlines the export inspection process for sheep and goats destined for export when the improved concept is available for use as a pilot scheme in probably five year time at the earliest.

**Table G 2: Outline of Improved Export Inspection Process for Sheep and Goats**

Activity/Location	Details of Inspection Process
1. Inspection close to production area	First veterinary inspection (based on a sample) in an area where diseases have been eradicated. Animals held in an inspection center for a maximum of 2 days (close to a sale yard or similar location where sheep and goats are marshaled and sold for export). Animals approved for export are each identified with official tags.
2. Inspection close to port	Second veterinary inspection in a quarantined area close to the port (based on a sample). Within 1 day animals have their tags verified, are again checked (by sample) for diseases, and if approved are certified for export.
3. Animals loaded on ships	Export certificate is issued and animals are loaded on ships

9. The Livestock Working Group of the Somalia Aid Coordinating Body has been considering such conceptual improvements in the arrangements for export inspection and certification of livestock for many years. It may be possible for the Group to come to closure on these arrangements before the completion of the report by the Productive Sectors and Environment Cluster of the Somali JNA. Obviously it would also be essential for the Working Group to discuss a revised system based on the concept developed by PACE and the SAHSP with the livestock producers and exporters and seek their support and agreement. External support for financing the implementation of this vision in all areas in all Somali regions could then be factored into the costing for the JNA.

7. The change to a simpler and more direct concept for export inspection and certification should be more efficient and cheaper for traders as well as for the Puntland MoLAE and the Somaliland Ministry of Livestock, which should be reflected in higher prices to producers. Assuming that the improved concept is accepted by the authorities, producers and traders as the target, and that Somalia's international customers for livestock will endorse it, then it seems logical that the JNA should budget for the costs associated with providing the basis for this scheme (eradication, monitoring etc) and for its implementation. This is exactly what this report has done.

8. Of course the actual implementation of the improved system assumes successful eradication of epizootic diseases (probably phased by regions) which will take time and

resources. Clearly animals not originating from disease-free areas will still need to pass through the more tedious and costly traditional inspection system. In the interim period an improved version of the traditional process based on improved infrastructure and implementation capacity can probably be devised.

It is possible, however, that if the proposed system based on eradication of epizootic diseases is not implemented that the Saudi authorities may require a system like the export inspection system used by Sudan for sheep which is more costly than the current system used for sheep in Somali regions and ports. The current system is summarized in Table G.3.

**Table G 3: Export Inspection and Certification Procedures – Sudan**

(April 2006)

<b>Inspection and Export Certification System for Sheep in Sudan</b>	
<b>Location/Timing</b>	<b>Activities</b>
Inspection close to production area	First veterinary inspection, animals held in an inspection center under observation for 7-10 days
Entry into a quarantine area	Second inspection at inland quarantine station by veterinarians, blood sample taken from every animal for brucellosis testing. Animals held for 7-10 days
Inspection on the way to the port	Third animal inspection in quarantine area by veterinarian, the group of animal receives three certificates – i.e. number of animals, free from infectious and non-infectious diseases, animals in good health.
Prior to loading on ship	Fourth inspection seven days prior to shipment, animals are held in quarantine and inspected to verify that they have no evidence of infectious or non-infectious disease, and not generally weak.
Animals are eligible to be loaded on ship with certificate	If animals pass this final inspection all animals intended for export are issued with an international animal health certificate

*Source:* Dr Hassan Nur, Director of Planning, Ministry of Animal Resources and Fisheries, Government of National Unity, Khartoum, Sudan

## ANNEX H: ESTIMATES OF SOMALIA'S FISHERIES RESOURCES

### General

1. Since the mid-1960s, several fishery resource surveys have been carried out in Somali waters. Reports from the main survey studies are listed below.

#### R/V Thetis (Greece)

2. A freezer trawler from Greece carried out exploratory trawl surveys between Mait and Eil from January to December 1966. The total catch was 3,310 ton, taken at a mean catch rate of 24.9 ton per day. Sea-breems and scavengers were the principal species in the catches. The main fishing grounds were on the north-east coast where the average individual trawl catch ranged from 2.8 to 4.3 ton. On the basis of the area swept by the trawl gear, and the catches obtained, average densities of demersal fish were calculated (Fisheries Development Limited, 1982). For the north coast, the average fish density was 2.3 mt per sq. km, and for the north-east coast, 4.8 ton per sq. km. These estimates are considered to have been overestimates when related to the wider Somali sea area because fishing effort was concentrated at the richest fishing grounds.

#### R/V Zheleznyakov (USSR)

3. This vessel carried out experimental fishing surveys on the north coast and in the Ras Hafun area in the period August 1970–October 1971. The main target was the tuna resource at the north coast, but some limited trawling on demersal fish was also carried out. The reports from the surveys describe in general the fish distribution and the influence of environmental factors, but no estimate of fish abundance was made.

#### R/V Misshin Maru # 52 (Japan)

4. This was a commercial freezer trawler which fished between March 1970 and August 1971, mainly in the area from Ras Asir to Ras Hafun. No resource evaluation was made but catch rates were reported within the range 82 - 472 kg per-hour-trawling.

#### R/V Dr Fridtjof Nansen (Norway)

5. Operating under a FAO/MORAD/UNDP project, this research vessel carried out five acoustic surveys of the entire Somali coast in the period March 1975 to November 1976. The estimates of the small pelagic fish ranged from 240,000 to 800,000 ton for the east coast, with the average 490,000 ton. For the north coast, the estimates ranged from 4,000 to 180,000 mt, average 80,000 mt (Kesteven, et al, 1981). The greater part of the pelagic fish stock was found between Ras Asir and Ras Hafun.

6. Estimates of demersal biomass were also made. The average biomass for the east coast was 335,000 ton, and for the north coast 65,000 ton. These figures also include some



fairly high densities of cardinal fish (*Synagrops* spp.), although the species were considered to be of little commercial value (Stromme, 1987).

#### **Somali Fish (Soviet/Somali Joint Venture)**

7. Somali fish was a Somali/Soviet joint venture company which carried out bottom trawling for fish, mainly off the north-east coast, but also in a narrow belt in deeper waters for deep-sea lobster. The fleet consisted of 10 trawlers which caught about 8,700 mt in the period 1975-1977. The data collected from these activities did not lend themselves to being used for resource evaluation.

#### **Amoroso E Figli (Italy)**

8. An Italian fishing company operated with three freezer trawlers off the north-east coast in 1978/1979. The catch rates ranged from 4.0 - 4.4 to/trawler/day of commercially valuable demersal fish, and 0.3 to 0.6 to/trawler/day of lobster. Trawling indicated fish densities of 0.95 - 1.3 to per sq. km.

#### **R/V "Isla De Lanzarote" (Spain)**

9. This vessel carried out an extensive trawl survey along the whole of the Somali east coast in the period February to April 1981. The report estimated the demersal biomass of valuable commercial species (groupers, snappers, scavengers, sea breams) at 31,000 ton, at an average density of 1.16 ton per sq. km. This was about one-third the density estimated by *Dr Fridtjof Nansen* but that survey also included non-commercial fish.

#### **F/V Clabucet (Romania)**

10. A Romanian factory trawler operating pelagic trawl gear in the Ras Asir/Ras Hafun area from November 1983 to October 1984 collected a considerable amount of data on catch rates, biological characteristics of the species, and fishing techniques. The data collected were not suitable for estimation of the abundance of the fish resources.

11. Initially, as part of the project, some local coastal trawlers carried out trawl surveys off the north coast. Due to difficult sea conditions and heavy loss of gear on the rough grounds, these activities were stopped.

#### **Somitfish**

12. Somitfish operated three stern trawlers along the entire Somali east coast in the years 1980 - 1985. Both demersal fish and deep-sea lobsters were caught. Catch rates for fish were 5 - 7 ton/day and for lobsters 1.5 - 2.5 ton/day (FAO, 1987).

**Table H 1: Best Estimates of Annual Fish Catch Potential by Somali Regions**

Species	Somaliland	Puntland	South-Central	All Regions
	(tons)			
<b>Large Pelagic</b>	1,600 – 3,200	9,000 – 18,800	9,000 – 18,000	20,000 – 40,000
<b>Small Pelagic</b>	5,600 – 8,000	32,900 – 47,000	31,500 – 45,000	70,000 – 100,000
<b>Large Demersal</b>	3,200 – 4,800	18,800 – 28,200	18,000 – 27,000	40,000 – 60,000
<b>Sharks and Rays</b>	2,400	14,100	13,500	30,000
<b>Spiny Lobster</b>	120 - 160	705 - 940	675 - 900	1,500 – 2000
<b>Prawns</b>	40	235	225	500
<b>Total</b>	12,960 - 18,600	76,140 – 10,9275	72,900 – 104,625	162,000 – 232,500

*Source:* The estimates of fish catch potential in this table are for the three regions considered in this report based on various pieces of research done mainly 20 to 30 years ago. The estimates are prepared by the Productive Sectors and Environment Cluster based on figures obtained from the "Dr Fridtjof Nansen" cruises<sup>a/</sup>, and other research and reported observations. The basic figures used were the figures for all areas. Those figures were then broken down into estimates for the three regions by dividing the total Somali figures by the estimated proportion of the total EEZ taken up by each State. Somaliland has an EEZ which is roughly 8 percent of the total Somali EEZ, Puntland 47 percent, and South-Central 45 percent. The cluster fisheries expert considers these estimates are conservative and actual results could be as much as 50 percent higher than those in the table assuming the current destruction of habitat and illegal fishing practices are stopped.

*Note:* Pelagic species are open sea, usually large, fish such as tuna and kingfish. Demersal species are bottom fish such as flounder, grouper and snapper.

<sup>a/</sup> FAO (1999); Fridtjov Nansen Survey, 1975-76

**ANNEX I: REGISTERED MANUFACTURING AND INDUSTRIAL ENTERPRISES  
IN SOMALILAND**

**Table I 1: Somaliland – Registered Small Scale Industries**

#	The Name of	Production	Date, Registries	The Location
1	N.P.P.C	Newspapers	3-04/09/95	Hargeisa
2	Aala-yaasir	Bread (loaves)	4-04/12/96	Hargiesa
3	Warshadamasabiirta	Nails	6-14/02/98	Hargiesa
4	Al-khayraatfoamfactor	Matrices	8-28/11/99	Hargiesa
5	Towfiqbuidinq Ca-orpro	Leather	9-20/20/93	Burco
6	Warshada Baastada	Spaghetti	10-29-11-99	Hargiesa
7	Gamuur Fibre Class	Fibre Glass	33-23-06-2001	
8	H,Foods	Chilled meat	16-29-06-2000	Burco
9	Hargeisa plastic Factory	Plastic products	20-08-10-2000	Hargiesa
10	Brick & Tiles factory	Cement blocks & Tiles	26-03-03-2001	Hargiesa
11	Hargeisa spring water	Treated water vase	27-04-03-2001	Hargiesa
12	World wide business	Soft drinks & pastry	29-29-03-2001	Hargiesa
13	W, Biyaha Nature	Pure natural water	30-21-04-2000	Hargiesa
14	Daryel work shops	Building material	31-22-04-2001	Hargiesa
15	Saafi water	Purified water	33-23-06-2001	Hargiesa
16	Gamuur fiber class	Fibre Glass	34-23-06-2001	Hargiesa
17	Aluminum Factory	Aluminum production	35-01-09-2001	Hargiesa
18	Dalashis	Bricks & Blad	36-20-09-2001	Hargiesa
19	Hargeisa Furniture	Ceranicstices	38-23-09-2001	Hargiesa
20	Deeqa Brick Production	Bricks	39-22-01-2001	Hargiesa
21	Afgal food industries	Food	40-21-11-2001	Hargiesa
22	Building Material	Cumar.f.&jamacmired	41-03-05-2002	Hargiesa
23	Waaberi	Biscuits	46-12-05-2002	Hargiesa
24	Red sea salt Enterprise	Salt	50-05-05-2002	Hargiesa
25	Ilo-tango	Powdered Drinks	52-14-07-2002	Hargiesa
26	Takhoshis	Iodized Salt Production	55-17-07-2002	Hargiesa
27	Bakery.	Loaves of bread	57-22-07-2002	Hargiesa
28	Al-Towfiq Automatic	Bread & Cakes	58-20-07-2002	Hargiesa
29	Awro aluminum		66-03-03-2003	Hargiesa
30	Golisb distilled water elan	Distilled water processing	68-12-01-2003	Hudisa
31	Gudud processing group	Dye substances (for women)	5/6/2003	
32	W, marmarka iyo dhagaxa		69	
33	Hargeisa food & Beverage	Diluted drinks & soft drinks	71-02-02-2003	Hargiesa
34	Warshada marmarka	Tiles	72-04-03-2003	Hargiesa
35	Warshada nacnaca	Candies, Chocolates	75-17-05-2003	Hargiesa
36	Natural Gas Reprocessing	Natural gas & filling iron	78-13-01-2003	Hargiesa
37	Rasamaal	Roofiling and flooring-wall	82-04-10-2003	Hargiesa
38	Raaxo foam factory	Sponge	85-01-12-2003	Hargiesa
39	Foster-ZamZam factory	Drinks in powder	86-14-12-2003	Hargiesa
40	Somcrete inc	Marmarka (tiles)	93-13-03-2004	Hargiesa

#	The Name of	Production	Date, Registries	The Location
41	Warshada kaluunka laasqoray	Fish	94-13-03-2004	Hargiesa
42	Livestock	Animal By-Product Processing	98-09-05-2004	Hargiesa
43	Batuun leather tanning	Karoomka	99-09-05-2004	Hargiesa
44	Shaam construction factory	Building material	102-17-06-2004	Hargiesa
45	Boqal jire Building products	Building product	109-15-07-2004	Hargiesa
46	Hargeisa Marble Factory	Tiles	110-15-07-2004	Hargiesa
47	W. Saab, Budada ileys Burco	Soap detergents	114-20-11-2004	Hargiesa
48	United leather factory	Wet Blue	112-27-09-2004	Hargiesa

Source: Ministry of Commerce and Industry, March 2006

## **ANNEX J: REFORESTATION PROGRAMMES IN ARID AND SEMI-ARID AREAS IN SUB-SAHARAN AFRICA**

### **Description of Achievements in Forestry Nurseries in Sub-Saharan Africa**

Nurseries have been established in four countries, namely Niger, Cameroon, Nigeria and Chad. Seedlings planted were those of over-exploited and threatened indigenous and a few exotic species of economic, dietary, medicinal and cultural value to communities in the project area. Between 2 and 5 hectares have been established as community woodlot sites and planted with species using seedlings from the nurseries. Community members have been provided with tree seedlings of their choice which they have successfully planted and are managing around household compounds and farm land.

An area of 0.25 ha. nursery plots have been established on all four country sites since 2002. The seedlings planted consist of over-exploited and threatened indigenous and a few exotic species of economic, dietary, medicinal and cultural value to communities in the project area. These include: *Acacia Senegal*, *Acacia seyal*, *Boabab* spp, *Khaya senegalensis*, *Ziziphus mauritania*, *Prosopis juliflora*, *Tamarindus indica*, *Balanites aegyptiaca*, *Neem* spp *Eucalyptus* spp, and *Zeaton* spp.

- An area of 2 ha (Cameroon, Nigeria and Niger) and 5 ha (Chad) community woodlot sites have been established and planted with the above species.
- Community members have been provided with tree seedlings of their choice which they have successfully planted and are managing around household compounds and farm land, with significant impact realized in 2003 due to favorable conditions compared to 2002.
- In Diffa, Niger, about 7,500 seedlings were produced between 2002-03 and 5000 in 2004 for transplanting in the rainy season in June-July 2004. Although survival was low in 2002 (about 20%) due to drought conditions, in 2003 the woodlot was replanted with 2400 seedlings and 3,500 distributed to the community with 95% survival.
- In Makilingai, Cameroon, 20,000 seedlings were produced in 2002-03 period for woodlot plantation and distribution to the communities for afforestation purposes. 8,000 have been planted in the 2 ha. Community woodlot plots, with more than 2,000 distributed to Junior School Environmental Clubs and 10, 000 to the community members to plant around their compounds and farms.
- In Ngala, Nigeria 10,000 seedlings were produced in the nurseries in 2002-03 and 8,000 have been established in pots for transplanting into fields this year. About 3,000 of these have been transplanted in the 2 ha community woodlot.
- In Zafaya, Chad, about 2000 seedlings were produced in 2002 but with 80% mortality due to prevailing drought conditions. In 2003, with the provision of water from a developed well, and better rainfall, survival rate was 85% with 3,000 seedlings.

## **ANNEX K: CONDITIONS FOR FISHING LICENSES IN PUNTLAND**

The following are the terms and conditions under which foreign fishing licenses are granted in the State of Puntland. Fishing Law No. 25 of 30 Nov 1985 and/or Puntland, State of Somalia Regulations. Contravention of this law may result in suspension or withdrawal of license and further restriction in relation to issue of license for future fishing in Puntland waters. Master, owner or charterer of vessel in respect of which this licence is granted shall:

1. Keep original of licence aboard vessel.
2. Make available vessel for boarding for inspection upon receipt of request by Fisheries Protection Officer and/or any other person authorized by him including stopping and/or moving to prescribed location to facilitate safe boarding by him.
3. Not assault, obstruct, delay or intimidate Fisheries Protection Officer and/or his authorized person.
4. Not carry or allow to be carried on board or use any type of fishing gear other than is stated in license.
5. Complete a daily catch report in the form attached to license and comply with requirement as to provision of copies.
6. At all times comply with Code of Conduct (as defined in Regulations).
7. Not transship any part of vessel's catch inside or outside Puntland waters unless authorized by Fisheries Protection Officer who may require observers to be aboard the transshipment vessel.
8. Obey any orders and directions given by Fisheries Protection Officer in command of the Fisheries Protection Vessel.
9. Comply with internationally recognized Law of the Sea and regulations.
10. Inform Fisheries Protection Officer by electronic communication every 24 hours as accurately as possible or upon request the fishing vessel's position.
11. During passage in Puntland waters stow all fishing gear in hold or other place provided for that purpose.
12. Not catch any other species than as authorized in license except that there may be by-catch of no more than 50 percent of the authorized species on board.
13. No fish within the Territorial Waters of Puntland, State of Somalia, the seaward boundary of which shall be not less than 6 nautical miles from the nearest point of land, nor allow the vessel's fishing gear when deployed to drift within that boundary.
14. Ensure that any installment for this license is paid on time, failing which this license may be suspended or withdrawn.
15. Carry or use for trawling operation nets whose cod ends shall be not less than 70 mm stretched mesh.
16. Not use blinders or double nets or any material to reduce mesh size of net.
17. Comply with any variation of license notified to Vessel.
18. Ensure that the relevant radio frequency used for communication with the Fisheries Protection Vessel is monitored during the prescribed schedule as notified to fishing vessel from time to time.
19. Ensure that the fishing vessel displays clear identification marks in accordance with the Code of Conduct (as defined in regulations).
20. This license shall be valid only for the period provided therein and shall not entitle holder to automatic renewal following expiry.

## ANNEX M: ACHIEVEMENTS, STATUS AND WAY FORWARD FOR THE TELECOMMUNICATIONS INDUSTRY

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The purpose of this annex is to outline the remarkable developments in the Somali telecommunications industry, the current status of the industry and the possible way forward. The opportunities that Information and Communications Technology (ICT) offer pose complex policy choices for the government in the context of recovery and reconstruction process. The Government has to address the implementation of ICTs amid strong competition for limited financial resources from other sectors of the economy. In addition, consideration has to be given to other crosscutting areas such as governance, gender and human resource development and appropriate legislation, security, privacy and protection of intellectual property rights.

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The successful implementation of the ICT policy objectives depends on an integrated approach underpinned by developing strategic synergies and partnerships between the public and private sector as well as with civil society. This implies clear definition of the roles, responsibilities and functions of all stakeholders. Developing this mutual understanding requires a deliberate and open process of broad-based consultations among all major stakeholders. Neither government nor industry can itself create the necessary conditions for success in ICTs. Therefore, it is fundamental for government to create the right policy conditions that allow ICT to flourish. Yet it is equally important for the private sector to take a leading role in investment and lend its own expertise to the planning and implementation process. The national ICT leadership should reflect responsibilities across public, private, and civil society.

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## INSTITUTIONAL FRAMEWORK

Coherent strategies are required to address the current problems in Somalia, in order to achieve objectives that have been set for the growth of telecommunication services, in an investor-friendly environment, which is conducive to rapid development. One of the essential conditions is to pursue more rigorously the structural transformation of telecommunication institutions in Somalia.

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Somalia has not achieved any institutional re-arrangements and is at ground stages of implementing an effective management of the Telecommunication industry. Although Somalia still lacks the dominant operator, no government now provides Telecommunication services directly. However, some local governments are indirectly involved lightly in regulating of these enterprises. Actually, basic telecommunication services in Somalia are provided by non state-owned or completely run by private sector-owned enterprises. So far, Somalia has not established telecommunications regulators authority as the country recovering from civil conflict. But, compared with neighboring countries or those who are similar situation as Somalia, the regulators mandate and autonomy has been enhanced in order to be able to function optimally in the current competitive environment. However, some of these countries regulatory responsibilities are shared in various degrees between government and the state-owned dominant operator.

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There is consensus in Somalia to rebuild infrastructure, and the necessity of restructuring existing institutions in order to empower, clarify and assign appropriate roles to key players in the telecommunication sector should be the top priority. The ultimate goal is to come up Telecommunication industry framework with separate roles for government, regulator and service-providers, operated through adequate legislation. In moving to this target industry configuration, the reinforcement of human resource capacity in both government and regulatory institutions, to enable them to pursue the building process effectively, has become an urgent consideration.

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## OBJECTIVES OF THE INSTITUTIONAL FRAMEWORK

**The key objectives of proposed institutional framework are to:**

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- a) Allocate clear roles and responsibilities to key role-players;
- b) Promote principle of good corporate and public governance (e.g. accountability, transparency, e. t. c.)
- c) Remove unnecessary duplications, and to promote efficiency and cost-effectiveness in managing the information and communications industry;
- d) Promote investor friendly environment;
- e) Create a “level playing field”;
- f) Restructure the national incumbent operators including broadcasting operators and postal services operators;
- g) Introduce and promote competition;
- h) Promote market growth;
- i) Promote ICT diffusion; universal service and universal access; and
- j) Promote regional integration
- k) Promote as far as possible peace and harmony through communication

## **KEY ROLE-PLAYERS**

The key role-players in building a structure for the Telecommunication industry are:

Government

Regulator

Investors, Operators and Service Providers

Consumers/Users.

Traditionally, governments have played the role of strategic planner and policy maker, regulator and service provider. The future government interventions should be confined only policy-making and create independent regulation Authority.

In a reformed Telecommunication industry, these roles must be clearly separated. Government should retain strategic planning and policy-making and it should withdraw from the operational involvement and of an independent regulator should undertake enforcement.

The importance of the role of labor should be accorded greater recognition and interests of consumers should be taken into account in decisions affecting the telecommunication sector. All players have the inherent responsibility to improve the performance of the industry in order to meet macro-economic, micro-economic and social goals.

## THE ROLE OF GOVERNMENT

Somalia government would be the largest buyer of ICT goods and services in the country, and is a critical provider of services to its citizens. The Government is also the single largest collector, user and dissemination of information in the country. Hence, the government can and does play an important and catalytic role in moving Somalia into the information society by integrating ICTs in the delivery of services to the citizens.

The single most important role for government is to provide vision leadership in the area of ICTs. The government can set a positive national tone and sense of urgency in a way no other stakeholder will. The government is duty-bound to provide an enabling political, institutional and legal environment to guide the participation of other stakeholders. Therefore, the political leadership in the country takes center stage in the elaboration of a coherent national strategy for Information and Communication Technology as a matter of real priority. The Government shall ensure the formulation of short, medium and long-term implementation plans of this policy in tandem with the National Development Plans and other strategic frameworks.

Secondly, Government will actively promote local participation of Somalia citizens through deliberate empowerment strategies including leveraging its procurement operations. In summary, the Government's role in the ICT policy implementation will also include the following responsibilities.

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Developing the required technical capacity for ICT policy development and implementation in all Ministries and public sector organizations. Establishing a department of ICTs in the Ministry responsible for the ICT portfolio. Providing visionary and catalytic leadership in the implementation of the ICT policy at all levels.

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Developing broad ICT skills and knowledge base in the public sector. Devising a political, institutional, economic and legal framework that promotes competition at all levels in the ICT sector. Developing change and project management skills with a view to integrating ICTs in the public sector as part of Public sector Reform Programme.

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Providing the necessary technical and financial resource in achieving the objectives of the policy. Mobilizing regional and international development organization to support the implementation of the policy.

Ensuring continues monitoring and evaluation of the ICT policy interventions and outcomes

Take the leading role in mobilizing resources and encouraging smart partnership between public and private sector operators.

## OVERALL FUNCTIONS OF GOVERNMENT

At the aggregate level, Government should be doing the following principal functions:

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Create an enabling environment for the provision of affordable and available services through liberalization and commercialization of Telecommunication sector;

Create a level playing field to facilitate the entry and growth of nascent operators;

Provide good governance, including ensuring law and order in the state; and allowing for, at the most basic level, checks and balances including an independent judiciary, which ensure fair and efficient regulation in the ICT sector.

Establish and implement development-promoting policies that are market guiding and friendly;

Restructure and consolidate the telecommunication sector by assigning responsibilities to players dealing with policy (Ministry), Regulation (Regulator) and operations (operators/service providers) to ensure that the community as a whole, and all of its parts, is provided with adequate services with choice at affordable prices;  
Manage change through adequate mechanisms, such as a policy implementation monitoring unit and an investment center;

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Encourage national and regional network interoperability and cross-border connectivity;

Play a leadership role in using telecommunication applications (e-governance, e-government, etc).

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### **POLICY RESPONSIBILITY OF MINISTRIES (Y) RESPONSIBLE FOR TELECOMMUNICATIONS**

Recognizing that telecommunications is a public utility and tool necessary to the development of all sectors of the economy and society, as well as a business in itself, the Ministry responsible for telecommunication has the following functions:  
Establish broad policy frameworks for universal access/service with respect to basic telecommunication services and universal access with respect to Telecommunication and advanced information services;

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Create and oversee maintenance of a facilitative and credible regulatory framework for the telecommunication's industry;

Build and sustain an enabling environment for the provision of telecommunication services largely by the private sector;

Ensure that policy-making, regulatory and enforcement structures have the institutional and human resource capacity to perform there respective functions comprehensively and fairly; and formulate and review broad policy frameworks.

These functions change the responsibility of the Ministry from the previous combinations of policy, rule creation, enforcement, implementation and operation to sector analysis, policy development rule creation and general facilitation.

To fulfill its functions, the Ministry must introduce and enforce effective competition policies so that the national or regional resources are allocated and utilized in an efficient way in the interest of the public. One of such policies is to enable, promote and facilitate fair competition between interests active in the marketplace while ensuring universal access and universal service to all sectors of the community relevantly.

Once correct policies are established, they should be embodied in a simple, reliable and enforceable set of stable legislation, and introduced and enforced in a transparent manner.

These actions create an enabling environment in which the private sector or other bodies can successfully participate in the building up and delivery of Telecommunication infrastructure and services.

## **CAPACITY BUILDING OF GOVERNMENT**

To attain the required transformation of Government to the new role, the composition, job content/description and skill requirements of the staff may need readjustment. An adequately staffed strategic policy and Planning Unit will be geared to carrying out the necessary policy development and endorsement. Where such a unit exists, it should be strengthened in terms of skills and other resources.

## THE ROLE OF PARLIAMENT

The liberalization of the telecommunications, postal and broadcasting sectors worldwide have opened new requirements for transparent and effective legal and regulatory environments. Therefore, the role of parliament in the effective implementation of the ICT policy shall include the enactment of a modern telecommunications law which should include the establishment of a Telecommunications Regulatory Authority (TRA).

Deleted: among others

The telecommunications law should provide the framework for the allocation and approval financial resources for the implementation of the ICT Policy in the public sector. Monitor the effective utilization of resource allocated to public sector institutions in the implementation of the ICT policy. Finally it should ensure that good governance principles are applied and adhered to in the implementation of the ICT policy by public sector institutions

Deleted: ¶  
Amendment of existing legislations to support the establishment of converged Regulator as well as to enhance the legal environment to ensure smooth operations of the Regulator¶  
Creation of legislation to support establishment of the National Regulatory Authority (NRA)¶  
Facilitate

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¶

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## THE ROLE OF PRIVATE SECTOR

The importance of entrepreneurship and partnerships between government and the private sector in the development of ICTs cannot be overemphasized. However, given the nascent nature of the ICT industry in Somalia, government is committed to providing an environment that is conducive for the growth of a locally based and globally competitive ICT sector.

On the other hand, despite its size, the private sector plays a catalytic role in the formulation and implementation of the ICT policy. Thus, the private sector is encouraged to:

Support and participate in innovative and productive ways of establishing a competitive local ICT sector so as to guarantee Somalia competitiveness in the global market.

Take advantage of business opportunities resulting from implementation of the information society initiatives such as NEPAD and AISI

Provide incentives for ICT skills re-training of their workforce

Participate in the provision of cost-effective technical education and internationally recognized certification programmes in ICT

Articulate the large and growing opportunity cost of under investment in basic National ICT Infrastructure.

Develop local capability for manufacture of ICT products and creating innovative services for local and export markets.

Invest in ICT projects for rural and underserved urban areas as well as traditionally disadvantaged areas Participate in policy formulation and implementation process on an going basis.

Deleted: REGULATOR

**THE ROLE OF THE TELECOMMUNICATIONS REGULATORY AUTHORITY**

**The Regulatory Institution**



The Ministry for Telecommunication should put into place an appropriate regulatory institution for the enforcement of government's policies and legislation and strengthen the regulatory and. By so doing, the regulatory institution will take over the responsibilities for enforcement of regulations and rules to facilitate efficient operations in the market.

The regulatory institution enforces laws and rules within the Telecommunication market boundaries. This entails the monitoring of market demand and supply capacity of service providers, and intervention to correct imbalances or market distortion. Its activity ensures the existence of an efficient and competitive market environment allowing Telecommunication services to be developed and delivered at affordable prices. The regulatory institution is also critical in guiding and facilitating the healthy development of Telecommunication infrastructure, services, and applications.

The regulatory institution should have the necessary independence from stakeholders to ensure impartiality, flexibility and transparency. However institutional oversight must be sufficient to ensure accountability. Furthermore, it must have requisite capacity in order to avoid “regulatory capture” by stakeholders and ensure transparent public accountability. Consequently, legislation is required to specify the rights and obligations of operators in the industry and the powers and accountability of a regulatory institution to enforce them.

**The Regulatory Framework Should Comprise Four Main Elements:**

- Legal instruments that facilitate market growth and articulate the scope and powers of a regulatory institution, and the rights and obligations of operators and regulatory processes.
- The legal provisions should be introduced to support the national socio-economic strategies.
- Some laws that need to be enacted in implementation of this policy:
- A comprehensive Telecommunication Law;
- Laws specific to complements to Telecommunication e.g. Internet.

A regulatory institution, which is independent from operators / government, and equipped in resources and skills to enforce rules. Where such an institution already initiated at state level, but lacks some of the recommended attributes, it should be strengthened appropriately. The institution should also be capable of progressively adjusting itself to changes in technology and services.

Regulatory processes involving specialized activities, related to establishment, expansion and operation of Telecommunication technologies, services, applications and markets, to perform regulation functions

Relationships between the regulatory institution and other institutions or authorities in exercising its powers conferred in the legislation

Ensure that the regulatory authority is accountable for its actions

## **ESTABLISHMENT OF REGULATORY AUTHORITY**

The regulatory institution, referred to, as the “Regulatory Authority” should be established as an autonomous entity with all the powers of a legal persona.

## **SCOPE AND MANDATE OF SOMALI REGULATORY AUTHORITY**

In addition to mandating the adoption of a telecommunications policy, it should be degree for co-operation among institutions concern on technical matters and the Government that will promote the development of the Telecommunication through the establishment of appropriate mechanism. In these circumstances, Somalia telecommunication policy may encourage the development of software and content but not address the control of content, namely that which is transported through information and communication networks. However, as telecommunications is evolving into a broader information and communications technology (ICT) that includes elements of telecommunications, broadcasting and computing, the mandate of the Regulatory Authority proposed in this document confined only to the promotion of the development of telecommunications infrastructure and services, as well as the development of reconstruction for information services, including issues relating to the management and monitoring of the radio frequency spectrum for telecommunications.

However, some time in the future Somalia may establish “fully converged” Regulatory Authorities to regulate both ICT infrastructure, services and content as has been done in a number of countries elsewhere. Under that scenario a suitable policy and legislation relating to content would develop and adopted.

For the partially telecommunication regulator proposed in this document, various names could be used. Some countries have retained the traditional name of “Telecommunications Authority“. Others have used “ Communications Authority” or “Information Development Authority” which appears to be more descriptive than “Telecommunications Authority” of a regulator whose mandate extends to the regulations of other information and communication services. Whatever name is used, what matters in the end is the

clear specification of responsibilities and authorities in the instrument establishing the institution which would include facilitative regulation of the transmission and reception of information in sound, data, and video through telecommunications infrastructure, other radio-communications, Internet.

In some countries the management of the radio spectrum is undertaken, or it used to be undertaken by a separate institution but the tendency now is to merge this function with those of the telecommunication regulator.

Where aspects of the activities or services in the information and communications sector are regulated by different institutions close co-ordination among them is essential for effective and healthy ICT development and applications.

### **MISSION OF THE REGULATORY AUTHORITY**

In line with the objectives for Telecommunication development proposed in 1.2.1 above, the mission of the Regulatory Authority would be:

Ensuring the provision of adequate high quality and cost-effective services that meet the diverse needs of consumers in order to promote economic growth and social development;

The promotion of universal service with regard to basic communications services and universal access with regard to advanced information services; and The promotion of regional seamless Telecommunication connectivity and trade in Telecommunication services.

Based on this primary objective, the specific objectives of the Regulatory Authority will be to: Regulate Telecommunication services in the public interest;

Achieve progress towards the social goals of Telecommunication policy e.g. the provision of universal service and universal access;

Ensure the provision of a wide range of Telecommunication services to stimulate and support sustainable social economic growth;

Regulate the activities of Telecommunication operators and service providers;

Stimulate investment in the public Telecommunication network;

Ensure a “level playing field” where competitive entry is permitted under the Telecommunication policy;

Protect the interests of Telecommunication users and consumers, and ensure privacy rights;

Stimulate innovation in the Telecommunication industry with a view to provide advanced information services;

Promote the development of human resources for the Telecommunication industry;

Manage common national scarce resources, such as the radio frequency spectrum, numbering plan and domain names effectively;

Actively participate in the international management of orbital slots and developments in international standards; and Promote public confidence in Telecommunication Market through transparent regulatory licensing and other regulatory processes.

## **FUNCTIONS AND ISSUES OF THE REGULATORY AUTHORITY.**

The typical functions of an autonomous regulatory body include rule making and enforcement, licensing, and management of scarce resources. The regulatory body should perform these functions in a transparent manner encouraging public participation.

In performing these functions, the following are some of the key regulatory issues:

Rule-making process and enforcement

Licensing;

Management of scarce resources

Universal Service/Access;

Service provision and user needs;

Investment;

Ownership and control;

Liberalization /Competition;

Competitive Safeguards;

Technical Standards;

Human Resources Development;

Dispute Resolution;

Interconnection;

Price Regulation/Tariff policy guidelines;

Consumer and user protection;

Access to services of International Bodies;

Liaison with Minister to ensure the articulation of issues in the sector arising from experience in implementing policy;

Reporting to Parliament;  
Consultation on regional and international issues;  
Data and Information collection, analysis and dissemination;  
Establish indicators of performance by sector operators and the sector as a whole  
Technology migrations  
Emergency Communications

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**ANNEX N: SUMMARIES OF SOMALI FIELD ASSESSMENTS IN SOMALILAND, PUNTLAND AND SOUTH-CENTRAL**

**Table N 1: Summary of Somaliland Field Assessment for Productive Sectors and Environment<sup>4</sup>**

S/N	Sectors	Major Constraints	Key Priority Actions:
1	Livestock	Rangeland degradation and devastation hazards	<ul style="list-style-type: none"> <li>• Re-activation of animal grazing reserves</li> <li>• Introduction of small scale range and forestry management system</li> <li>• Support to the implementation of regulation of forestry protection.</li> </ul>
		Lack of Vet. Service deliveries at all levels	<ul style="list-style-type: none"> <li>• Re-building the original field veterinary services (public and private)                             <ul style="list-style-type: none"> <li>◆ Vet. Clinics dipping station at region and deistical</li> <li>◆ Vet. Mobile team</li> <li>◆ Vet. Diagnostic labs</li> <li>◆ Drugs instrument</li> <li>◆ Capacity for building of public and private professional.</li> </ul> </li> </ul>
		Absence of disease surveillance capacity	<ul style="list-style-type: none"> <li>• Development of Animal Disease Surveillance system.                             <ul style="list-style-type: none"> <li>◆ Data information.</li> <li>◆ Standardized and validated diagnostics sampling etc.</li> </ul> </li> </ul>
		Livestock Ban Poor Hygiene and sanitation	<ul style="list-style-type: none"> <li>• Rehabilitation of Marketing infrastructures and marketing diversification.                             <ul style="list-style-type: none"> <li>◆ Holding grounds</li> <li>◆ Quarantines &amp; marshalling yard.</li> </ul> </li> </ul>

<sup>4</sup> The summary is based on the report of the field assessment carried out by the Somaliland JNA Technical Cluster Counterparts from March 16-29, 2006.



S/N	Sectors	Major Constraints	Key Priority Actions:
			<ul style="list-style-type: none"> <li>• Reconstruction of modern slaughters &amp; improving hygiene &amp; sanitation</li> </ul> <p>Regional &amp; district slaughter house</p> <ul style="list-style-type: none"> <li>◆ Water drainage system</li> </ul> <ul style="list-style-type: none"> <li>• Development of the credibility of veterinary health certificates.</li> </ul> <ul style="list-style-type: none"> <li>◆ Movement control system.</li> <li>◆ Pre-export inspection.</li> <li>◆ Export certification</li> </ul>
		Low quality production	<ul style="list-style-type: none"> <li>• Re-establishment livestock breeding centers.</li> </ul> <ul style="list-style-type: none"> <li>◆ Extension service for Animal breeding system.</li> <li>◆ Cattle diary farm.</li> <li>◆ Milk processing technologies.</li> </ul>
2	<b>Agriculture</b>	Lack of cadastral survey and Data Base for land management	<ul style="list-style-type: none"> <li>▪ Conduct cadastral survey of farm and database information.</li> </ul> <ul style="list-style-type: none"> <li>◆ Regulate agriculture industry.</li> <li>◆ Data information system.</li> </ul>
		Low yield of production	<ul style="list-style-type: none"> <li>▪ Improvement yield of crop production through provision of quality seeds &amp; extension service program (multi-cropping system)</li> </ul>
		Lack of meteorological stations	<ul style="list-style-type: none"> <li>▪ Re-establishment of meteorological stations at all regions.</li> </ul>
		Extensive soil & water erosion	<ul style="list-style-type: none"> <li>▪ Establish soil &amp; water conservation measures.</li> </ul> <ul style="list-style-type: none"> <li>◆ Repair of farm bunds</li> <li>◆ Watershed management schemes</li> </ul>
		Lack of rehabilitating form irrigation system.	<ul style="list-style-type: none"> <li>▪ Rehabilitation/construction of farm irrigation systems.</li> </ul>
		Absence of MAO capacity building.	<ul style="list-style-type: none"> <li>▪ Improve MOA—Capacity Building framework</li> </ul>

S/N	Sectors	Major Constraints	Key Priority Actions:
		Absence of flood protection measures.	<ul style="list-style-type: none"> <li>▪ Establish concrete flood protection mechanism</li> </ul>
		Lack of basic agricultural inputs.	<ul style="list-style-type: none"> <li>▪ Increase the supply of basic agriculture inputs. <ul style="list-style-type: none"> <li>◆ Seeds hand tool (pesticides.)</li> </ul> </li> </ul>
		Lack of food processing technology.	<ul style="list-style-type: none"> <li>▪ Re-establish agriculture food processing (preservation technology)</li> </ul>
		Poor tillage capacity	<ul style="list-style-type: none"> <li>▪ Improvement of tillage capacity through credit scheme</li> </ul>
		Lack of agriculture extension service	<ul style="list-style-type: none"> <li>▪ Re-establish agriculture extension. <ul style="list-style-type: none"> <li>◆ Structures of multiplication</li> <li>◆ Equipment.</li> <li>◆ Transport facilities</li> </ul> </li> </ul>
3	<b>Fisheries</b>	Lack of coastal artisanal fisheries	<ul style="list-style-type: none"> <li>▪ Re-activation of coastal artisanal fisheries to improve household economy of fishing families. <ul style="list-style-type: none"> <li>➤ Fishing gear</li> <li>➤ Ice making machine</li> <li>➤ Boat engines.</li> </ul> </li> </ul>
		Poor fishing gear inputs.	<ul style="list-style-type: none"> <li>▪ Establish fishing gear for traditional fisherman. <ul style="list-style-type: none"> <li>➤ Fishing nets</li> <li>➤ Mending twines</li> <li>➤ Hull repairs</li> <li>➤ Nylon ropes, hooks</li> <li>➤ Marine engines parts</li> <li>➤ Fishing line</li> </ul> </li> </ul>
		Collapse of all pre-existed infrastructure facilities	<ul style="list-style-type: none"> <li>▪ Rehabilitation of Berbera fishing center. <ul style="list-style-type: none"> <li>➤ Structure</li> <li>➤ Cold chain system.</li> </ul> </li> </ul>
		Lack of capacity building of the relevant organization.	<ul style="list-style-type: none"> <li>▪ Provision of capacity building of the relevant organization (public and private)</li> </ul>
		Lack of encouragement efforts to private sectors	<ul style="list-style-type: none"> <li>▪ Develop necessary infrastructure &amp; short training works. <ul style="list-style-type: none"> <li>➤ Marketing facilities</li> <li>➤ Equipment</li> <li>➤ Material</li> </ul> </li> </ul>

S/N	Sectors	Major Constraints	Key Priority Actions:	
			➤ Work shops	
		Less public demand for consumption.	<ul style="list-style-type: none"> <li>▪ Establish sales promotion of efforts for awareness building purpose.</li> </ul>	
S/N		List of Product	Major Constraints	Key Priority Action
	<b>Other Products</b>	<ul style="list-style-type: none"> <li>▪ Minerals</li> </ul>	<ul style="list-style-type: none"> <li>▪ Lack of capital investments</li> </ul>	<ul style="list-style-type: none"> <li>▪ Introduction to appropriate technology for products production and processing.</li> </ul>
		<ul style="list-style-type: none"> <li>▪ Frankincense products</li> </ul>	<ul style="list-style-type: none"> <li>▪ Lack of appropriate technologies and expertise for production and processing.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Improve marketing feeder-roads</li> </ul>
		<ul style="list-style-type: none"> <li>▪ Gum Arabic</li> </ul>	<ul style="list-style-type: none"> <li>▪ Lack of inputs for (honey) production.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Provision of credit schemes</li> </ul>
		<ul style="list-style-type: none"> <li>▪ Honey products</li> </ul>	<ul style="list-style-type: none"> <li>▪ Lack of credit</li> </ul>	<ul style="list-style-type: none"> <li>▪ Increase in puts to local product production</li> </ul>
		<ul style="list-style-type: none"> <li>▪ Salt</li> </ul>	<ul style="list-style-type: none"> <li>▪ Low production</li> </ul>	<ul style="list-style-type: none"> <li>▪ Establish sales promotion efforts for locally produced.</li> </ul>
		<ul style="list-style-type: none"> <li>▪ Natural charcoal</li> </ul>	<ul style="list-style-type: none"> <li>▪ Inaccessibility to markets</li> </ul>	
		<ul style="list-style-type: none"> <li>▪ Colton</li> </ul>		
		<ul style="list-style-type: none"> <li>▪ Beauty-making substances</li> </ul>		

<b>5</b>	<b>Private Business</b>	<b>Main Constraints</b>	<b>Key Priority Action.</b>
		<ul style="list-style-type: none"> <li>• Livestock Ban effects</li> </ul>	<ul style="list-style-type: none"> <li>• Improvement of livestock marketing systems</li> </ul>
		<ul style="list-style-type: none"> <li>• Lack of capital investment and currency exchange trends.</li> </ul>	<ul style="list-style-type: none"> <li>• Availability of capital investment through loan or grand schemes.</li> </ul>
		<ul style="list-style-type: none"> <li>• Lack of business diversification.</li> </ul>	<ul style="list-style-type: none"> <li>• Access to recognized Banking system.</li> </ul>
		<ul style="list-style-type: none"> <li>• Lack of regulatory framework for trade.</li> </ul>	<ul style="list-style-type: none"> <li>• Re-establish trade regulatory framework</li> </ul>
		<ul style="list-style-type: none"> <li>• Lack of encouragement for small scale business.</li> </ul>	<ul style="list-style-type: none"> <li>• Credit support to small scale business organizations.</li> </ul>
		<ul style="list-style-type: none"> <li>• Absence of partners and cooperative businesses ownership</li> </ul>	<ul style="list-style-type: none"> <li>• Introduce and strengthen the capacity of business partnership and cooperative business ownership as well.</li> </ul>
		<ul style="list-style-type: none"> <li>• Lack of supporting institution (credit availability and training)</li> </ul>	
		Main Constraints	Key Priority Actions
<b>9</b>	<b>Industries</b>	<ul style="list-style-type: none"> <li>• Collapse of all pre-existed infrastructures and facilities for both public and private sector.</li> </ul>	<ul style="list-style-type: none"> <li>• Rehabilitate infrastructures and facilities of pre-existed industries in the region.</li> </ul>
		<ul style="list-style-type: none"> <li>• Lack of capital investment</li> </ul>	<ul style="list-style-type: none"> <li>• Introduce capital investment through recognized Banking system.</li> </ul>
		<ul style="list-style-type: none"> <li>• Lack of banking system</li> </ul>	<ul style="list-style-type: none"> <li>• Provision of appropriate technologies to small scale</li> </ul>

			industries.
		<ul style="list-style-type: none"> <li>• Lack of skills and expertise for industrial development.</li> </ul>	<ul style="list-style-type: none"> <li>• Establish functional policies and regulatory frame for industrial goods.</li> </ul>
		<ul style="list-style-type: none"> <li>• Importation industrial goods.</li> </ul>	<ul style="list-style-type: none"> <li>• Upgrade skills knowledge of the relevant organization.</li> </ul>
		<ul style="list-style-type: none"> <li>• Lack of appropriate technologies for small industries development.</li> </ul>	
		<ul style="list-style-type: none"> <li>• Absence of policies for investment of industries</li> </ul>	
		<ul style="list-style-type: none"> <li>• Lack of capacity building initiative to relevant agencies organization</li> </ul>	

<b>10</b>	<b>Women Affair</b>	<b>a)</b>	<b>Major Contrarians Facing Women in Region</b>
			<ul style="list-style-type: none"> <li>• Poor household economy</li> <li>• Nomadic living style and effects of drought crisis .</li> <li>• Drawbacks of women in education opportunity (illiteracy)</li> <li>• Poor medical care and welfare.</li> <li>• Low participation of women in decision making processes</li> <li>• Lack of access to humanitarian resources</li> </ul>

b)	Major Constraints facing Women in crop livestock		Priority Action.
<b>Crop</b>	Products: <ul style="list-style-type: none"> <li>• Vegetable and fronts</li> </ul>	Constraints: <ul style="list-style-type: none"> <li>• Less farms inputs</li> <li>• Lack credit</li> <li>• Lack of skills</li> </ul>	Priority Action: <ul style="list-style-type: none"> <li>• Improve farm inputs</li> <li>• Credit availability</li> <li>• Skills training in business.</li> </ul>
<b>Livestock</b>	Milk and butter	<ul style="list-style-type: none"> <li>• Less growth rate and low production of livestock due droughts.</li> <li>• Livestock trade ban.</li> <li>• Low household economy.</li> </ul>	<ul style="list-style-type: none"> <li>• Establish opportunities for restocking of programs as drought crisis mitigation efforts.</li> <li>• Improve household economy</li> </ul>
<b>Other products</b>	<ul style="list-style-type: none"> <li>• Beauty-making substances.</li> <li>• Honey</li> <li>• Poultry products.</li> <li>• Imported goods.</li> </ul>	<ul style="list-style-type: none"> <li>• Lack in puts</li> <li>• Lack of technologies and skills for production and processing</li> <li>• Lack credit availability</li> </ul>	<ul style="list-style-type: none"> <li>• Improve bee keep and poultry in puts.</li> <li>• Introduce appropriate for producing and processing local material.</li> <li>• Availability of credit support.</li> </ul>

C)	Main Priority Action for equality opportunities	
	<ul style="list-style-type: none"> <li>• Upgrade education opportunities for women</li> <li>• Establish various income generating opportunities</li> <li>• Strengthen the capacity building of women organization.</li> </ul>	

**Table N 2: Summary of Regional Priority Needs Ranking for the Productive Sectors and Environment<sup>5</sup>**

Sector \ Region	Hargeisa					Awdal					Sahil					Togdheer					Sanaag					Sool									
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5					
1. Crops	√					√							√				√					√													√
2. Livestock	√					√					√					√					√					√					√				
3. Fisheries								√					√										√												
4. Priv. Sector Busin.	√					√					√					√					√					√					√				
5. Land & Sea Env.	√					√					√					√					√					√					√				
6. Land Tenure	√					√					√					√					√					√					√				

Ranking of the sectors on a scale of one to five (with 1 being very important and 5 being relative less important) with respect to reconstruction and evelopment needs by region

<sup>5</sup> Summary of regional priorities

**Table N 3: Summary of Puntland Field Assessment for Productive Sectors and Environment<sup>6</sup>**

Region/Districts	Sub-Cluster	Constraints	Priority Actions	Order of Importance	Response in the Report
Bari/Hafuun	Livestock production	Water	Increase water supply	1	Included
		Veterinary services	Improve vet. Services	2	Included
	Livestock marketing	Deterioration of rangeland	Rangeland improvement	3	Included
		Import ban	Lifting of ban	1	Included
		Lack of financial serv.	Financial services	2	„
	Crop production	Holding grounds needed	Establishment of hold. Gr.	3	„
		Lack of irrigation facil.	Irrigation development	1	„
		Pests	Pest control	2	„
	Crop marketing	Shortage of agric. Inputs	Increase availability	3	„
		Unregulated food aid	Plan food aid	1	Bari is food deficient
		Inadequate access to agricultural land	Improve infrastructure	2	Recommended
	Fisheries production	Lack of credit	Improve credit availability	3	Included
		Illegal fishing	Ban illegal fishing	1	„
		Lack of access	Infrastructure development	2	„
		Inadequate cold storage	Develop cold storage	3	„
	Other Product	Destruction of marine resources	Protect marine environment	4	„
		Natural resources	Common salt	1	„
			Exploration of oil and min.	2	„
	Islamic credit facility.	Needed	Provision of credit	1	„
	Land environment	Desertification	Reforestation	1	„

<sup>6</sup> This is a summary of various report from the field assessment teams of Puntland State. The JNA Field Assessment Mission was from March 16 to April 4, 2006 and met with communities in Rako, Iskushuban, Badhan, Las Qoray, Hasbahale, Gara'ad, Galdogob, and Talex. They also passed through other communities.



Region/Districts	Sub-Cluster	Constraints	Priority Actions	Order of Importance	Response in the Report
	Marine environment	Poor land management	Land tenure	2	„
			Environmental protection	3	„
		Environmental destruct.	Environmental protection	1	„
		Illegal fishing	Stop illegal fishing	2	„
	Private business	Accessibility	Roads and airport network	3	Jetties suggested
		Lack of credit and financial services	Financial services	1	Included
		Poor trade and marketing	Trade regulation	2	„
	Industry	Weak public services	Better marketing	3	„
		Shortage of know-how	Electrification	1	Recommended
		Lack of financial serv.	Financial services	2	Included
	Problems facing Women	Inadequate power supply	Investment	3	„
		Illiteracy	Education	1	„
		Less representation	Equal opportunities	2	„
		Lack of awareness of gender and human right issues	Increase community awareness	3	„
	Women in crops, livestock and fisheries	Lack of skills	Skill training	1	„
		Lack of equality	Improve gender equality	2	„
		High household burden	More mother and child care	3	„
Karkar/Bender Beyla, Rako, Iskushuban.	Livestock Production	Water and grazing space	Water improvement	1	„
		Shortage of vet. Services	Improve vet services	2	„
		Lack of access	Infrastructure improvement	3	„
			Range improvement	4	„
	Livestock marketing	Export ban	Lifting of export ban	1	„
		Lack of credit and financial services	Financial institutions	2	„

Region/Districts	Sub-Cluster	Constraints	Priority Actions	Order of Importance	Response in the Report
	Crop production	Lack of regulation	Land and marine transport	3	„
			Holding grounds	4	„
		Absence of irrigation	Irrigation improvement	1	„
		Pest damage	Agric. Inputs availability	2	„
	Crop marketing	Lack of agric. inputs	Better land management	3	„
			Environ. Protection	4	„
		Unregulated food aid	Increase production	1	„
		Access of agric land	Infrastructure development	2	„
	Fisheries production and marketing	Absence of credit	Financial/credit facilities	3	„
		Chaotic and unregulated export trade	Ban of illegal fishing	1	„
		Environ destruction	Infrastructure	2	Jetties planned
		Illegal fishing	Improve cold storage	3	Included
	Other products	Accessibility	Credit and financial services	4	„
		Inadequate cold storage	Improve production, processing and marketing	1	„
		Frankincense	Encourage production	2	„
		Salt	Research and exploration	3	„
	Oil and minerals				
	Would producers take Islamic based credit?	Yes	Make credit available	1	„
	Land environment	Desertification	Environmental protection	1	„
		Poor management	Improve management	2	„
		Accessibility	Infrastructure development	3	„
	Marine environment	Environ. destruction	Improve infrastructure	1	Jetties planned
		Illegal fishing	Stop illegal fishing	2	„
		Accessibility	Environmental protection	3	„
	Private business	Lack of credit and			

Region/Districts	Sub-Cluster	Constraints	Priority Actions	Order of Importance	Response in the Report
	Industry	financial services Poor trade and marketing Weak regulation and public services Inadequate power supply Lack of financial services Lack of know-how	Improve financial services Improved marketing Improved trade regulation Electrification improvement	1 2 3 1	„ „ „ „
	Women issues	Illiteracy Lack of equal opportunities Lack of public awareness	Improve financial services Increase investment and training Women education Equal opportunities in public and private sectors Improve community awareness	2 3 1 2 3	„ „ „ „ „
Nugaal/Eyl	Livestock production	Shortage of water and grazing space Inadequate vet services Accessibility	Improve water supply and rangeland Improve vet services Improve infrastructure	1 2 3	„ „ „
	Livestock marketing	Export ban KSA Lack of credit and financial services Absence of institutional regulation	Lifting of export ban Improve financial services	1 2	„ „
	Crop production	Lack of irrigation Pest damage Lack of agric inputs	Holding grounds Improving irrigation Availability of agric inputs Environmental protection	3 1 2 3	„ „ „ „
	Crop Marketing	Unregulated food aid Inaccessibility Lack of credit	Encourage local production Improve infrastructure Improve credit and	1 2	Food deficit area Included

Region/Districts	Sub-Cluster	Constraints	Priority Actions	Order of Importance	Response in the Report
	Fisheries production and marketing	Illegal fishing	financial services	3	„
		Accessibility	Stop illegal fishing	1	„
		Cold storage	Improve infrastructure	2	Jetties planned
	Other products	Salt	Improve cold storage	3	Included
		Oil and minerals	Encourage salt production	1	„
	Would producers use Islam based credit?		Oil and mineral exploration	2	„
		Yes	Improve credit and financial services	1	„
	Land environment	Desertification	Reforestation	1	„
		Poor land management	Proper land tenure	2	„
		Inaccessibility	Environmental protection	3	„
	Marine environment	Illegal fishing	Stop illegal fishing	1	„
	Private business	Lack of credit and financial services	Improve credit and financial services	1	„
		Poor trade and marketing regulation	Better trade regulation	2	„
		Weak public services	Improve poor services	3	„
	Industry	Inadequate power	Electrification	1	„
		Lack of financial services	Improvement of financial services	2	„
		Shortage of know-how	Investment and capacity building	3	„
	Women issues	Illiteracy	Women education and skill training	1	„
		Lack of equality in public representation	Improvement of public opportunities participation	2	„
		Lack of public aware of	Increase community		

Region/Districts	Sub-Cluster	Constraints	Priority Actions	Order of Importance	Response in the Report
		gender issues	awareness	3	„
Mudug/Gara'ad, Galdogob	Livestock Production	Shortage of water and grazing space	Improve water supply and range management	1	„
		Lack of vet services	Improve vet services	2	„
	Livestock marketing	Inaccessibility	Develop infrastructure	3	„
		Import ban by KSA	Lifting of livestock ban	1	„
	Crop production	Lack of credit and financial services	Improve financial services	2	„
		Lack regulation	Improve regulation	3	„
		Lack of irrigation facilities	Improve irrigation	1	„
		Pests	Pest control	2	„
	Crop marketing	Lack of agricultural input	Improve input availability	3	„
		Unregulated food aid	Improve local production	1	„
		Inaccessibility	Improve infrastructure	2	„
	Private business	Lack of credit and financial services	Introduce credit facilities	3	„
		Lack of credit and financial services	Improved financial services	1	„
		Poor trade and marketing	Better marketing	2	„
	Industry	Weak regulation and public services	Improved trade regulation	3	„
		Inadequate power supply	Electrification	1	„
		Shortage of knowledge	Investment and capacity building	2	„
Lack of financial services		Improved financial services	3	„	
Women issues	Illiteracy	Women education	1	„	

Region/Districts	Sub-Cluster	Constraints	Priority Actions	Order of Importance	Response in the Report
		Lack of equal opportunities Lack of public awareness of gender issues	Instituting equality  Enhance community awareness on gender issues	2  3	„  „
Sanaag/Badhan, Las Qoray	Livestock production	Inadequate water and grazing	Improved water supply and rangeland	1	„
		Lack of vet services	Improved vet services	2	„
	Livestock marketing	Inaccessibility	Improved infrastructure	3	„
		Livestock export ban	Lifting of livestock export ban	1	„
		Credit and financial services	Improved financial services	2	„
	Crop production	Inadequate land and marine transport	Improved roads and jetty	3	„
		Lack of irrigation facilities	Improved irrigation	1	„
		Pests	Improved pest control	2	„
		Lack of agricultural inputs	Improved availability of agr inputs	3	„
			Environmental protection	4	„
	Crop marketing	Unregulated food aid	Improved irrigation	1	„
		Inaccessibility	Improved infrastructure	2	„
		Absence of credit and financial services	Improved financial services	3	„
	Fisheries production and marketing	Illegal fishing	Stopping illegal fishing	1	„

Region/Districts	Sub-Cluster	Constraints	Priority Actions	Order of Importance	Response in the Report
	Other products	Inaccessibility	Improved infrastructure	2	„
		Lack of cold storage	Improved cold storage	3	„
		Credit and financial services	Improved financial services	4	„
		Environmental degradation	Environmental protection	5	„
		Frankincense	Improved frankincense production and marketing	1	„
		underdeveloped	Oil and mineral exploration	2	„
	Land environment	Unexploited oil and minerals			
		Inadequate financial services	Improved financial services	3	„
		Desertification	Reforestation	1	„
	Marine environment	Poor land management	Improve land management	2	„
		Inaccessibility	Improved infrastructure	3	„
	Private business	Environmental degradation	Environmental protection	1	„
		Illegal fishing	Fight illegal fishing	2	„
		Inaccessibility	Improved infrastructure	3	„
	Industry	Poor trade and marketing	Improved trade regulation	1	„
		Lack of credit and financial services	Improved financial services	2	„
		Weak public support services	Improved public services	3	„
		Inadequate power supply	Electrification	1	„
		Shortage of know-how	Improved financial services	2	„
		Inadequate financial services	Improved capacity building and investment	3	„

Region/Districts	Sub-Cluster	Constraints	Priority Actions	Order of Importance	Response in the Report
	Women affairs	Illiteracy and lack of skills Lack of equal representation in decision-making High household burden	Improved women education And skill training  Achieving equal opportunities Improved mother and child care	1  2 3	„  „ „
Sool/Talex	Livestock production  Livestock marketing  Crop production  Crop marketing  Other products	Limited of water supply and grazing Shortage of vet services Inaccessibility Import ban by KSA Absence of credit and financial services Absence of institutional regulation Lack of irrigation Pests Shortage of agric inputs  Unregulated food aid Inaccessibility Lack of credit and financial services Unexploited oil and	Improved water supply and grazing Improved vet services Improve infrastructure Lifting of the export ban  Improved financial and regulatory services Holding grounds Improved irrigation Proper pest control Improved availability of agric inputs Better land management and environmental protection Boosting of local production Improved infrastructure Improved financial services Starting of oil and mineral	1 2 3 1  2 3  4 1 2 3	„ „ „ „  „ „ „  „ „ „ „



Region/Districts	Sub-Cluster	Constraints	Priority Actions	Order of Importance	Response in the Report
	Land environment	mineral resources	exploration	1	„
		Desertification	Reforestation	1	„
		Poor land management	Improved land tenure	2	„
		Inaccessibility	Environmental protection	3	„
	Private business		Improved infrastructure	4	„
		Lack of credit and financial services	Improved financial services	1	„
		Poor trade and marketing			
			Improved trade and marketing regulation	2	„
	Industry	Weak public services	Improved public services	3	„
		Inadequate power supply	Electrification	1	„
		Inadequate financial services	Improved financial services and investment	2	„
		Shortage of know-how	Improved capacity building	3	„
	Women affairs	Illiteracy	Improved women education and skills	1	„
		Lack of equal representation	Equal opportunities in private and public sectors	2	„
		Lack of public awareness on gender issues	Improving community awareness of gender issues	3	„

## **A. Central Zonal Field Assessment (South Mudug, Galgadud, Hiran and M/Shabelle)**

Productive sector examined issues related production and marketing for crop production, livestock, fisheries and other products, environmental issues on land and marine areas. In addition, issues to private business development and women affairs. Overall the key constraints observed by the participants both in the production process and marketing of *livestock* sub-sector were: lack veterinary services, security, water scarcity and lack of marketing infrastructure and poor coordination between production process and marketing. **On crop production** the main constraints observed by the participants were lack of security, capital and farm inputs, and lack of knowledge on seed multiplication. Proposed measures to address these problems include facilitate access to credit facilities, improve security, develop seed multiplication centers/farm inputs and training; and most important rehabilitation of agricultural infrastructures, such as irrigation, bridges and rural roads.

On *fisheries production* side participants were of the view that the key problems hindering production were lack of production skills, equipment and over fishing by foreign shipping companies. Proposed measures to address include provision of skills, fishing equipments and establishment of cold chain system.

**Other Products** considered important in the zone include honey and incense production. These products are hindered by lack of needed skills, security and poor knowledge on what goes in the production process. Participants indicated that necessary measures to overcome the situation should include upgrading skills, training farmers and other people involved in the production of these products, and improve security.

**On the environment**, tree cutting, charcoal burning (land) and over fishing particularly by foreign industrial shipping companies, dumping of industrial waste are the major ones observed by the participants. Suggested solution, abolish charcoal exports; introduce marine control by forbidding foreign industrial shipping from Somali costs and dumping of industrial waste.

On *private business*, the issues to be addressed are not different from others sub-sectors, apart from improving investment climate, improve access to credit facilities and facilitate access to both local and international market.

**Women affairs**, women tasks and responsibilities are huge, they participate in the production, marketing of the agriculture and livestock production but not in the decision-making process, they are excluded by tradition, culture and other related factors which ingrained within the society. Their time is shared between the core household activities, child care, food production, food preparation. Participants gave general suggestion on how women situation could be improved; these include increasing participation of women in decision making process, supporting more handcraft industries, and improve women skills through training.

## **B. South West Zonal Field Assessment (Bakool, Bay and L/Shabelle)**

Productive Sector and Environment Cluster examined issues related production and marketing for crop production, livestock, fisheries and other products, environmental issues on land and marine areas. In addition, issues to private business development and women affairs. Overall the key constraints observed by the participants both in the production process and marketing of *livestock* sub-sector were: lack veterinary services, security, water scarcity and lack of marketing infrastructure and poor coordination between production process and marketing. **On crop production** the main constraints observed by the participants were lack of security, capital and farm inputs, and lack of knowledge on seed multiplication. Proposed measures to address these problems include facilitate access to credit facilities, improve security, develop seed multiplication centers/farm inputs and training; and most important rehabilitation of agricultural infrastructures, such as irrigation, bridges and rural roads.

On **fisheries production** side participants were of the view that the key problems hindering production were lack of production skills, equipment and over fishing by foreign shipping companies. Proposed measures to address include provision of skills, fishing equipments and establishment of cold chain system around the coastal areas. In addition, rehabilitation of the two major ports of Barawe and Merka and transport system to help access to local and international markets.

**Other Products** considered important in the zone include honey and incense production. These products are hindered by lack of needed skills, security and poor knowledge on what goes in the production process. Participants indicated that necessary measures to overcome the situation should include upgrading skills, training farmers and other people involved in the production of these products, and improve security.

**On the environment**, tree cutting, charcoal burning (land) and over fishing particularly by foreign industrial shipping companies, dumping of industrial waste are the major ones observed by the participants. Suggested solution, abolish charcoal exports; introduce marine control by forbidding foreign industrial shipping from Somali costs and dumping of industrial waste.

On **private business**, the issues to be addressed are not different from others sub-sectors, apart from improving investment climate, improve access to credit facilities and facilitate access to both local and international market.

**Women affairs**, women tasks and responsibilities are huge, they participate in the production, marketing of the agriculture and livestock production but not in the decision-making process, they are excluded by tradition, culture and other related factors which ingrained within the society. They time is shared between the core household activities, child care, food production, food preparation. Participants gave general suggestion on how women situation could be improved; these include increasing participation of women in decision making process, supporting more handcraft industries, and improve women skills through training.

## **Livestock – Production**

### **Constraints:**

This sector's cluster group discussed the constraints that hinder the livestock sub-sector and confines the overall problem in three major headings:

- a) Settlement problem
- b) Drought and water shortages – as a result of delayed rains, and missed seasons in combination with insufficient water wells, and brake down of water sources.
- c) Lack of livestock health services – the availability of dispensaries to treat sick livestock sub-sector is also one that hinders, where the problem is exacerbated by lack of good quality medicine in the country. Further the knowledge to use the available health care drugs is limited in the countryside where that causes sight effects as a result of improper use of drugs to available livestock production in the country. This economically affects the whole nation, where Mogadishu suffers the biggest proportion as many nomads relocate from the countryside to city in search of copying mechanisms. This contributes to low livestock production, and insecurity and burden on Benadir zone inhabitants.

### **Marketing**

- a) Livestock trade ban – the neighboring countries imposed a trade ban on the livestock exports of the country, which mainly the economy of the country depends on. This causes decrease in value of the livestock related incomes, which the livelihood of many Somalis depends upon.
- b) Lack of appropriate traders – the livestock traders doesn't consider the quality of the livestock exports, in terms of physical and proper medical treatment. This gives a negative impression towards the healthy of the Somalia's livestock exports, and contributes to persistent ban on the production system of the region.
- c) Training – Also the livestock owners and traders need some sort of training that includes quality control, and as well as proper treatment of livestock in terms of feed, and medical practices necessary. Thus this can add value to the livestock production system in the country, and in particular to Benadir zone.

### **Priority actions to improve livestock production and marketing system**

#### **Production**

- a) Mass vaccination is needed
- b) The establishment of health service centers is important
- c) The sector cluster group also reports the need for refresher courses to the professionals in the livestock sector

## **Marketing**

- a) Market research is important
- b) Hold grounds
- c) Feed lot centers and feed production

## **Crop**

### **Production**

#### **Constraints**

- a) Infrastructure within and outside the farm
- b) Farm inputs is needed such as seeds, farming tools, and land preparation tractor costs
- c) Extension services – farm extension training is important such as land preparation, sowing, plant spacing, the use of fertilizers, and as well as pest controls and etc.

## **Marketing**

- a) Unbalanced input and output costs – because of insufficiency of knowledge, the farmers, and traders produce more than the market needed. At the same time they don't have storage and consumption plans to breakeven the input and output of crop production system.
- b) Lack of pest sides – most of the farmers can't afford to buy the pest side control stock to protect their crop from the harmful insects that attach the crop produces during cultivation and after harvest in the 'bakaar' storage system.
- c) Foreign aid coincidence is also one of the major problems that hinder the market system of the local crops harvested. It happens many times that aid agencies deliver food aid simultaneously at the local harvest period of each season. This devaluates the selling price of the local products, which in turn can't meet the input costs by the local farmers. In that context, the result is loss of invested input costs, which discourages the farmers to continue the crop production system

### **Priority actions to improve agricultural products**

- a) The group recommends the introduction of new varieties of plantation seeds from international sources to upgrade and improve the current crop yield level.
- b) The group also recommends the establishment of agricultural constitute with proper extension services to introduce effective crop management systems.
- c) The participants also suggest the improvement of the current farming infrastructure system in the country, such as the machines, tools, storages systems, and as well as transportation system between villages to the districts and the capital city.

## **Marketing**

- a) The group of this cluster suggested that farmers should produce a standards quality crop so that it can compete with local and regional markets that exist.

- b) Establish good trading relations with the neighboring countries as the potential buyers of the crop produces by the Somali people. The group believes this will add value to the crop production system in the country, and to the economy of the Somalis.
- c) The group recommends that food aid is brought in only during bad times, and in the plantation period. The group argues this will relief the crop price devaluation burden on the local farmers, and will be a subsidy for the farmers, and that will at the same time boost the market value of the local crop products.

### **Fisheries**

#### **Constraints**

- a) Lack of capital – The group mentions people in Mogadishu lack the initial capital to start the fishery business, to facilitate for them acquiring the fishing gears, the nets, and other tools necessary for fish catches. The group also discusses the need for start up capital to finance the fishing operations during the first few seasons until one stands on its own feet.
- b) Illegal foreign fisheries with no enforced regulation to control them are also one of the major problems fisheries face.
- c) Lack of fishing knowledge exacerbates the problem as most of the fisheries don't have sufficient knowledge in terms of the appropriate seasons, the most profitable fish catches, and as well as the marketing know-how is needed.

#### **Priority actions in terms of fishing catches, and marketing**

- a) Capital availability – the start up capital to finance the equipments, and tools needed and as well as some petty cash to enable the fisheries are able to wait until seasonal catches harvested is necessary.
- b) The cluster group also recommends introducing procedures to control the illegal foreign fisheries in the waters of the Somali people.
- c) Capacity building training for the fisheries in Benadir region is also recommended so that the knowledge of the Somali fisheries is upgraded to become effective producers.

### **Other products**

#### **Potential projects in the region, and marketing in order of their economic importance:**

The group in their discussion named some potential commodities that can be produced from Benadir zone such as leather, different kinds of juice, and meat production.

#### **Constraints**

Type of commodity	Constraints	Priority Actions
Leather	Marketing problem	Leather improvement
Juice Production	“ “	Production Facilities
Meat Production	Market Ban	Quality improvement + political lobbying

The groups in this cluster discussion see credit facility as a good way of empowering the fishermen, and livestock owners in the country. They recommend the La-ribba credit system through micro-finance institutions with guaranteed deposits, and enormous capacity building to minimize potential default rates.

## Land and Environment

### Damaging factors to the land environment

- a) Deforestation – The participants indicate the existence of severe land degradation challenges in Somalia as an urgent problem due to continuous and massive deforestation in the country. The participants suggest genuine intervention - first by the Somalis in collaboration with the international community. With the continuation of Somalia’s environmental degradation, particularly the range and forests, the group foresees no any development project will sustain due to lack of conducive-environment to contribute to the development of projects in the country.
- b) Soil erosion – The cluster group discusses according to tropical climate of Somalia, where vegetation is high, there is more rainfall and where the vegetation is low, rainfall decreases. The vegetation can be maintained through the conservation of range and forests, and where there is accurate vegetation thus the livestock and farmers can anticipate enough pasture and seed production respectively.
- c) Unbalanced Echo system – The group if no genuine intervention to preserve environment, foresees that the unbalanced echo-system will bring negative impact of both the short and the long-term affects and Somalia’s ecosystem will always be susceptible to land degradation.

## Marine Environment

### Damaging factors

- a) Discharge of Nuclear nasty and other harmful chemicals is one of the major damaging factors the participants of the workshop reported.
- b) Illegal fishing actions – The group also disclosed the persistence of enormous fishing practices by illegal fisheries that devastate the available marine resources in the Somali waters.
- c) Un-planned fishing methodology – Addition to the above the cluster group specify fishing fleets with un-planned tools and equipments repeatedly without consideration

to breed of fish in the Somali waters. The group expresses its concern that there are no monitoring plans to protect harmful actions of such fishing boats.

### **Private business starting & expanding**

#### **Constraints**

- a) Knowledge – the group shares with the organizing team that most of the Somali people don't have the necessary entrepreneurial skills for starting and expanding a potential business in the country.
- b) Capital – The initial start up capital, to start a business is also one of the obstacles that hinder the Somalis living in Benadir region to start a business.
- c) Market – is also another major problem noted, such as the conducive market environment with the maximum security needed! The group also argues the Somalis lack the marketing skills needed, in terms of the strategic location to install the business, and as well as the business plans needed to undertake before commencing any type of business.

#### **Actions to address the business constraints**

- a) Capacity building – Business management training is one of the major factors that the cluster group members discussed as a vital contributor to the success of any business
- b) Micro-credit programs are also suggested as a supplementary income sources to starting a business in order to simplify availability of the business start up capital needed.
- c) Marketing skills training has also been proposed to equip the Somalis with potential business dreams with the crucial marketing constituents that can contribute to the achievement of a relative business.

### **Industries**

#### **Constraints to start and expand industry business**

- a) Raw material – The participants express concerns towards the acquisition of the raw materials locally to properly processing and accounting for all the costs related and producing a merchandise that reasonably can compete in the local and international markets in terms of quality, quantity and price is one of the fundamental constraints that can lead to either the success or failure of any production trade industry.
- b) Technical institutes – the availability of effective technical institutes that can be available and affordable to potential manufacturing companies is also a major problem that obstructs any likely manufacturing business entity in the country.
- c) Micro-economic credit – Another major problem reported is that many industries take advantage of loan services. The group explicates that lending financial institutions in the country are not available, and to expand a profitable business in the country virtually takes the loss side of the coin.



## **Women's Affairs**

### **Major problems facing the women in Benadir region**

- a) Lack of education – as the Somali culture always puts daughters into circumstances that are not learning friendly, the group articulates that the Somali women have less schooling chances than to their male counterpart in the family members. Issues of critical has been mentioned that girls are not registered into schools equal to boys, and at the same time other household workloads and early marriages discourage them to drop from completing the necessary education classes required to compete with the male counterparts in the education system.
- b) Domestic workload – it was also reported by the group members that women suffer more domestic work load than their men partners within the same households. Despite this integrates with ancient cultural aspects that have continued through out centuries, however, the group suggests advocating for environments that could at least give women the opportunities to get them empowered economically and socially.
- c) Lack of job opportunities – the participants of the cluster expressed that less percentage of women is represented in the employment opportunities available. The group attributes the problem to their limited education opportunities within the household level, and to the fact that many Somalis believe that women can't work full time due to housel related matters such as child rearing, and other domestic works.

The group further discussed about the cross-cutting issues and debated integrating peacebuilding issues into the entire productive sub-sector cluster. Concurrently, the group recommends incorporating gender promotion related works in all aspects of the cluster through women's rights seminars, and other awareness works. Capacity building is also a cross-cutting pillar of all the sector sub-clusters to supplement the effectiveness of the individual sub-cluster performances.

### **Sector Findings**

- Livestock constraints found during the assessment include settlement, drought, and water shortage problems.
- There is the lack of livestock health care facilities, and services in Benadir region and its outskirts.
- Marketing is also another main issue that hinders the invaluable of the livestock products in Benadir zone. The problems of this sub-sector include international trade bans, and imbalance of input and output due to insufficient marketing skills by most of the Somalis.
- The crop production constraints include lack of anti-pests, trade bans, and as well as foreign aid assistance that coincides with harvesting time of the farmers.

- The fisheries constraints reported consists the disturbance of illegal foreign fisheries, insufficient knowledge, and lack of the initial capital to start the fishing business.
- There are also marketing, and knowledge constraints on other products such as the leather, juice, and meat productions in Benadir zone.
- Environmental problems such as deforestation, soil erosion, and as well as nuclear wastes, and other chemical disposals in the waters of the Somali people are at the same time among other issues that affect the production level of the Somalis living in Benadir zone.
- Private business running capital, knowledge and market, and marketing skills are also other factors that obstruct the private business sector industry in Benadir zone.
- According to the industry business sector, the people of Benadir zone suffer from the availability of raw materials, the skills and expertise, and as well as the lack of lending institutions in Benadir zone.
- Women in particular endure problems as a result of insufficient education, domestic workloads, and lack of job opportunities when compared to their male counter parts in Benadir zone.

**Recommendations:**

- The construction of water points in areas of Benadir region and its outskirts, where water problems exist is important. This will relieve the burden on women and other people as a result of distance travels for fetching water for livestock and for household purposes.
- Vaccinations, and other health facilities, and services needed for livestock in combination with training for community members is also important.
- Market research in terms of hold grounds, and **lot** centers in Benadir region and its outskirts is also recommended.
- Introducing new plantations and varieties alongside with infrastructure rehabilitations, such as canals, and farm extension training works are necessary to increase crop production and livestock pasture system in Benadir zone and its outskirts.
- Food aid control mechanisms should also be scheduled with the donor agencies in order to minimize its coincidence with the farmers' crop harvest times.
- Mechanisms such as the resource capital and capacity building to control the illegal fisheries in the waters of the Somali people should be introduced.

- Affordable credit facilities have to also be introduced to assist the interested Somalis in Benadir region in order to be able to start business is also essential factor that would contribute the income level of the needing Somalis in the Benadir zone.
- Awareness raising, and capacity building chances for the Somali women in Benadir zone is necessary in order to empower and enable them participate in the reconstruction, and recovery plans and implementation of the country plans.

**These recommendations are not final. They are from the first preparatory workshop. Other three preparatory and main consultative workshops are remaining and more issues to be raised will be finalized on those workshops.**

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