



Ministry of Planning and International Cooperation

Macroeconomic Unit

Puntland GDP Estimate

Mohamed Said Samantar, DPhil

Team Leader & Senior Economist

Garowe, September 2011

GDP Estimates at Current Prices

Table of Contents

Background.....	3
I GDP Estimates	3
I.1 The GDP Expenditure Approach.....	4
II. Puntland GDP Estimates.....	5
II.1 (C) Household Consumption Expenditure (2010).....	5
II.2 (EX – IM) Foreign Expenditure (2009 - 2010)	8
II.2.1 Imports	10
II.2.2 Exports.....	14
II.3 Government Expenditure (G)	16
II.3.1 Government Capital Expenditure	17
II.3.1.1 The Special Case of Government Fixed Capital Formation	17
II.4 Private Investments (I)	19
II.4.1 Comparison between GIS and MoPIC Assessments.....	22
(ii) Industrial Investments.....	23
(iii) Agricultural Investments	24
(iv) Service Investments: Private Fixed Capital Formation	24
Concluding Remark.....	25

Background

The Ministry of Planning and International Cooperation and the United Nations Development Programme – Somali Institutional Development Project held consultations to support the Ministry. The outcome was to establish a Macro-Economic Unit to provide policy and technical advisory services and to support the capacity development of the Ministry. The Unit supports the institution for a transition period of time to enable the Ministry to fully undertake its mandate.

The Team is composed of five senior and 8 junior consultants. The senior consultants are: Senior macro-economist and Team Leader, Aid coordination Mgt Expert, M&E expert, Gender expert and Strategic Planning Expert. They provide regular coaching, mentoring and on the job training to both the junior consultants and the Ministry's employees for a better performance and guidance of their activities and make proper transfer of knowledge.

I GDP Estimates

GDP is defined as the total market value of all the goods and services produced within the borders of a nation during a specified period of time, normally a year¹. The GDP and the unemployment are the macroeconomic variables in Puntland which hasn't been estimated before. In Puntland the only macroeconomic variable carried out is inflation.

In general terms, GDP by industry is one of the three GDP series produced by central statistics departments of countries. It is also known as the **Output based GDP**, because it sums the value added (output less intermediate consumption of goods and services) of all industries in a country. This GDP series is published on a yearly basis and thus delivers the earliest and most up-to-date information on current developments in an economy. The other two GDP series are the **income based GDP**, which tallies earnings that are generated by the productive activity, and the **expenditure based GDP**, which is equal to final expenditure on goods and services produced.

The above mentioned three alternative GDPs are designed to independently but equivalently portray the production activity of a country, perceived from different perspectives. With information on the sources of goods, services and incomes generated

¹ **GDP per capita**, together with the Life Expectancy and the Education Indices, is the basis of the **Human Development Index** (HDI). This shows the importance of estimating GDP to tackle with HDI in Puntland and in Somalia.

by processes of production, the output and the income based GDP provide a comprehensive and detailed description of the supply side of domestic production.

I.1 The GDP Expenditure Approach

The expenditure approach involves counting expenditures on goods and services by different groups in the economy. This approach is more relevant for a country that doesn't have the capability of producing the three series of GDP data.

Besides, Real GDP is only calculated in terms of expenditure as the components of the income based GDP cannot be split between a quantity value and a price value. Therefore, there is no indicator enabling us to remove the effect of inflation to calculate real values for the income-based GDP components. This is why only the components that are part of the GDP by expenditures are calculated in real terms.

Real GDP is used by policy makers, financial institutions and other businesses to help determine the health of the nation. Since real GDP measures the volume of goods and services produced, an increase in its value is a sign of a healthy economy while a decline indicates that the economy is not functioning to its full capacity. Real GDP relates directly to other key macroeconomic variables such as employment, business cycles, productivity and long-term economic growth.

Puntland now publishes a series of data on inflation rates based on consumer price indices used as deflators to convert nominal GDP into real GDP.

The four main components are consumption expenditures by households (**C**), gross private investment spending principally by firms (**I**), government purchases of goods and services (**G**), and net exports (exports minus imports (**EX - IM**)). Here is an equation that sums it up:

$$\mathbf{GDP = C + I + G + (EX - IM)}$$

II. Puntland GDP Estimates

II.1 (C) Household Consumption Expenditure (2010)

- (i) UNDP/HDEU has commissioned Puntland State University to carry out a Household Consumption Expenditure (C) survey in Puntland and the result is presented in Table 1 below as an average estimated figure of One Billion and Half USD **(1,497,600,000)²**:

Table 1 Total Expenditures on various household items (US\$) - Puntland

Items	Urban		Individual Expenditure	Rural		Individual HH Expenditure	Total		Individual HH Expenditure
	Amount	# of HHs		Amount	# of HHs		Amount	# of HHs	
Food grains last year	207,918	311	669	242,269	218	1,111	450,188	529	851
Pulses and grains last year	145,953	275	531	216,237	208	1,040	362,189	483	750
Vegetables last year	209,383	355	590	97,096	171	568	306,479	526	583
Fruits last year	12,369	197	63	3,679	82	45	16,048	279	58
Milk and eggs last year	34,971	287	122	12,948	143	91	47,919	430	111
Meat and fish last year	49,863	303	165	33,857	148	229	83,720	451	186
Sugar, edible oils, fats, ets last year	80,200	319	251	62,810	247	254	143,010	566	253
Tea, coffee and spices last year	13,028	178	73	4,262	129	33	17,290	307	56
Cigarettes last year	4,265	32	133	986	37	27	5,251	69	76
Khat last year	12,705	57	223	4,163	52	80	16,868	109	155

² The calculation of the individual HH consumption expenditure was done by Musa Duale from UNDP/SIDP-Area Manager Garowe

Energy for cooking and lighting last year	46,623	326	143	15,105	158	96	61,728	484	128
Clothing, shoes, etc last year	35,591	232	153	21,668	200	108	57,259	432	133
Education last year	64,281	306	210	14,713	138	107	78,994	444	178
Health last year	25,686	202	127	15,858	154	103	41,545	356	117
House construction last year	8,071	55	147	609	19	32	8,680	74	117
Transport and communication last year	26,009	183	142	7,134	63	113	33,144	246	135
Agricultural Inputs last year	2,973	13	229	7,361	14	526	10,334	27	383
Livestock Inputs last year	7,149	24	298	23,840	99	241	30,989	123	252
Social or religious ceremonies last year	6,279	52	121	3,939	14	281	10,218	66	155
Loan repayment last year	15,120	28	540	7,853	14	561	22,974	42	547
Other items last year	319	1	319	0	1	0	319	2	159
Total	1,008,757	408	5,248	796,388	297	5,645	1,805,145	705	5381

	<i>Individual Expenditure</i>	<i>Total Expenditure</i>
Scenario One: 3,900,000	468.0	1,825,200,000
Scenario Two: 2,500,000	468.0	1,170,000,000
Average		1,497,600,000

Family Size	6.00
Per/person	1.3
Per/HH	7.63

Source: UNDP & Our Elaborations (Red Colour)

(ii) Calculating the HH Consumption Expenditure and GDP as residuals of $I+G+(X-M)$ we obtain a close figure as under (i) above, especially when we take the upper case scenario (3.9 million) of Puntland population³:

GDP	\$1,568,100,320.00
HH Consumption Expenditure_2010 (110% of GDP Assumed)	\$1,724,910,352.00

³ The calculation of the total HH consumption expenditure was done by the statistics junior consultant Abdinoor Boru

II.2 (EX - IM) Foreign Expenditure (2009 - 2010)

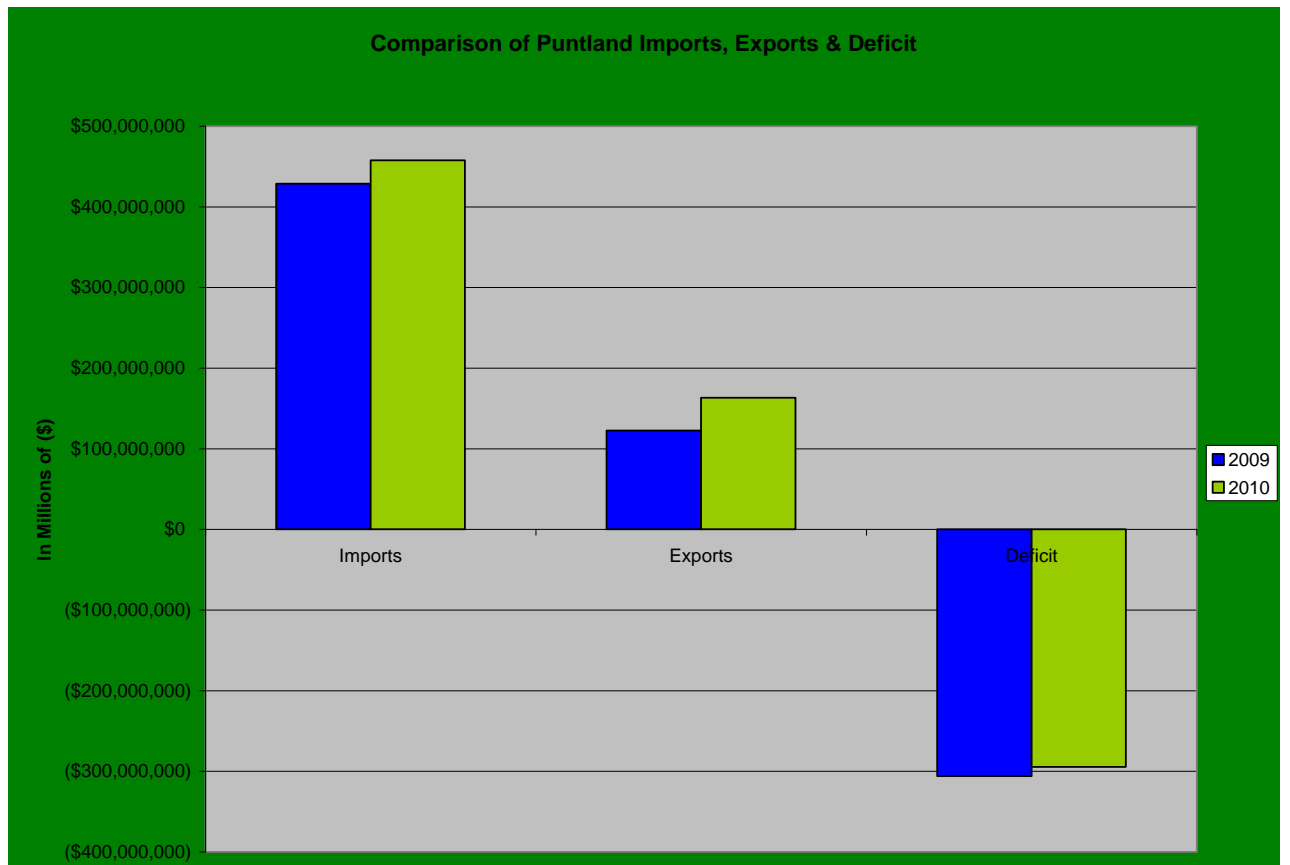
Table 2 Foreign Expenditure in US\$

Years	Exports (EX)	Imports (IM)	Foreign Expenditure (EX - IM)
2009	122,619,162	428,754,950	(-306,135,788)
2010	163,169,101	457,732,290	(-294,563,189)

Table 2 shows the foreign demand of Puntland produced goods and services less imports for 2009 and 2010. This is displayed by the Chart 1⁴.

⁴ The Junior Consultants Abdullahi Osman & Mohamed Ahmed have made serious efforts to put together the import-Export data presented here

Chart 1: Foreign Expenditure on Puntland Goods and Services in US\$



Source: Our Elaborations

II.2.1 Imports

Introduction

The economy of Puntland has always relied and depended strongly on traditional and informal pillars.

The government of Puntland spends a lot of money for purchasing and importing the needed commodities from foreign nations.

Methodology

We carried out this research in order to measure the annual GDP of Puntland and at the same time to see the general economic status of the state and the economic growth that the country has achieved. We have focused the two years of 2009 and 2010.

The economic of Puntland depends on the items exported to and imported from the rest of the world, especially the Gulf countries, Saudi Arabia, Yemen and the Emirates.

The data used in this report include both primary and secondary system.

We obtained the secondary data information from the imported quantities in the year of 2009-2010 by the Port Authority of Bossaso. The prices were also obtained from Puntland facts and figures booklet, while some of the prices of import were obtained from the trading companies and the various business sections in Garowe. These received secondary and primary data were jointly gave us the possibility to prepare it from this reliable report.

Puntland Government imports goods and services from the rest of the world through the main port of Bossaso, through the borders of Galkaxayo to the Southern Part of Somalia. But the main source by these imports is the main commercial city's port (Bossaso). The contents of general cargo commodities are so many about almost eighty five different items obtained from various types of businesses.

The most imported items are of necessity goods, trucks, cars, repairing materials, construction materials, huge cargoes that consist of many different kinds of goods. Puntland exports valuable goods such as livestock, frankincense, fish, hide and skins to the rest of the world. The expenditure on 2010 imports was almost four times to the amount of exports. In other words exports are almost a quarter to the total value of imported goods. The imports of 2009 are quite less than the imports of 2010. This shows that imported goods increased from 2009 to 2010.

Chart 2 Imported Quantities in (Tons) 2009-2010

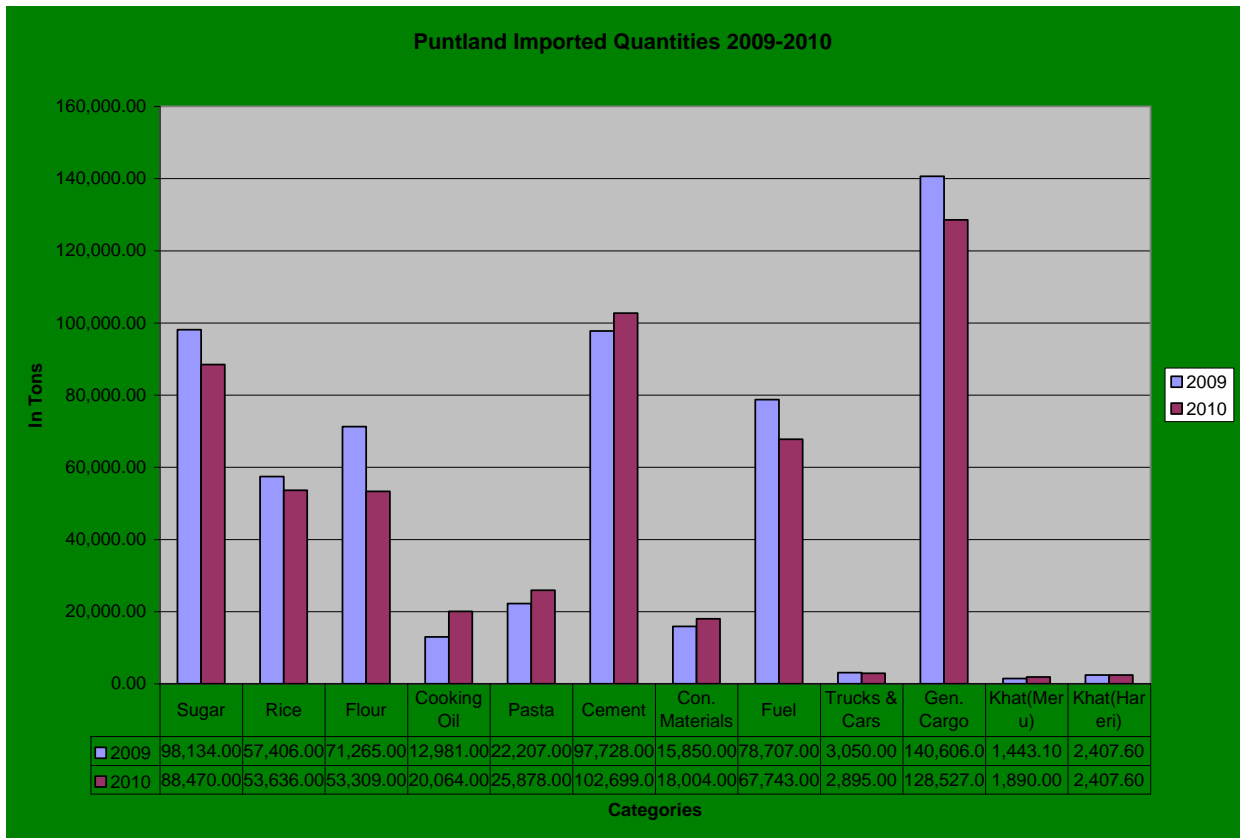
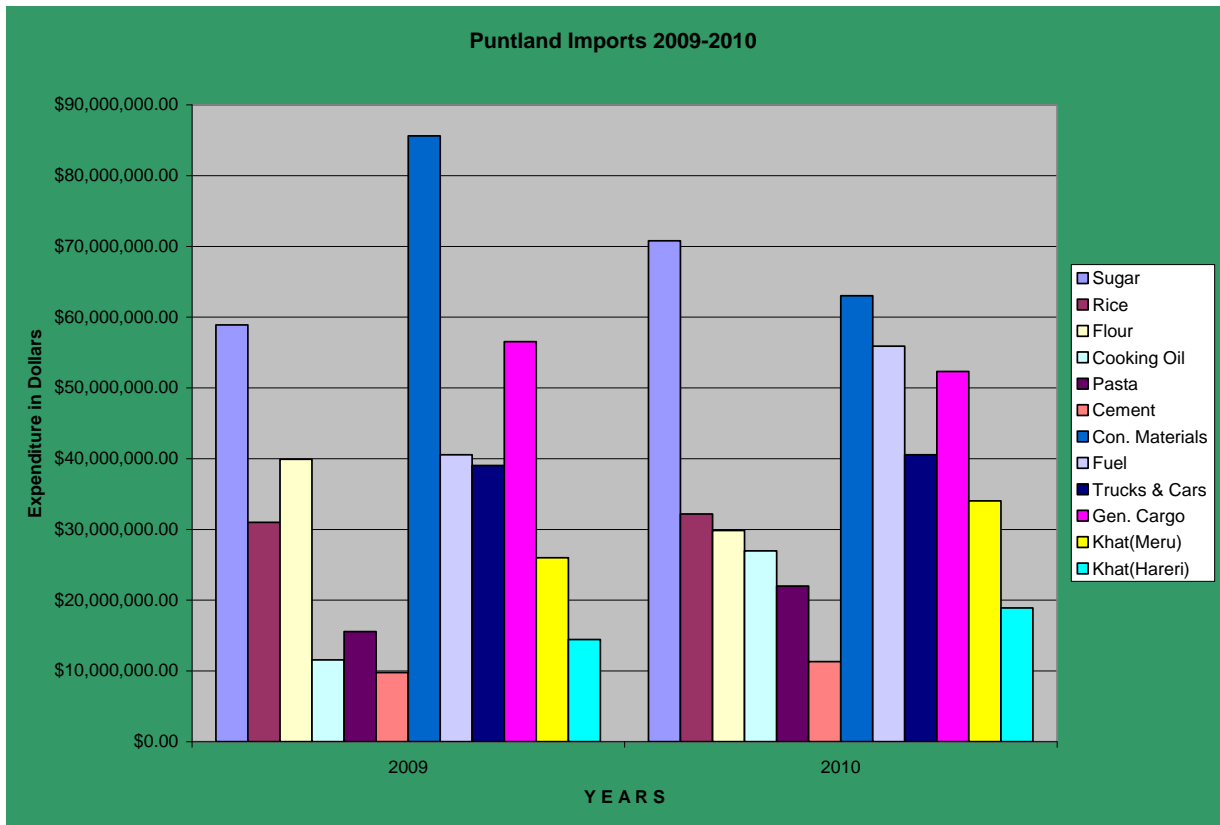


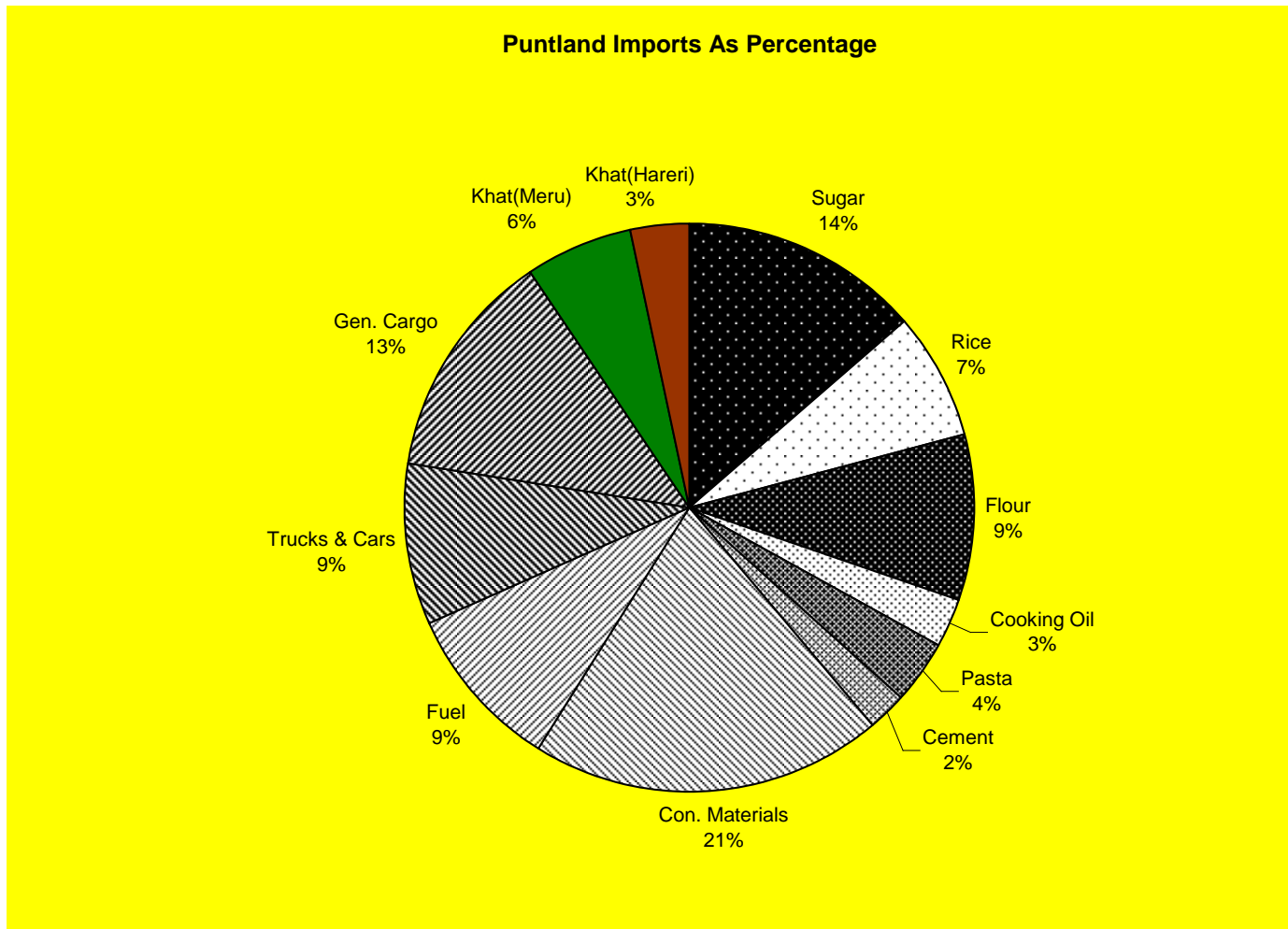
Chart 3 Composition of Import in US\$ for 2009-2010



Source: Our Elaborations, Ministry of Ports, Marine Transport and Counter-piracy, Puntland Facts & Figures Booklet

Chart 3 contains imported goods & services in two consecutive years: 2009 & 2010. It shows the comparison of imported commodities in percent. In 2009, the most imported item was the construction materials, followed by general cargoes and then sugar. In 2010 sugar became the most imported item followed by construction materials and general cargoes.

Chart 4 Compositions of Puntland Imports as Percent of Total 2009-2010



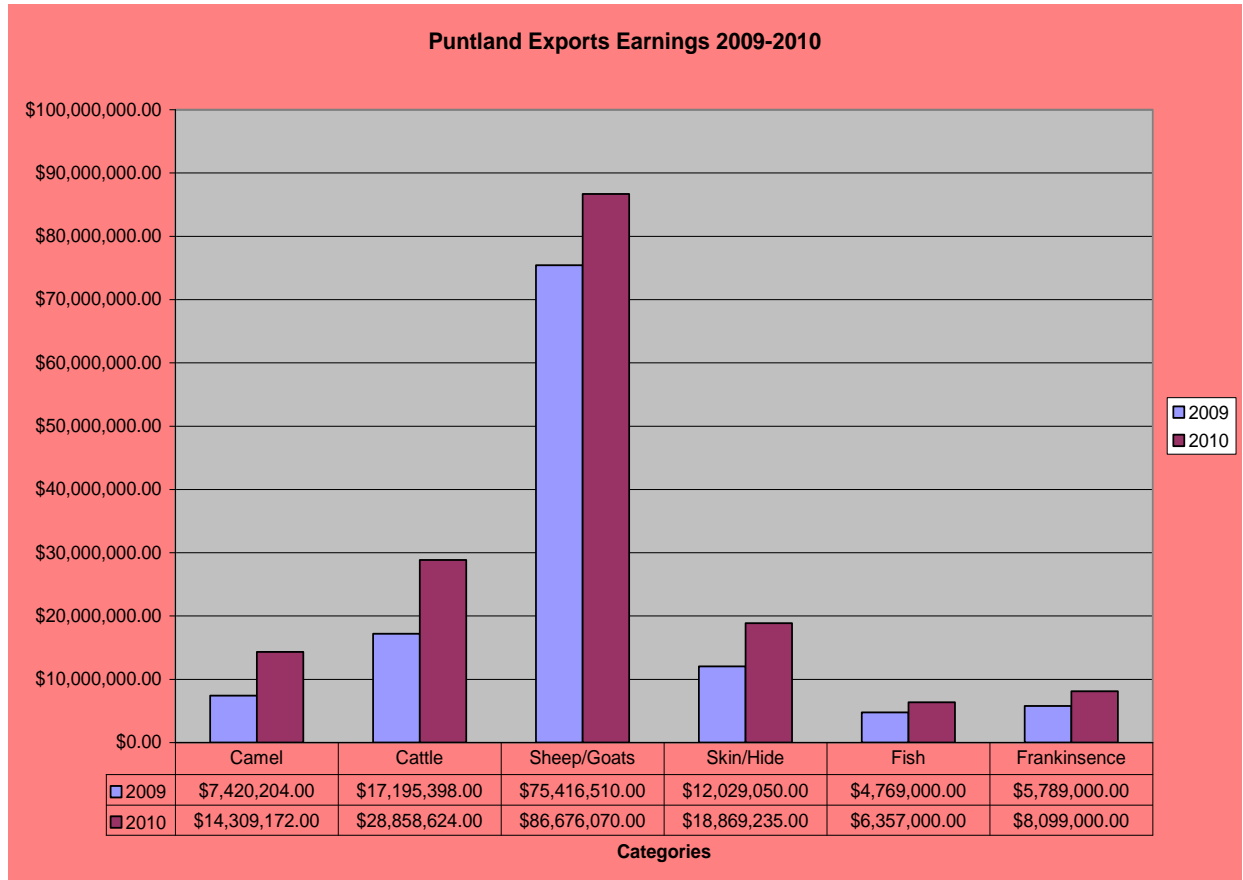
Source: Our Elaborations

Again Chart 4 illustrates the comparison of the entire imports and exports for both years 2009-2010. In 2009, the most imported item was the construction materials. This shows the extent that the country's building and construction is growing (see the section on private urban land development), followed by general cargo and then the sugar. It is as well as the most imported item by comparing to the others in the year 2010. Secondly construction material & cement have scored 23%. This reflects the expansion and growth Puntland is experiencing after the collapse of the central government in Somalia.

It is worth noting that khat alone siphons away from Puntland a total of nine percent of the total volume and value of imports (see also Chart 2 & Chart 3 above). This is equivalent to the amount of fuel or cars & trucks imports.

II.2.2 Exports

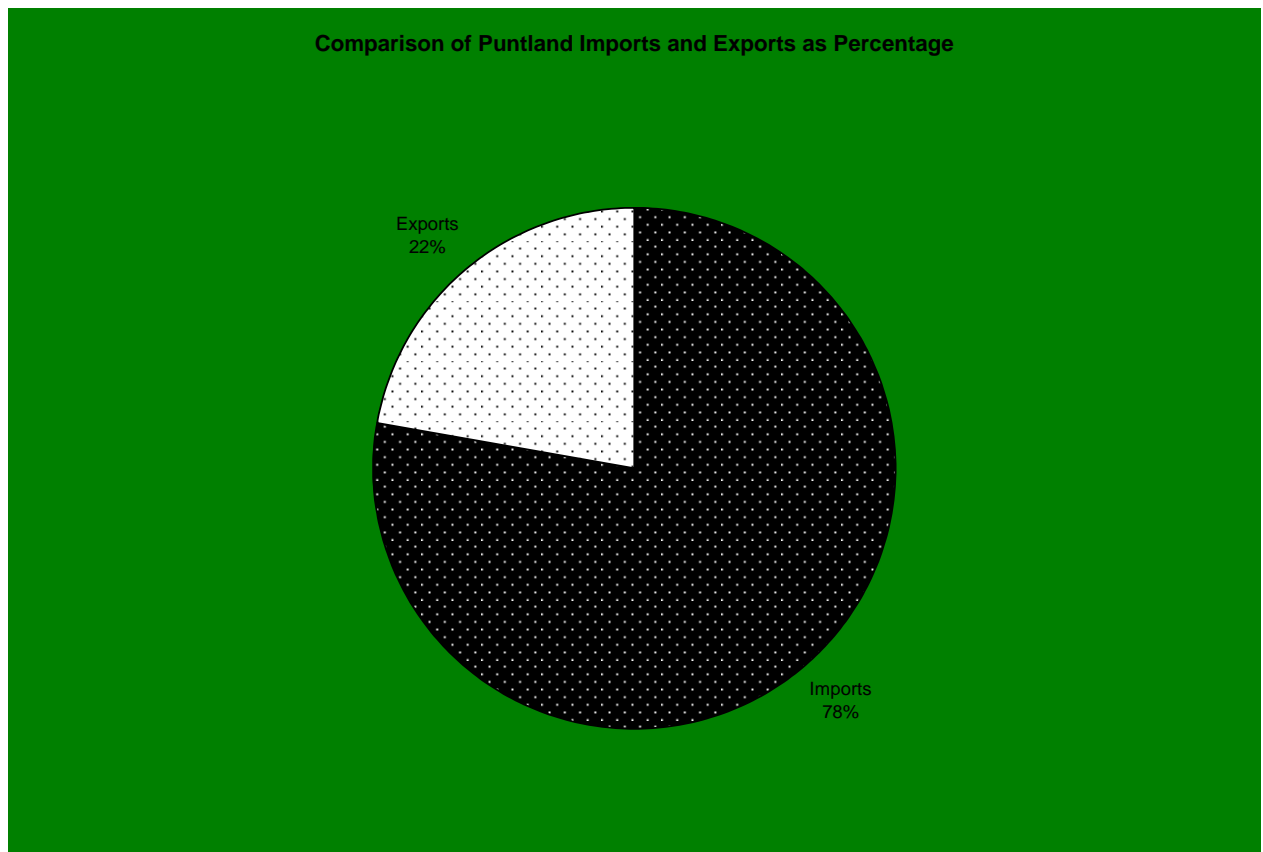
Chart 5 Puntland Compositions of Export Earnings 2009-2010



\Source: Our Elaborations

Even if we add together the volume and value of total foreign expenditure on Puntland goods and services for 2009 and 2010 we obtain almost the same results as when estimated the individual values of the two years. Imports are again almost four times that of exports as shown in chart 5 below:

Chart 5 Puntland Import and Export as Percent of Total 2009-2010



Source: Our Elaborations.

Sources of Both import and Export Data

Prices of imported and exported goods and Services were obtained from the Port Authority of the Ministry of Ports, Maritime Transport and Counter Piracy, Puntland Chambers of Commerce & Industry, Ministry of Commerce & Industry, and the Statistics Department of MoPIC.

The Prices of certain exported items such as Fish, Hide/skin and Frankincense were difficult to find they are not officially recorded. We had to interview traders in Bossaso to obtain these prices.

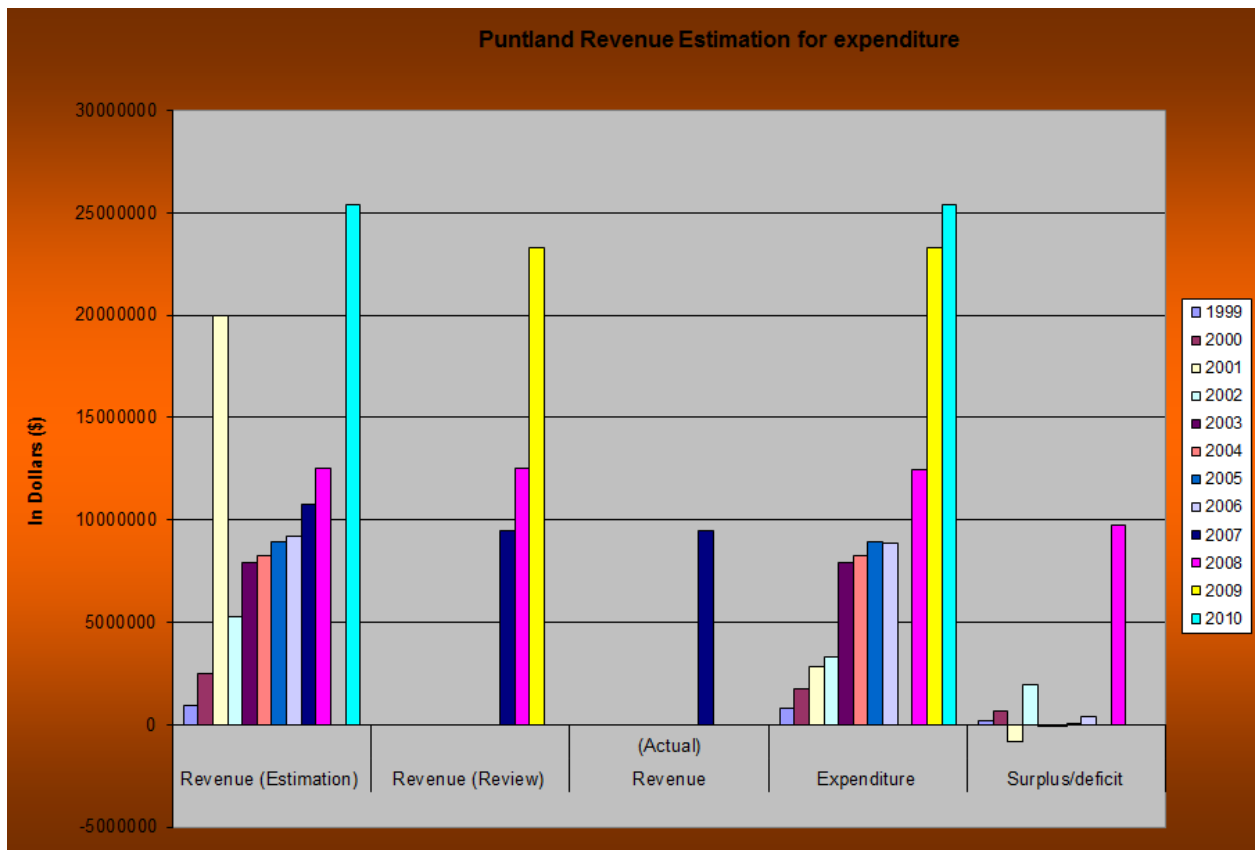
II.3 Government Expenditure (G)

Table 3: Government Expenditure: 2009 – 2010 (in USD) ⁵

Years	2009	2010
Expenditure	19,019,529	29,592,857

Chart 5 below depicts the general pattern of Government revenue and expenditure.

Chart 6 Puntland Revenue & Expenditure in US\$



⁵ The Interns Sundus D Osman & Salma M Said have made serious efforts to put together the Government Revenue & Expenditure data presented here

II.3.1 Government Capital Expenditure

Most of government expenditure is reflected in the category of Investment and Equipment under the items of the General Expenditure of the current budget (see code 2.2.4.4). This is a small portion to be considered as a capital budget. This is equivalent of US\$1,117,384 in 2009 which was partly funded the activities shown in Table 4 below.

II.3.1.1 The Special Case of Government Fixed Capital Formation

The Puntland Highway Authority (PHA), previously known as NESHA, is an autonomous agency set up by the government to be in charge of the development, rehabilitation, and maintenance of the road networks in the state. PHA has an independent board of directors for overall management and policy decisions. The authority receives revenue from fuel taxes, as well as 50 percent of the taxes on vehicles and spare parts collected at Bossaso Port. The authority is in charge of the highways, feeder roads, and the coastal roads. There are about 50 staff members, of whom only 5 are engineers. Most of the development works are carried out in coordination with donors (UNHCR, ILO, WFP, European Commission, etc.).

The PHA achievements are In 2009 the total amounts which is spent the rehabilitation, constructions and repairs of roads are estimated US\$ **379,000** and in 2010 the total amount of activities made by PHA was US\$ **674,000** (see Table 4)

Table 4 Puntland Highway Authority⁶

Puntland Highway Authority					
Year	Rehabilitation, Construction and Repair Roads	Metre/Kilo Metres	Location	Funded By	Amount in US \$
	Reh. of Kalyixeed Feeder Road	8 Km	Dangoroyo	WFP+PHA	35,000
	Reh. of Feeder Road	12 Km	Xaafuun	WFP+PHA	40,000
	Opening of Lafagoroyo Road	4 Km		WFP+PHA	207,000

⁶ The Junior Consultant Mohamed Farah has made serious efforts to put together the PHA and the urban land development data presented here

2009	Reh of Terminal Road	11 Km	Hema – Abaarey	PHA	70,000
	Pothole Repair Work	60 Km	Garawo – Kalabayr	PHA	6,000
	Reh of embankment	200 m	Sanjilbo, Qardho	PHA	21,000
Sub – Total					379,000
2010	Reh of xaafuun feeder Road	12 Km		WFP+PHA	60,000
	Opening of Lafagoroyo Road	4 Km		WFP+PHA	207,000
	Reh of Dameer Feeder Road	7 Km	Taleex	WFP+PHA	63,000
	Reh. of Terminal Road	45 Km	Rabable – Tulo Oman	ILO+PHA	160,000
	Reh. of damaged Culvert		Laag	PHA	15,000
	Reh. of Bandarbayla Road	4 Km		ILO	161,000
	Reh. of Terminal Road	25 Km	Abarey – Talocad	PHA	8,000
Sub – Total					674,000
Rate of Growth					0.78

II.4 Private Investments (I)

Private Investment in Puntland consists of (i) urban land development, (ii) industrial and (iii) agricultural development and (iv) Service Investment.

- (i) The annual private urban land investment has been estimated to be equivalent of US\$**101,414,880**. **This figure was obtained after adding 20% estimate to the total land investments in Table 5 (US\$84,512,400)**

II.4.1 Methodology

In order to find out Puntland private land Investment, a simple questionnaire was developed to collect information from urban centres shown in Table 5. After literature review was made we interviewed well informed land developers at different urban centres in Puntland as well as experts in the municipalities visited and listed below.

II.4.2 UN Joint Programme on Local Governance (JPLG) Investment

The land and property management programme of UN-HABITAT within the JPLG has completed its GIS package in Garowe, the capital city of Puntland. It will move to Galkacayo, Gardo and Bossaso as these municipalities are part of UN JPLG.

II.4.3 Urban Land Developments

(i) Garowe Municipality 2006 – 2010

Garowe is the capital city of Nugal region and of Puntland State of Somalia as well. The annual investment made in Garowe between **2006 and 2010** is estimated as US\$ **20.880,000**

(ii) Bossaso Municipality

Bossoso is the most populated and business city of Puntland.

The Bossaso municipality distinguish the following four (4) types of plots for tax purposes:

S/N	Measurement (M)	Selling Price (US\$)	Construction Amounts (US\$)
1	20 X 20	11,000 – 12,000	20,000 – 22,000
2	20 X 15	8,000 – 9,000	17,000 – 19,000
3	20 X 10	6,000 – 7,000	15,000 – 17,000
4	10 X 10	4,000 – 5,000	13,000 – 14,000

The average daily land acquisitions are three plots 20 X 20 for construction and two plots 20 X20 for sale, finally the average monthly land acquisition are three plots for construction and two for sale, which means 90 plots for construction and 60 plots for land sold. The annual capital investment between **2006 and 2010** is estimated as US\$ **29, 520,000**

(iii) Gardo Municipality

Gardo is a capital city of Karkar region the average monthly land acquisitions are estimated \$ **277,000**, so the annual capital investment between **2006 and 2010** is US\$ **3,324,000**

(iv) Burtinle Municipality

Burtinle is a district under Nugal region, the average monthly land acquisitions are estimated US\$ **75,000** which means the annual capital investment between **2006 and 2010** is estimated as US\$ **900,000**

(v) Ba'adweyn Municipality

Ba'adweyn is also a district under Mudug region. The average monthly land acquisitions are estimated US\$ **301,700** that means the annual capital investment between **2006 and 2010** is US\$ **3,620, 400**.

(vi) Galdogob Municipality

Galdogob is also a district under Mudug region. The average monthly land acquisitions are estimated US\$ 295, 000 so the annual capital investment between 2006 and 2010 is US\$ 3,540,000.

Table 5 Puntland Urban Private Land Investments

Puntland Urban Private Land Investments 2009 – 2010										
Name of Cities	Average Monthly Land Acquisitions					Value per plot in US\$		Total		Average Annual Value
	Plot of land (20 X20)	Land Sold	Land constructed	Land Sold %	Constructed %	Land Sold	Land constructed	Land Sold	Land constructed	Total amounts of Land sold & Constructed X 12
Bossaso	150	60	90	40	60	11,000	20,000	660,000	1,800,000	29,520,000
Qardho	35	29	6	83	17	5,000	22,000	145,000	132,000	3,324,000
Garowe	145	116	29	80	20	10,000	20,000	1,160,000	580,000	20,880,000
Burtinle	15	10	5	67	33	3,000	9,000	30,000	45,000	900,000
Ba'adweyn	21	7	14	33.5	66.5	1,100	21,000	7,700	294,000	3,620,400
Galkayo	88	18	70	18	82	8,000	25,000	144,000	1,750,000	22,728,000
Galdogob	30	10	20	33	67	1,500	14,000	15,000	280,000	3,540,000
Total	494	250	244	35.5	34.5	39,600	131,000	2,161,700	4,881,000	
Total Annual Investment 2009 - 2010										84,512,400

Source: Field Data

II.4.1 Comparison between GIS and MoPIC Assessments

Table 6 below shows the closeness of the figures between GIS (Green colour) and our assessments (red colour).

Table 6 Comparison between GIS and MoPIC Assessments

S/N	GIS	Total	MoPIC	Total	Remarks
1	Residential houses	5,015	Residential houses	5,720	29 (Land constructed per month) X 20 (years) = 6,960, including Commercial (870) and Public (370) services
2	Undeveloped plots	1,584	Undeveloped plots	1,392	116 (Land sold per month) X 12 (one year)
3	Public services	370	Public services	370	We took it as it is
4	Commercial services	870	Commercial services	870	We took as it is
5	Industrial services	19	Industrial services	51	Including Bricks, Faratoyo, Furniture's, and Welding, Grain & Oil, Breads, Roof (Jillay), Clean water and Aluminium. (source: MoC & I)
Total		7,858		8,403	

Source: GIS and MoPIC

(ii) Industrial Investments

PUNTLAND INDUSTRIES INVESTMENT				
S/N	Factories	No of Factories	Initial Investment (In US\$)	Annual Investment (In US\$)
1	Tailoring	11	19,500	9,800
2	Bricks	23	258,000	246,000
3	Sponge	4	970,000	250,000
4	Stone Grinding	9	165,000	29,000
5	Furniture	65	2,430,000	504,800
6	Power station	5	1,895,000	1,240,000
7	Welding	55	418,000	160,600
8	Grain and Oil Mills	12	178,600	13,920
9	Bread	13	830,000	102,000
10	Clay Roof Tiles	2	520,000	58,000
11	Clean water	8	300,000	103,000
12	Glass	2	20,000	4,800
13	Printing House	2	40,000	15,000
14	Hide and Skin	1	90,000	50,000
15	Ice Maker	34	900,000	168,500
16	Boats	1	50,000	5,000
17	Aluminium	3	150,000	45,000
18	Cool Drinks	1	40,000	25,000
19	Cooling system	3	120,000	15,000
20	Fish	2	1,900,000	400,000
Total Annual Investment in US\$				3,445,420

Source: Field Data

(iii) Agricultural Investments

PUNTLAND AGRICULTURAL INVESTMENT					
S/N	Farms	No of Farms	(A) Initial Investment (In US\$)	(B) Annual Investment	(C) Average annual Investment (B / No of Farms)
1	Mudug	15	59,000	11,520	768
2	Nugal	4	5,800	3,500	875
3	Bari/Karkar	8	7,500	2,700	337
	Total		72,300		

Source: Field Data

Covering all other region of Puntland we can safely make an estimate US\$100,000 annual investment in agriculture.

(iv) Service Investments: Private Fixed Capital Formation

Golis Telecom founded in 2002 is the largest telecom operator in Puntland regions of Somalia. Its network coverage area extends to all major cities and districts of Puntland Map 1 below.

PUNTLAND SERVICE INVESTMENT			
S/N	Companies	Annual Investment	Average Annual Investment
1	Golis Telecom	3,000,000	800,000
2	Telecom Puntland	100,000	
3	Somaphone	50,000	
4	NationLink	50,000	
Sub-Total in US\$		3,200,000	

Source: Field Data

The field data collection was made possible through a survey by MoPIC/SIDP junior consultant's team as well as the preparation of questionnaires: Mohamed Farah, Mohamed Ahmed, Abdulaahi Osman, Ubax Maxamed, Osman Jama and Liban Aden. Data tabulation and analysis was done by the budget junior consultant Mohamed Farah. :

Concluding Remark

Puntland GDP = C + I + G + (EX - IM) as

GDP (2009) =	US\$1,318,644,041
+ C	US\$1,497,600,000
+ I (agriculture)	US\$100,000
+ I (industry)	US\$3,445,420
+ I (Service)	US\$3,200,000
+ I (Urban land development)	US\$101,414,880
+ G	US\$19,019,529
+ (EX - IM)	US\$(-306,135,788)

GDP (2010) =	US\$1,340,789,968
+ C	US\$1,497,600,000
+ I (agriculture)	US\$100,000
+ I (industry)	US\$3,445,420
+ I (Service)	US\$3,200,000
+ I (Urban land development)	US\$101,414,880
+ G	US\$29,592,857
+ (EX - IM)	US\$(-294,563,189)

S/N	Puntland Industries									Total
	Type of Industries	Bari	Karkar	Nugal	Mudug	Sool	Sanag	Heylaan	Cayn	
1	Printing House	2								2
2	Hide and Skin	1			1					2
3	Boat	1								1
4	Bricks	2	3	14	2	1	1			23
5	Sponge	2			1					3
6	Ice Maker	21	2	1	6	2	2			34
7	Aluminium	3								3
8	Fish	8					1			9
9	Stone Grinding	6	1	1	1					9
10	Furniture	21	4	13	19	4	4			65
11	Power station	21	2		3	1				27
12	Welding	22	3	11	13	3	3			55
13	Cooling System	3								3
14	Cool Drinks	1								1
15	Grain and Oil Mills	6		2	4					12
16	Milk Processor		1							1
17	Bread		5	2	6					13
18	Clay Roof Tiles			1	1					2
19	Clean water			4	3					7
20	Clothes			1						1
21	Glass			1	1					2
22	Meat Processor				1					1
23	Iron maker				1					1
Total		120	21	51	63	11	11			277

Source: Ministry of Commerce & Industry

Map 1: Golis Operating Map



Source: Golis Telecom

http://www.golistelecom.com/Golis_map.php?catid=Golis%20Map