

**PART I THE PRESENT SITUATION  
AND MAJOR ISSUES**

**Chapter 1**

**Outline of the Syrian Arab Republic**

## **Chapter 1 Outline of the Syrian Arab Republic**

### **1.1 Background**

#### **(1) Location**

The Syrian Arab Republic is located between 32 to 37 degrees of the north latitude in the northern part of the Arabian peninsula. It lies on the eastern coast of the Mediterranean Sea, bounded by Turkey to the north, Iraq to the east, Palestine and Jordan from the south and by Lebanon and the Mediterranean Sea to the west. The total land area of the country is 185,180 km<sup>2</sup>.

#### **(2) History**

The modern state of Syria was established only in 1946. However archaeologists have unearthed evidence of habitation dating back to 5000 B.C. Furthermore many archaeologists consider Damascus to be the world's oldest continuously inhabited city.

The Egyptians, Babylonians, Hittites, Chaldeans and Persians have successively ruled ancient Syria. It became a part of the Greek empire in 333 B.C., and a province of the Roman empire from 64 B.C. to 400 A.D. Remains of the famous Roman roads are still observed in Syria attesting to that country's importance as a transport hub for the empire. Syria fell under the Byzantine Empire up to the 7<sup>th</sup> century when it became a part of the Arab and Islamic nation.

From the 16<sup>th</sup> century Syria fell under the rule of the Ottoman Empire. At that time Syria was part of the Sham region, which roughly covered the present countries of Syria, Lebanon, and parts of Palestine and Jordan. Ruling from Turkey under the mantle of Islam, the Ottoman Empire gave importance to improving transport between Turkey and the holy cities of Medina and Mecca (in present day Saudi Arabia). Under this policy the Hejaz railway was constructed at the start of the 20<sup>th</sup> century. With the Ottoman Empire defeat in the First World War, the Sham was divided up and Syria becoming a protectorate under French rule.

The country gained its independence in 1946 becoming a republic. Syria's major influence in the Arab world is undebatable and it continues to play a leading role in Arab politics to

date.

### (3) Administration

Syria is a republic with the president at the head of the executive branch. The president is elected for a seven-year period and the president in turn appoints the ministers and governors. There are a number of political parties and the president heads the Arab Ba'ath Socialist Party. The government is composed of various parties under a coalition government. Both the General Establishment for Syrian Railways (GESR) and General Establishment for Hijaz Railways (GEHR) belong to the Ministry of Transport.

The People's Council forms the legislative branch of the country and comprises 195 members elected for five-year terms.

The local administration is divided into 14 governorates and the president appoints the governor of each for an indefinite period.

## **1.2 Natural Conditions**

The natural conditions of Syria are described in the Statistical Abstract Book of 1999 published by the Central Bureau of Statistics and The National Environmental Action Plan (NEAP) draft report of the World Bank/UNDP published in June 1998. The findings of these reports are briefly summarized in this report.

### (1) Geographic Features

The cultivable lands area in Syria represents 32%, uncultivable lands area 20%, steppe and pastures (under conditions of suitable rainfalls) 44%, and forests 4%. Of concern is the protection of the limited cultivable lands and forests areas.

Geographically the General Organization of Remote Sensing, GORS, has divided Syria into seven regions as explained in the following table.

Region/ Characteristics
<p>1. Coastal region This region exists in a narrow strip of land between the Mediterranean coast and the adjoining uplands. <i>The GESR railway links the coastal cities of Lattakia and Tartous with Aleppo and Damascus via Homs.</i></p>
<p>2. Coastal mountain The coastal mountains extend along the coast from north to south, about 25-35 kilometers inland. Extensive cultivation is possible in the south part of this region relying on the freshwater springs. <i>The Lattakia – Aleppo GESR railway crosses this region in the north through breathtaking scenery.</i></p>
<p>3. Upland region Rocky mountainous areas bound the uplands to the east. The Orontes river flowing in this region creates a fertile valley extending north to the plains of Homs, Hama and Aleppo. The Al-Ghab region is rich in agriculture activity. <i>GESR railway passes through this region connecting Homs with Aleppo, via Hama.</i></p>
<p>4. Middle &amp; East Syrian Desert Steppe This region covers about 60% of Syria. Nomads, Bedouins and shepherds inhabit oases and meager water points. <i>GESR railway lines serving the phosphate mines pass through these areas.</i></p>
<p>5. Southeast sand area This region is cut by valley and extensive sand spread over the area towards the Euphrates. Precipitation in this region is only 150 to 200 mm per year.</p>
<p>6. Euphrates Valley The Euphrates flows diagonally into Syria, crossing the desert and providing fertile land on its banks extensively used for agriculture. <i>The GESR railway line serves the agriculture in this area with its Aleppo – Raqqa – Deir El Zor line.</i></p>
<p>7. Syrian – Jordan border Volcanic summits, slag cones and craters with intermittent, extensive lava fields, provide excellent soil conditions for the cultivation of cereals. <i>GESR Damascus bound lines and GEHR lines serve this region.</i></p>

Source: GOSR, 1996, Syria Space Image Atlas

## (2) Climate

The Mediterranean Sea climate generally prevails in Syria: a rainy winter and a dry, hot summer generally separated by two short transitional seasons. The coastal region of the country witnesses heavy rainfalls in winter and in summer, moderate temperatures and relatively high humidity. The interior is characterized by a rainy winter season and a hot and dry season during the summer. The areas in the mountains with an altitude of 1,000 meters or more have rainy winters where rainfall may exceed 1,000 mm and moderate climate during the summer. Finally the desert region is characterized by a small amount of rainfall in winter and a hot and dry summer.

### (3) Topographical Features

The *coastal region* may be divided into two sections; the western part from the coast inland dominated by coastal valleys, and an eastern section dominated by mountains of heights ranging from 200 – 300 m. The *mountain region* comprises the Easterly Mountain range, which stretches east of Lebanon and along its border with Syria. The highest peak is Al Skeikh Mt. (2,814 m above sea level). The *southeastern region* comprises mild hills with average levels of 650 – 850 m in dominantly flat plains. Levels fall below sea level in Wadi Yarmouk (-156 meters).

The *steppes region* represents a third of the Syrian land area and stretches from the country's southern borders to the Northern Palmyra mountain range. The *Aleppo valleys region* stretches from the Orantes river eastwards to the Euphrates valley, and in the north – south direction from the Syrian – Turkish borders to the Northern Palmyra mountain range in the south. The region is characterized by hilly terrain with average heights of 350 – 450 meters.

Finally in the country's northeastern corner the *Euphrates Valley and Jazira region* is located. The terrain here is almost flat with heights of about 350 meters.

### (3) Geological and Soil Conditions

The Statistical Abstract Book has classified the soil conditions in Syria into six main groups as presented in the Soil Map. Agricultural activity is concentrated in regions with *alluvial* soil, mainly along the Euphrates river, and with *cinnamonic* soil in the country's southwest corner and in the region between Homs and Aleppo to the north border with Turkey. Pasture lands and seasonal agriculture is found in regions with *grumusol* soils to the west and east of the cinnamonic soils region and extending eastwards to Palmyra. Remaining regions of the country are classified by *desert* and *gypsiferous* soils, which do not support agriculture activities. Pockets of *groundwater soils* are scattered over the country north of Lattakia, north east of Damascus, near Aleppo and at Hasake.

## 1.3 The Present Syrian Economy

### 1.3.1 The National Economy

#### (1) Changes in the Economy

The Syrian economy can be briefly explained by two periods. The first period was from 1977 to 1987. During this period the economy was dominantly socialist with the private sector participation active in parts of the handicrafts industry, food processing industries, and agriculture. In terms of the economy the country had close ties with the former Soviet Union, the Eastern block and the Arab countries.

The second period (starting from 1988 to the present) began as the Former Soviet Union, Syria's main trading partner weakened and soon after collapsed. With the eruption of the Gulf war, Syria took a stand along the alliance led by Saudi Arabia and the Western World to liberate Iraq, bringing it into contact with the Western world. Thereafter peace negotiations with neighbouring Israel took centerstage and the threat of war diminished. Under these conditions the Western world, including Japan took an active role in international cooperation with Syria.

The most significant action taken during this second period was the strategy Syria adopted for strengthening of free market economy in the country. Investment Law no. 10 was adopted in 1991. Within one year of promulgating this law the shares of the private sector in imports, exports (excluding crude oil), and fixed capital investments overtook those of the public sector. Table 1.3.1 shows the rate of growth of the economic indicators during the first and second periods.

Table 1.3.1 GNP and other Economic Indicators Growth Rates (%)

Item	First Period	Second Period			
	1977-87	1988-98	1997	1998	1999 (Mar.)
GDP	3.4	5.3	1.2	5.4	4.8
GNP/Capita	-0.3	2.0	-2.4	2.6	2.4
Exports of goods and services	2.7	8.7	-0.9	11.1	3.1

Source: World Bank, 1998

Examination of the impact Law no. 10 had on the different sectors of the economy shows it had a significant impact on the transport sector (refer to Table 1.3.2). This can be ex-

plained by the large change in custom duties applied to the vehicles; before law no. 10 import duties on truck large size passenger cars and buses were 250% and 100% of their costs respectively, while Law no. 10 gave preferential duties for the same imports (0% in most cases).

Table 1.3.2 Impact of Law no. 10 on Industrial Sectors  
(May 1991 to December 1992)

Industry	Number of projects	Share of total	Value (SP. Billion)
a. Transport sector	397	54%	42.6
b. Food processing	107	15%	19.4
c. Textiles & clothing	62	8%	7.9
d. Chemicals & pharmaceuticals	67	9%	7.9
e. Others	99	14%	15.6
TOTAL	732		93.4

Source: World Bank, 1998

## (2) Economic Indicators

Since the 1960's the Syrian economy has diversified. The shares of the primary, secondary and tertiary industries are 30%, 20% and 50% respectively. For a long time the primary sector growth was stagnant while the secondary and tertiary sectors considerably grew, however in the past 4-5 years, and under the poor global economic conditions the share of the primary sector has grown. Imports share declined from 41% in 1977 to 29% in 1998 as a share of GDP as the Syrian economy became more consumer-oriented. Table 1.3.3 shows the economic indicators with respect to GDP during the period of 1977 to 1998.

Table 1.3.3 Economic Indicators w.r.t. GDP

(% of the GDP)	1977	1987	1997	1998
A – Economic activity				
Agriculture	18.5	25.4	27.8	29.2
Industry	24.4	19.4	17.9	17.3
Manufacturing	--	--	6.2	6.0
Services	57.0	55.2	54.3	53.5
B – Consumption shares				
Private consumption	67.4	77.1	58.2	59.3
General government consumption	19.6	18.0	16.7	16.6
C – Import of goods and services	40.7	28.9	31.4	29.0

Source: World Bank, 1998

## (3) Trade Income and Expenditures

In 1997 the total exports exceeded the imports but than fell one year later. This is mainly

due to the gradual increase in export of petroleum and petroleum products reaching a peak in 1997 and than falling more than half in the following year. This shows the importance of crude oil and petroleum products within the Syrian economy. Trade figures are shown in Table 1.3.4.

Table 1.3.4 Trade Indicators

(USD million)	1977	1987	1997	1998
Total Exports (fob)	1,070	1,340	4,057	3,089
Petroleum and petroleum products	621	703	2,509	1,628
Agricultural products	--	--	989	766
Manufactures	--	--	442	396
Total Imports (cif)	2,402	2,470	3,603	3,257
Food	--	--	674	492
Fuel and energy	422	492	115	81
Capital goods	--	--	821	824
Export price index (1995 = 100)	8	22	76	N.A
Import price index (1995 = 100)	5	22	68	N.A

Source: World Bank, 1998

### 1.3.2 Land Administration and Use

#### (1) Administrative Division

Syria is administratively divided into 14 governorates. Smaller administrative units exist within the governorates. These include cities, villages, towns, hamlets, counties, “Nahia” and “Mantika”. The largest administrative unit after the governorate is the Mantika and in total there are 60 Mantika. Figure 1.3.1 shows a map with the governorate and Mantikah borders.

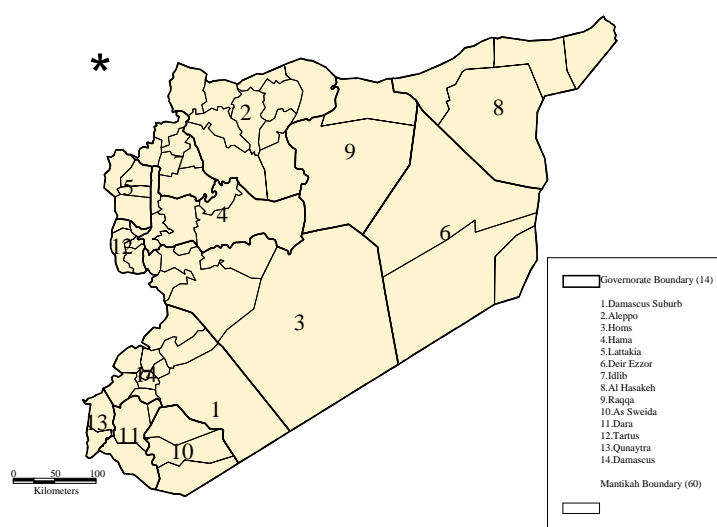


Figure 1.3.1 Governorate and Mantikah Borders



## (2) Governorate Characteristics

Syria lies on the eastern coast of the Mediterranean Sea, and has shared border with Turkey to the north, Iraq to the east, Israel and Jordan to the south and Lebanon to the west.

The climate in Syria closely follows the country's four major geographical regions, namely;

- ⇒ The coastal region lying between the mountains and the sea and includes the two governorates of Tartous and Latakia where the main seaports are located. This region has heavy rainfall in winter and moderate temperature and high humidity in summer.
- ⇒ The interior region or the plain region east of the north south mountain range and comprising the flat areas of the governorates of Aleppo, Idlib, Hama, Homs, Damascus Countryside, Damascus, Al Sweida, Dar'a and Qunaitara. The northern fertile regions running through the governorates of Al Rakka and Al Hassaka are also included in this region. The climate in this region is rainy in the winter and hot and dry in summer.
- ⇒ The mountainous strip running from the north to the south and including all the mountainous and hilly areas in the above stated governorates. There are heavy rains in the winter in the high altitudes of this region; sometimes exceeding 1,000 mm and the summers have mild climates.
- ⇒ The desert region concentrated in the country's southeastern part and stretching to the Iraqi and Jordanian borders and covering portions of Deir Ez Zour, Homs, Damascus Countryside and El Sweida governorates. This region witnesses little rainfall in the winter and very hot dry summers.

## (3) Regional Economic Conditions

The minerals and agricultural resources are shown in Figure 1.3.2. Syria's economy has diversified since the 1960's. Although agriculture is still the leading sector of the economy and the main source of employment, its share of the gross domestic product has declined as industrial sector has grown. Less than one third of the country is cultivated because of

aridity and poor soils. With the exception of the cultivated lands along the Euphrates River, approximately 80% of the agricultural land is still dependent on rain-fed sources. Rainfall variability causes fluctuations in grain production, which affects the industry. These cultivated areas located along the Mediterranean coast and the Euphrates River have obviously developed rapidly within the country's land use structure and are served by the railway network. This developed land use structure has formed the basis for determining the development potential of Syria within this Study.

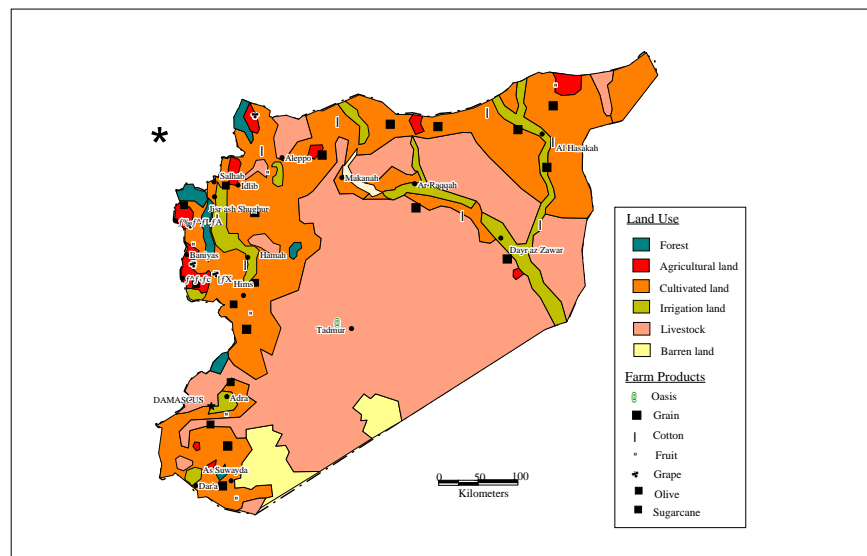


Figure 1.3.2 Land Use

Syria's industries are agrarian based – food processing and textiles. The main cash crop is cotton. In the mid 1960's the government began a policy of rapid industrialization, especially in the areas of iron and steel and other heavy industries. This industrialization has encouraged large migration to urban areas. Syria has also exerted efforts in the exploration of oil resources and as a result a major oilfield was discovered in the Deir Az Zour region in the mid 1980's. Although Syria is not a major petroleum producer by Middle East standards, nevertheless petroleum presently accounts for some 40% of total exports and a petrochemical industry has developed around the main refineries. The locations of the economic activities are shown in Figure 1.3.3.

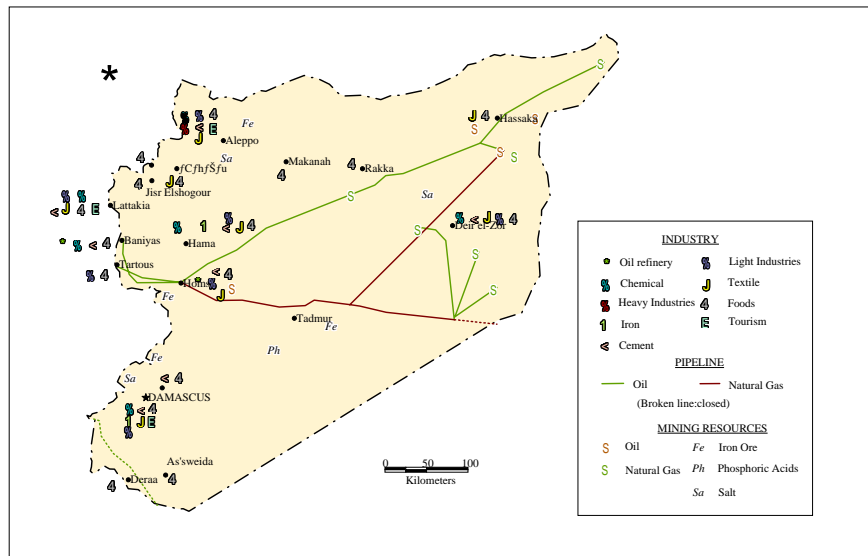


Figure 1.3.3 Industrial Map

Although when the water demand and supply conditions in Syria are considered, there are sufficient water supplies at normal levels of precipitation, the great distances between water supplies and population centers poses serious distribution problems. The water problem is worsened by rapid population growth, and increased water pollution. These conditions are illustrated in Figure 1.3.4 and Table 1.3.5.

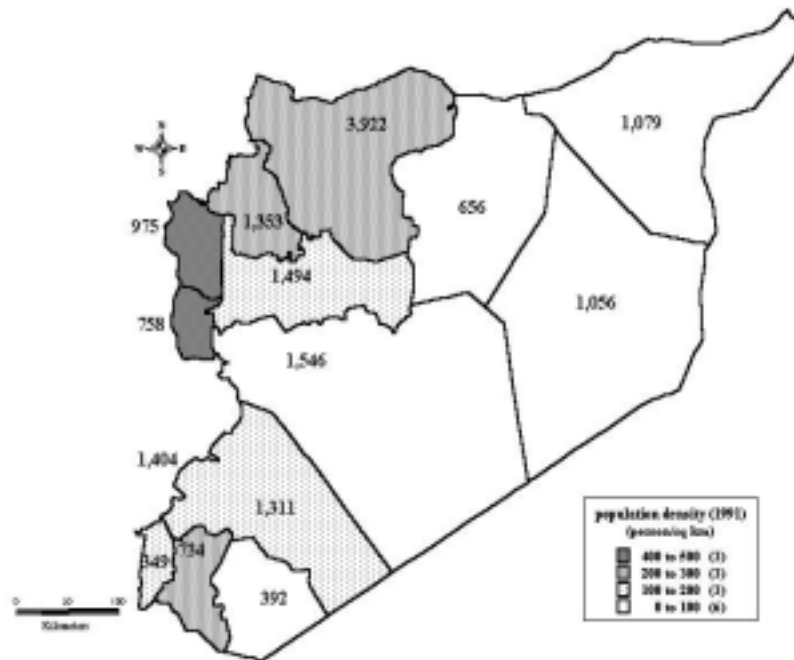


Figure 1.3.4 Population Distribution Map

Table 1.3.5 Population Indicators

Governorate	Population	Population share of total (%)	Growth rate 1970-1981	Growth rate 1981-1994	Pop/ built-up Area (p/ha)	Pop/ cultivated area (p/ha)	Pop/ Tot. area (p/ha)
Damascus City	1,404,000	8.3	2.63	1.80	33.1	14.1	1.5
Damascus Country	1,311,000	7.7	3.62	4.59	(included in Damascus City)		
Aleppo	3,922,000	23.1	3.30	3.61	56.8	3.2	2.1
Homs	1,546,000	9.1	3.72	3.16	17.4	3.9	0.4
Hama	1,494,000	8.8	3.32	3.11	28.7	3.1	1.5
Lattakia	975,000	5.7	3.27	2.36	60.9	8.8	4.2
Deir Az Zour	1,056,000	6.2	3.10	4.36	40.6	4.5	0.3
Idlib	1,353,000	8.0	3.84	3.48	33.0	4.0	2.2
Al Hasakeh	1,079,000	6.3	3.32	3.31	24.5	0.8	0.5
Al Rakka	635,000	3.7	3.31	3.59	11.8	0.7	0.3
As Sweida	392,000	2.3	3.29	2.30	13.5	2.1	0.7
Dar'a	734,000	4.3	4.15	4.03	9.8	3.2	2.0
Tartous	758,000	4.5	3.56	2.19	33.0	6.4	4.0
Quneitra	349,000	2.1	4.34	4.88	49.9	2.3	1.9
Total	17,008,000		3.35	3.30	27.8	2.8	

Source : Central Bureau of Statistics 1999, Syria

#### (4) Regional and Governorate Structure

Regional characteristics are summarized in Table 1.3.6.

Table 1.3.6 Review of Regional Characteristics

Region/ Characteristics
<u>Damascus</u> <ul style="list-style-type: none"> <li>• The country's capital city and often referred to as the oldest city in the world.</li> <li>• Strong attraction for rural migrants</li> <li>• Sprawl of informal housing</li> <li>• Encroachment on green areas</li> <li>• <b>Water supply problem with water rationing in some parts of the city</b></li> <li>• <b>Largest population growth rate with high density per built up area</b></li> <li>• Industries creating pollution</li> <li>• Historic city of significant cultural importance</li> </ul>
<u>Aleppo</u> <ul style="list-style-type: none"> <li>• Syria's second most important governorate after Damascus city</li> <li>• <b>Largest industrial center in the country</b></li> <li>• Water supply problem</li> <li>• High population density in the built-up areas reflects a severe demand on existing infrastructure</li> <li>• <b>Aleppo rural areas suffering from poor transport infrastructure</b></li> <li>• Historic city of significant cultural importance</li> </ul>
<u>Homs</u> <ul style="list-style-type: none"> <li>• Serious urban sprawl</li> <li>• <b>Center for oil refining and petrochemical industries</b></li> <li>• <b>Pollution in this city considered very severe</b></li> <li>• A large governorate containing the historic city of Palmyra and phosphate rich area south of Palmyra</li> </ul>
<u>Hama</u> <ul style="list-style-type: none"> <li>• <b>Urban infrastructure in this city is relatively better</b> than other Syrian cities because of the heavy rebuilding that took place there in the early 1980's.</li> <li>• Some encroachment on green areas has started recently</li> <li>• Many historic sites</li> </ul>
<u>Lattakia</u> <ul style="list-style-type: none"> <li>• <b>The major sea port for Syria</b></li> <li>• The port was rehabilitated in the late 1970's by Soviet aid</li> <li>• Large industrial area concentrated south of the city</li> <li>• Some pollution problems from the industrial activities</li> <li>• <b>Coastal resort city (northern part of the city)</b></li> <li>• High population densities compared to other Syrian cities may have contributed to the lower than average population growth during 1981 to 1994</li> </ul>
<u>Idlib</u> <ul style="list-style-type: none"> <li>• Used to be a part of Aleppo governorate and continues to retain that character</li> <li>• <b>Rural character</b></li> <li>• Agriculture activity in this governorate has suffered as its citizens are attracted to the nearby urban center in Aleppo and Hama</li> </ul>
<u>Tartous</u> <ul style="list-style-type: none"> <li>• <b>The second sea port of Syria after Lattakia</b></li> <li>• Resembles to a great deal Lattakia in its development characteristics</li> </ul>
<u>North-eastern Governorates: Al Rakka, Deir Az Zour, Al Hasakah</u> <ul style="list-style-type: none"> <li>• These three governorates witnessed large population growth rates as expansion in oil extraction and land reclamation started since the 1980's. Should the population growth continue to increase more attention should be paid to improvement of the less developed transport infrastructure.</li> <li>• <b>Although the area is rich in raw materials (oil and cotton) there are hardly any processing facilities except for some at Deir Az Zour, and the materials must be transported to Homs, Hama and Aleppo.</b></li> </ul>
<u>Southern Governorates: As Sweida, Dar'a and Quneitra</u> <ul style="list-style-type: none"> <li>• This area lags behind the rest of the country in terms of its development and population growths because of the continuous problem Syria has with Israel.</li> <li>• Indeed the Quneitra has only recently been restored to Syrian control (10 years ago) after remaining under Israeli occupation for more than 15 years. At present the area is a military one and access is subject to permission. However citizens there before 1967 have been permitted to return.</li> <li>• These area of the country has more potential for agriculture activity than for industry</li> </ul>

### 1.3.3 Gross Regional Domestic Product

#### (1) GDP/Capita of Labor

Based on the GDP and number of workers by activity type from the labour survey of 1998, the GDP/Capita of Labor was calculated, as shown in Table 1.3.8.

Table 1.3.8 GDP and Labourers by Economic Activity

Economic Activity	GDP (Mil. SP)	Labourers (persons)	GDP/labourer (Mil. SP/person)
Agriculture	219,170	875,609	0.250
Mining	114,212	512,551	0.223
Construction	28,383	516,111	0.055
Wholesale and retail trade	136,411	537,467	0.254
Transportation	81,289	213,563	0.381
Finance and insurance	28,379	53,391	0.532
Social Services	14,048	523,230	0.027
Government Services	55,004	327,463	0.168

Source: Labour survey, 1998

#### (2) Labour Force by Industry and Governorate

Table 1.3.9 shows the labour force by industry type and by governorate.

Table 1.3.9 Labour Force by Industry and Governorate

	Agriculture	Mining & manufacturing	Construction	Wholesale & retail trade	Transport & communication	Finance & insurance	Social & personal services	Government services	Total
Damascus city	3,061	72,581	73,108	96,095	29,290	14,563	77,086	48,245	414,030
Damascus rural	45,609	92,580	93,300	73,349	33,767	7,995	102,249	63,993	512,842
Aleppo	163,459	95,338	96,259	199,346	45,310	12,043	97,456	60,993	770,205
Homs	45,303	45,859	46,128	26,835	19,156	4,226	35,947	22,497	245,952
Hama	129,329	39,135	39,339	31,435	12,225	2,126	21,968	13,748	289,306
Lattakia	27,090	26,895	27,155	30,413	15,065	3,272	35,947	22,497	188,334
Deir el-Zor	97,953	17,413	17,581	8,945	5,794	827	21,968	13,748	184,229
Idlib	109,126	30,860	31,158	26,835	11,327	1,349	25,962	16,248	252,866
Hassaka	100,555	29,481	29,766	11,245	10,055	1,680	35,148	21,998	239,928
Raqqa	54,180	20,171	20,192	4,345	5,692	929	13,181	8,249	126,939
Sweida	17,601	8,793	8,703	4,089	3,283	1,044	8,388	5,249	57,150
Daraa	28,468	11,896	11,837	6,900	8,646	1,069	24,364	15,248	108,428
Tartous	50,660	19,826	20,018	16,868	13,157	2,151	23,166	14,498	160,344
Quneitra	3,214	1,724	1,567	767	795	115	399	250	8,831
Total	875,609	512,551	516,111	537,467	213,563	53,391	523,229	327,463	3,559,384

Source: Statistical Abstract 1989-1999

#### (3) Estimation of GRDP

GRDP was estimated by multiplying the GDP per worker in each economic activity type with the number of workers in each governorate belonging to that economic activity. The

result is shown in Table 1.3.10.

Table 1.3.10 GRDP Estimation (1998)

(Unit: Million SP)

	Agriculture	Mining & manufacturing	Construction	Wholesale & retail trade	Transport & communication	Finance & insurance	Social & personal services	Government services	Total
Damascus city	12,182	36,803	9,152	43,005	24,002	11,990	4,815	18,853	160,801
Aleppo	40,915	21,244	5,294	50,595	17,246	6,401	2,617	10,245	154,557
Homs	11,340	10,219	2,537	6,811	7,291	2,247	965	3,779	45,188
Hama	32,372	8,721	2,163	7,978	4,653	1,130	590	2,309	59,916
Latakia	6,781	5,993	1,493	7,719	5,734	1,739	965	3,779	34,203
Deir el-Zor	24,518	3,880	967	2,270	2,206	440	590	2,309	37,180
Idlib	27,315	6,877	1,714	6,811	4,312	717	697	2,729	51,171
Hassaka	25,169	6,569	1,637	2,854	3,827	893	944	3,695	45,589
Raqqa	13,562	4,495	1,110	1,103	2,167	494	354	1,386	24,670
Sweida	4,406	1,959	479	1,038	1,250	555	225	882	10,793
Daraa	7,126	2,651	651	1,751	3,291	568	654	2,561	19,253
Tartous	12,681	4,418	1,101	4,281	5,008	1,144	622	2,435	31,689
Quneitra	805	384	86	195	303	61	11	42	1,886
Total	219,170	114,212	28,383	136,411	81,289	28,379	14,048	55,004	676,896

GRDP by governorate is illustrated in Figure 1.3.5. The accumulation of GRDP along the Damascus – Aleppo axis is significant.

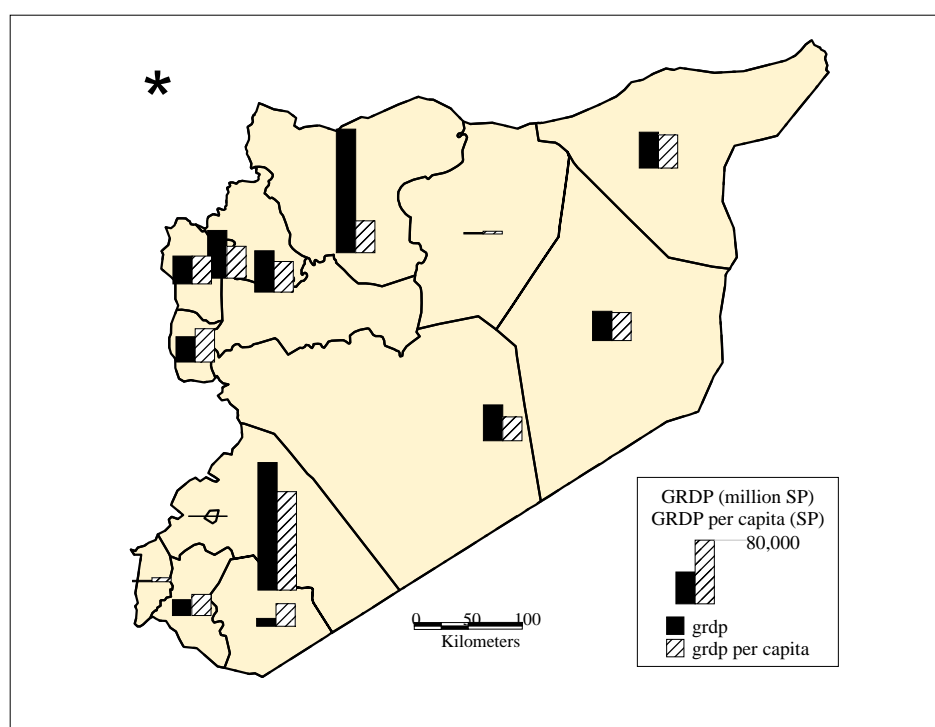


Figure 1.3.5 GRDP by Governorate

## 1.3.4 Population

Population data is collected for the purpose of making a population estimation model. Due to the limitation in data on mortality, the normal cohort method cannot be applied to estimate future population and a simplified model was formulated.

## (1) Population Increase/Decrease

Population increase of five years is shown in Table 1.3.11. Due to the Syrian practice of working abroad, the population group between 15 and 59 years old shows a decreasing tendency. The large cohort of the age group “5 to 14” is remarkable.

Table 1.3.11 Population of Syria by five years class and sex

(Unit: 1000)

No	Age Group		1999 Population			1994 Census			Increase/ Decrease in 5 years	
	From	to	Female	Male	Total	Female	Male	Total	Female	Male
1	0	0	225	242	467	191	206	397	1.178	1.1748
2	1	4	939	994	1933	803	850	1653	1.1286	1.1094
3	5	9	1209	1272	2481	1033	1087	2120	1.2045	1.1972
4	10	14	1136	1200	2336	975	1030	2005	1.0997	1.104
5	15	19	917	952	1869	785	814	1599	0.9405	0.9243
6	20	24	727	739	1466	622	632	1254	0.9261	0.9079
7	25	29	607	618	1225	518	527	1045	0.9759	0.9778
8	30	34	495	504	999	420	427	847	0.9556	0.9564
9	35	39	372	385	757	320	332	652	0.8857	0.9016
10	40	44	297	315	612	256	271	527	0.9281	0.9488
11	45	49	219	232	451	190	202	392	0.8555	0.8561
12	50	54	203	200	403	171	170	341	1.0684	0.9901
13	55	59	149	157	306	129	135	264	0.8713	0.9235
14	60	64	154	168	322	133	144	277	1.1938	1.2444
15	65	+	221	262	483	187	222	409	1.1818	1.1802
Total			7870	8240	16110	6733	7049	13782	1.1689	1.169

Source: Statistical Abstract 1999

## (2) Fertility Rate

Fertility rate of 1993 is available from Statistical Abstract 1999. That fertility rate is divided to urban and rural. Using sex ratio of urban data, urban and rural ratio by Governorate is estimated. Applying this urban and rural ratio to population by Governorate, urban and rural female populations by Governorate are estimated (refer to Table 1.3.12).



Table 1.3.12 Female Urban Population and Rural Population

Governorate	sex ratio			Rate		Female Population (in 1,000)		
	Total	Rural	Urban	Rural	Urban	Rural	Urban	Total
Damascus	106.9	0	106.9	0	1	0	711	711
Damas.Rural	106.3	106.4	106.1	0.6667	0.3333	437	218	655
Aleppo	106.3	103.1	108.3	0.3846	0.6154	773	1,237	2,010
Homs	104.2	102.7	105.5	0.4643	0.5357	364	420	784
Hama	104.6	103.7	106.3	0.6538	0.3462	496	263	759
Lattakia	104.8	104.4	105.3	0.5556	0.4444	275	220	495
Deir-el zor	102.4	100.0	108.7	0.7241	0.2759	402	153	555
Idlib	103.8	103.4	104.9	0.7333	0.2667	507	184	691
Hasakeh	103.2	101.9	104.9	0.5667	0.4333	318	243	561
Rakka	103.7	102.3	105.9	0.6111	0.3889	205	131	336
Sweida	95.3	94.3	97.8	0.7143	0.2857	142	57	199
Daraa	101.1	100.1	102.9	0.6429	0.3571	240	134	374
Tartous	104.5	104.9	103.2	0.7647	0.2353	294	90	384
Quneitra	101.9	101.9	0	1	0	178	0	178
Total						4,631	4,061	8,692

Source: Statistical Abstract 1999

To multiply total of urban and rural female populations to fertility rate of 1993 by urban and rural (as shown in Table 1.3.13), total number of births is obtained. Expected birth figure obtained; 495,151 is different from number of population less than 1 year old which is 467,000. The difference is considered as the number of deaths in a year. Possibility of infant death becomes 0.0566.

Table 1.3.13 Fertility Rate of 1993 (per 1,000 females)

Age Group		Fertility Rate		Birth			Average Fert. R	Rate of Infant Death
from	To	Urban	Rural	Urban	Rural	Total		
15	19	71	52	33,595	24,605	58,200	63	0.0566
20	24	157	177	58,896	66,398	125,294	172	
25	29	186	246	58,257	77,050	135,307	223	
30	34	145	228	37,036	58,236	95,271	192	
35	39	105	183	20,155	35,127	55,282	149	
40	44	44	100	6,743	15,325	22,068	74	
45	49	7	26	791	2,938	3,729	17	
Total				215,473	279,679	495,151		

Source: Statistical Abstract 1999

### 1.3.5 Economic Data

Data was collected and examined for the purpose of making an econometric model. An econometric model that is simplified but enough for the study purpose can be formulated using data mostly contained in Statistical Abstract. GDP at market prices is used for the model (refer to Table 1.3.14).

Consumption Data are separately collected as Government Consumption and Private Consumption. Data of Investment concern are also collected as Government Fixed Capital Formation and Private Fixed Capital Formation. The Government Fixed Capital Formation is planned to use for the control variable.

Data of Import/ Export show very peculiar movement. Exports are growing but imports show stagnant growth. The strong import control policy appears to be having an outstanding effect.

Government Revenue is divided into three categories. Taxes include Direct Taxes and Indirect Taxes. Roughly 70% of taxes are Direct Taxes and 30% Indirect Taxes. Government Expenditure is divided into two categories, Ordinary Expenditure and Development Expenditure. Development Expenditure grows faster than Ordinary Expenditure. After 1997, the shares of both are mostly even. Average Wages in 1995 constant prices in the last seven years are in the same range. Number of Government Employees excluding military service is slightly increasing.

Debit and Credit of the Government is well balanced. It is noteworthy that Debit and Credit are expressed in current prices. Data of total Debt is obtained from UNDP data. Debit and Credit in the Statistical Abstract 1999 are not consistent with UNDP Debt data. The UNDP Data is applied in the Econometric model. In the model, Debt Service Ratio is used to control the amount of Government Fixed Capital Formation.

Table 1.3.14 Economic Data

Identification	Item/Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
GDP concern											
1995 constant	GDP(M)	372,387	389,469	420,242	476,850	501,546	539,929	570,975	612,896	628,148	677,173
Current	GDP(M)	208,892	268,328	311,564	371,630	413,755	506,101	570,975	690,857	745,569	795,726
to Fix	Deflator	1.7827	1.4515	1.3488	1.2831	1.2122	1.0668	1.0000	0.8872	0.8425	0.8510
1995 constant	Total Debt									182,163	205,183
Consumption concern											
1995 constant	Consumption	394,414	386,208	396,028	446,509	450,970	426,431	454,852	471,474	469,108	496,228
1995 constant	Gov. Consumption	67,380	66,320	76,518	74,258	74,255	74,285	76,709	76,899	77,854	79,602
1995 constant	Private Consumption	327,034	319,888	319,510	372,251	376,715	352,146	378,143	394,575	391,254	416,626
Investment concern											
1995 constant	Capital Formation	82,605	92,434	95,836	127,039	128,856	155,530	155,504	155,045	147,256	152,140
1995 constant	Gov. Cap Formation	41,372	39,389	40,666	41,428	45,623	65,929	68,084	73,914	85,413	89,234
1995 constant	Private Cap Formation	41,233	53,045	55,170	85,611	83,233	89,601	87,420	81,131	61,843	62,906
Import/Export concern											
1995 constant	Import	193,515	193,899	193,926	219,071	213,904	215,907	216,610	208,253	207,928	194,883
1995 constant	Export	62,811	76,042	76,038	97,577	115,294	167,327	177,229	219,872	241,719	241,316
Population concern											
in 1000	Population	11,721	12,107	12,506	12,918	13,343	13,782	14,153	14,619	15,100	15,597
in 1000	Gov. Employee	530	662	681	701	687	729	737	761	788	804
Government Revenue concern											
Current	Gov. Revenue	54,568	71,014	87,207	88,848	106,579	125,393	156,913	180,494	203,036	217,909
Current	Tax	22,123	27,720	29,408	29,489	40,455	48,903	57,371	69,296	75,516	82,686
Current	Gov. Service	2,666	3,454	4,856	5,658	6,643	7,186	12,743	18,574	20,054	19,409
Current	Various	29,779	39,840	52,943	53,701	59,481	69,304	86,799	92,624	107,466	115,814
1995 constant	Gov. Revenue	97,277	103,074	117,626	114,003	129,193	133,774	156,913	160,125	171,059	185,443
1995 constant	Tax	39,438	40,234	39,665	37,838	49,038	52,171	57,371	61,476	63,622	70,366
1995 constant	Gov. Service	4,752	5,013	6,549	7,259	8,052	7,666	12,743	16,477	16,895	16,517
1995 constant	Various	53,086	57,826	71,410	68,905	72,101	73,936	86,799	82,171	90,540	98,559
Government Expenditure concern											
Current	Gov. Expenditure	57,000	61,875	84,691	93,042	123,018	144,162	162,040	188,050	211,125	237,300
Current	Gov. Exp. Development	21,600	24,300	27,177	36,250	61,750	67,964	74,099	91,473	108,700	119,600
Current	Gov. Exp. Ordinal	35,400	37,575	57,514	56,792	61,268	76,198	87,941	96,577	102,425	117,700
1995 constant	Gov. Expenditure	101,613	89,810	114,233	119,386	149,120	153,798	162,040	166,830	177,875	201,945
1995 constant	Gov. Exp. Development	38,506	35,271	36,657	46,514	74,852	72,507	74,099	81,151	91,581	101,781
1995 constant	Gov. Exp. Ordinal	63,107	54,539	77,576	72,872	74,268	81,291	87,941	85,679	86,294	100,164
Current	Wage	1,725	2,226	2,328	2,831	2,948	3,048	3,786	3,958	4,055	4,074
1995 constant	Wage	3,075	3,231	3,140	3,633	3,574	3,252	3,786	3,511	3,416	3,467
Finance concern											
Debit	ST Loan	8,265	11,261	17,120	24,304	34,749	33,330	25,170	31,888	44,745	51,506
Debit	LT Loan	14,411	22,238	13,233	7,602	6,824	10,435	10,286	8,050	23,068	10,311
Credit	ST Return	8,598	11,973	24,845	32,527	47,856	53,206	40,020	47,321	50,086	56,711
Credit	LT Return	4,310	6,745	12,360	12,477	11,844	25,618	11,410	15,904	17,054	19,149

Source: Statistical Abstract 1989~1999 and UNDP