

## **2.2.4 City Development M/P**

It is said that in 1993, Adana GM began to prepare its own master plan. The plan has introduced a fundamental change to expand the city towards the Northern hills, where no settlements were envisaged. Thus, invading the fertile lands was reduced and a modern city emerged at the newly defined lands over which the GM constructed all the infrastructure prior to the housing development. Upon the success of the Yeni Adana (New Adana) Project, the ADANA-North Yuregir Urban Development Project Study was completed. This is the present so called master plan. As understandable from its title, grand development concept, total land use and population framework are not mentioned here. Thus, the city master plan target year and exact study area is not clarified here. The second part describes on the project study on the North Yuregir Housing Project, mentioning their land use and population framework, however, the study's situation that is under detailed study does not clarify the target year. But through interview, it is understood that they have strong wish to complete by 2020, In this sense, this is a unique master plan report. On housing projects and transportation project, which affect much on the urban development, it will be mentioned in the section of urban structure later.

## **2.2.5 Housing Conditions and Urban Structure**

### **a. Housing Conditions**

Housing condition is examined with household income, their distribution is quite clear, corresponding with locations. On the Seyhan side of the River and in the centre of the city, in the new CBD, are high income level housings. The further north part of the city sees another high/middle income housings, Yeni Adana. In these areas, clean and well maintained apartment style housing are dominant, and detached type houses are rare. The districts beyond the station and behind the high rise new buildings on streets, e.g., in Sumer, Yesil Yurt etc, middle income housings are seen. Most of them are low, and medium rise, 2 to 6 storied buildings. Some are detached houses with gardens, thus the green coverage ratio in these districts cannot be said low. From the southern part of the CBD, and its west, surrounding the central districts in clockwise, comes low income houses. Some of them share continuous facades with neighbours and some stand as detached, but with having their own backyards. Sometimes they are burning their own garbage by themselves. In spite of their irregular and disordering out looking, inside houses are carefully cleaned and well maintained.

On Yuregir side, housing condition seems quite equal to those of Seyhan fringe area. But depending on its developing process, roads and blocking system differs from Seyhan's, spontaneous. The fan like road system covers almost all areas. Housing condition rises higher, from the southern part to the northern, depending on their developed date, income level and social status. In the southern part, some mixed use houses with small workshops and retailing shops are able to be observed. In the southern most areas like Haydaroglu, Gunesli, they have their own big gardens and farms in the remote places.

**b. Urban Structure**

Adana extends on the Seyhan River basin with Yuregir on the east and Seyhan on the west. The CBD, with two parts old and new divided by the old E-5 highway, is located on the Seyhan side. City's schematic structure is shown on Figure 2-5. Industrial and commercial developments major axis is on E-5 highway, and railway. The Greater Municipality is planning an organised industrial estate of 1,050 ha, along E-5 highway (Ceyhan road) for empowering industrial corridor type development.

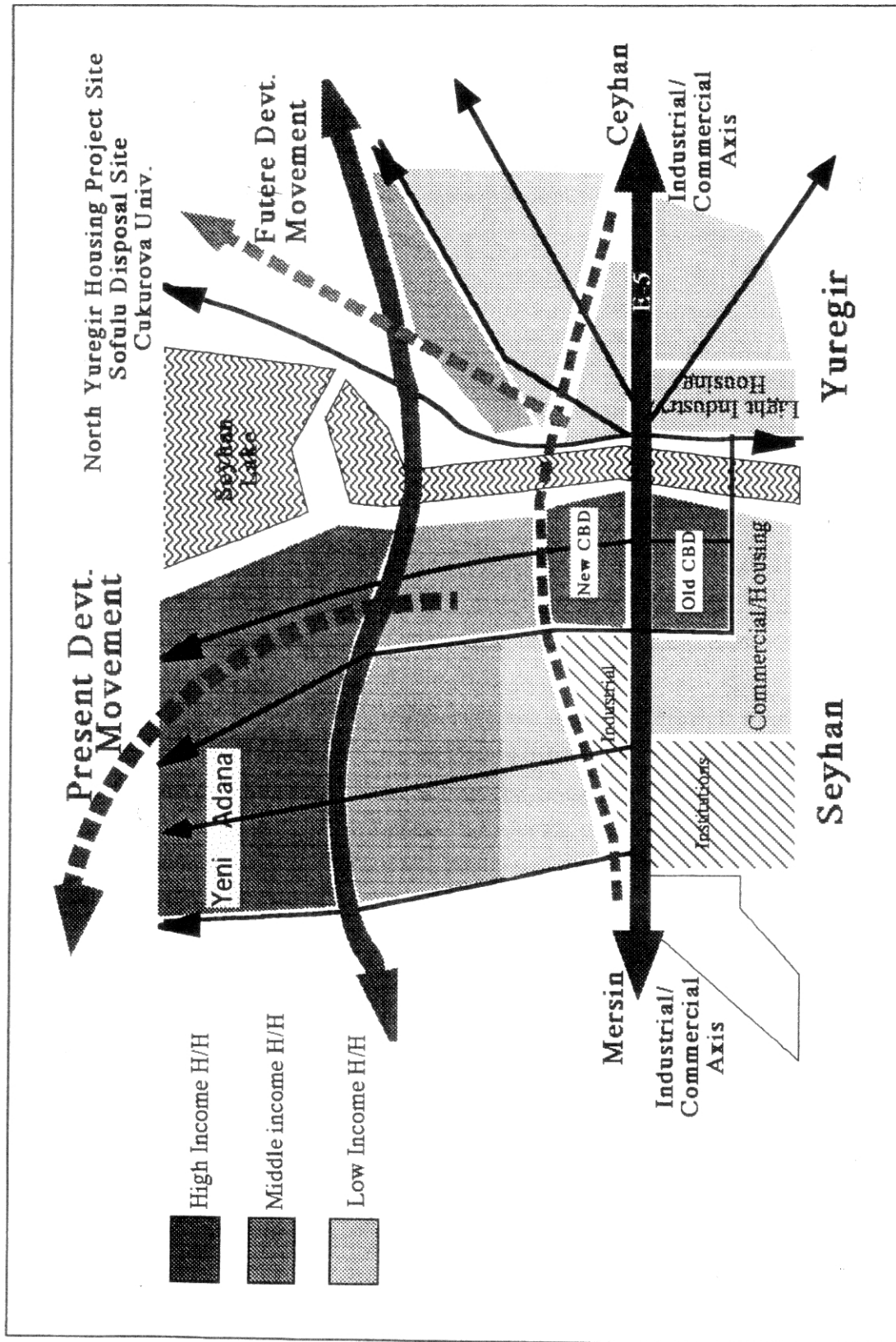


Figure 2-5: Schematic Urban Structure and Development Trend in Central Adana GM

The trend in new housing developments is starting behind the new station, through Sumer, Yesil Yurt, Yurt and continuing to the prominent housing development site, Yeni Adana. Yeni Adana is located in Seyhan district municipality, and was planned as a vast new town project for middle/high income level households both from inside and outside of the city. Initially almost all the housing designed were high rise apartments. As of 1998, the GM encouraged villa type housing groups over specially devoted areas in which sporting activities, gardens, swimming pools and woods were contemplated. The construction was begun in 1995, and is sustaining a great efforts on continuing. It is said that 40% of the housing plan was constructed, and another 60 % and other facilities are expected to be finished by 2020. Total population is targeting 1,000,000, when calculated average household size as 5.0. Outline of Yeni Adana Project is summarised on Table 2-6.

Table 2-6: Land Use Framework of Yeni Adana Project

Land Use	No. of Facilities	Area (ha)
Residential	200,000	915.0
Markets and Open Bazaars	40	15.0
Government Institutions	28	36.9
Social and Cultural Facilities	39	36.0
Health Facilities	10	9.1
School	75	40.8
Playgrounds	67	20.8
Green Area, Parks		960.0
Religious Facilities	36	9.6
Retirement Home	1	6.2
Psychological Clinic	1	19.6
Veterinary	1	3.5
Infrastructure		920.0 (680 km road)
Total		2072.5

Source: Adana-North Yuregir Urban Development Project Report, 1997

Another big housing project that is considered to have a significant impact on future urban structure is the North Yuregir Housing Project in the area adjacent to Yuregir and 2 to 3 km from the present Sufulu disposal site. This project is targeting the construction of new town filled with detached houses, thus the future population density is set quite a low level. Building coverage ratio is limited to 20 %, while floor area ratio 40 %. The project is now under study, and will begin construction from 2000 and be finished in 2020. Thus, average number of storeys comes 2. Outline of the North Yuregir Housing Project is shown on Table 2-7.

Table 2-7: North Yuregir Housing Project

District	Population	Area (ha)	Population Density	No. of Parcels	Average H/H Size
Carkpare	63,000	700	90	12,500	5.0
Cinarli	63,000	700	90	12,500	5.0
Menekse	28,000	400	70	5,600	5.0
Boynuyogun	134,000	1,140	118	26,650	5.0
Beyceli	63,000	700	90	12,500	5.0
Total	351,000	3,640	96	69,750	5.0

Source: Adana-North Yuregir Urban Development Project Report, 1997

Another project which is expected the best effects on the controlled future urban development is the Light Train System (tramway/metro) Project. Total length is planned 19.2 km with 19 stations, which will connect Yeni Adana - the CBD - North Yuregir by "V" shape lining plan. The project is composed of two phases, first phase by 2000 between 13 stations with 13.3 km line, second phase by 2010 further 6 stations with 5.9 km line. The project will surely support and make above mentioned two housing project complete with providing access to the CBD.

## 2.2.6 Economic Conditions

### a. Regional Economy

Cukurova Region is famous as a fertile agricultural area and have played an important role in Turkey as the place for the production of wheat, fruits (orange and olive) and cotton. Comparing industrial structure with other regions of Turkey, agricultural and industrial sectors are given considerable weight. However, the share of agricultural sector within Gross Regional Domestic Product (GRDP) in Adana Province has slightly reduced in recent years though the share of industrial, transportation and communication sectors within GRDP have increased.

Table 2-8: Changes in the Industrial Structure in Adana Province

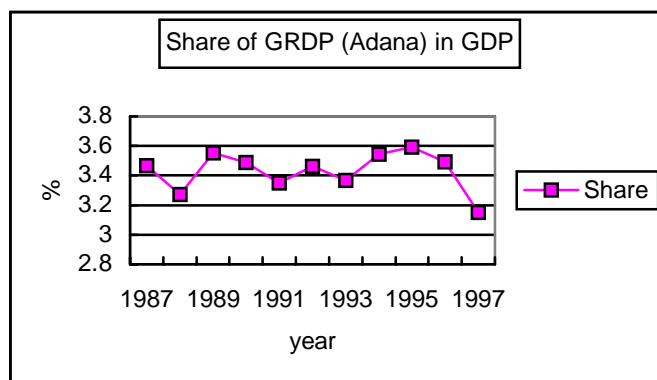
unit: billion TL, 1987 price

Sector	1991		1996		1996/91
	Value	%	Value	%	
Agriculture	595.6	20.8	677.6	19.0	1.138
Industry	842.7	29.4	1,136.8	31.8	1.349
Construction	146.2	5.1	156.9	4.4	1.073
Trade	619.2	21.6	795.2	22.3	1.284
Transportation & communication	255.2	8.9	343.1	9.6	1.344
Financial institutions	81.8	2.9	81.4	2.3	0.995
Real estate services	93.0	3.2	102.8	2.9	1.105
Business & personal services	57.7	2.0	68.9	1.9	1.194
Imputed bank service charge *	-69.6	-2.4	-67.1	-1.9	0.964
Government services	131.5	4.6	144.1	4.0	1.096
Private non-profit institutions	1.4	0.0	0.8	0.0	0.571
Import duties	112.4	3.9	131.5	3.7	1.170
GRDP	2,867.1	100.0	3,572.0	100.0	1.246

Note: \* evaluated charges without actual transactions.

Source: Economic and Social Indices (Adana) 1997, SSI

The rate of GRDP of Adana Province within GDP ranges  $3.4 \pm 0.2\%$  though it has reduced in 1997.



Source: Gross Domestic Product by Province, SSI Economic and Social Indices (Adana) 1997, SSI

Figure 2-6: Share of GRDP (Adana) in the GDP

According to the data published by SSI, the GRDP per capita of Adana Province resulted in 542.8 million TL (equivalent to US\$ 3,000) in 1997, which reached 1.18 times of average national level in Turkey of 461.5 million TL (equivalent to US\$ 2,550).

## b. Taxation System and Utilities Charging System

### b.1 National Taxation

The sources of national tax revenue in Turkey depend on income tax, taxes on goods and services as shown in Table 2-9.

Table 2-9: Changes in Tax Revenues

Category	1995	1996	1997	1997/95
Tax on income	435,865	865,321	1,896,789	4.352
Tax on property	24,440	18,720	35,539	1.454
Tax on goods & services	430,431	975,369	1,989,830	4.623
Tax on foreign trade	194,647	386,992	827,097	4.249
Others	32	2,018	1,196	37.375
Total	1,085,415	2,248,420	4,750,451	4.377

Source: Monthly Bulletin of Statistics, August 1998, SSI

The following are pointed out as the major problems in the Turkish taxation system.

- The ratio of tax revenues within GNP is lower than the other OECD countries.
- There are unfair burden sharing of tax among economic sectors.
- The gaps between tax return and actual amount of tax paid are big.

#### b.1.1 Income Tax

The income tax is levied on income gained through commercial activities or provision of labour regardless of whether they are companies or individuals. The ratio of the tax revenues is approximately 4:1, gaining more from tax on income

gained through provision of labour. The income tax rate in 1998 is shown in Table 2-10.

Table 2-10: Income Tax Rate

Range of income	Value of income tax
-1,000,000,000 TL	Income × 20%
-2,000,000,000 TL	200,000,000 + ( Income exceeding 1,000,000,000 TL ) × 25%
-4,000,000,000 TL	450,000,000 + ( Income exceeding 2,000,000,000 TL ) × 30%
-8,000,000,000 TL	1,050,000,000 + ( Income exceeding 4,000,000,000 TL ) × 35%
-16,000,000,000 TL	2,450,000,000 + ( Income exceeding 8,000,000,000 TL ) × 40%
16,000,000,000 TL-	5,650,000,000 + ( Income exceeding 16,000,000,000 TL ) × 45%

Source: Adana Tax Office

Due to the effects of inflation, tax rate is scheduled to lower. Lowest range is set to be below 2 billion with tax rate of 15% while highest range to be more than 50 billion with tax rate of 40%. The reason for lowering the tax rates is said to earn popularity in the next general election.

Income tax rate on income gained through commercial activities will increase to 30% in 1999 from 25% in 1998.

### **b.1.2 Taxes on Goods and Services**

Taxes on goods and services consist of domestic value added tax (VAT), petroleum consumption tax and others. Although the rate of VAT is 15% in general, according to the characteristics of goods, different rates are applied. For instance, 1% for agricultural products, 8% for groceries and 23% for luxuries.

### **b.1.3 Foreign Trade Tax**

Tax on foreign trade consists of custom duties and value added tax on imports. The ratio of these taxes are approximately 1:3.

## **b.2 Local Tax**

Local tax is classified into municipality tax, municipality duty and other fees.

### **b.2.1 Municipality tax**

Municipality tax includes environment and cleansing tax, property tax, electricity and gas consumption tax, advertisement tax and amusement tax. The revenues from cleansing tax and property tax account for approximately 70 to 80% of the municipality tax revenues.

### **b.2.2 Municipality Duty**

The municipality duty includes urban development duty and fees charged upon approval of the construction drawings.

### **b.2.3 Other Fees**

The other fees include the revenues and profits obtained from enterprises managed by municipalities and various fines such as arrears.

### b.3 Utilities Charging System

Public utilities are charged and billed in proportion to their consumption amount. The users pay these charges at the offices of utilities enterprise in cash or through money transfer from their bank accounts.

#### b.3.1 Water Supply

Since the water supply services are managed by the water supply enterprise of respective city, the charging system varies. The charges of waste water are jointly collected. The tariff for water of Adana water supply enterprise is shown in Table 2-11.

Table 2-11: Water Supply Tariff in Adana

Category		Water supply	Wastewater	VAT	Total
Household	0 - 15 m <sup>3</sup>	77,610	23,283	15,134	116,027
	15 m <sup>3</sup> -	135,531	40,659	26,429	202,619
Commercial		232,777	69,833	45,392	348,002

unit: TL/m<sup>3</sup>

Source: Adana Water supply enterprise

#### b.3.2 Electricity

Distribution of electricity is managed by a state controlled private enterprise. The tariff on electricity is shown in Table 2-12.

Table 2-12: Tariff on Electricity

Category	Total
Household	24,182 TL/kW
Commercial	29,700 TL/kW

Source: Turkish Electricity Distribution Corporation

### c. Financial Conditions

#### c.1 Overview of Local Finance

The source of revenues of municipality for current expenditure is a general budget allocated from national taxes depending on the size of the population. In greater municipalities, a certain proportion of national tax collected in that provincial center is additionally allocated. Moreover, property tax, which used to be one of national taxes, is now collected by municipalities in order to establish their financial base. As for capital budget, it is subsidised by the central government.

#### c.2 Seyhan District Municipality

##### c.2.1 Changes of Seyhan DM Budget

The actual figures of revenues and expenditures in Seyhan DM are not obtained except 1998. Equilibrium finance is aimed on budget basis, though the amount of budget went down in 1996 and 1997.



Table 2-13: Changes in the Seyhan DM Budget (1994 - 1998)

unit: million TL

	1994	1995	1996	1997	1998
Total Revenue	910,000	1,325,000	1,900,000	3,500,000	7,669,000
Total Expenditure	910,000	1,325,000	1,900,000	3,500,000	7,669,000
Exchange Rate (US\$ 1 to TL)	35,200	50,803	97,306	180,655	284,480
<b>Budget in US\$ (US\$1,000)</b>	<b>25,852</b>	<b>26,081</b>	<b>19,526</b>	<b>19,374</b>	<b>26,958</b>

Source: Adana GM Annual Budget Statement 1994,1995,1996,1997,1998

The actual revenue in 1998 was about 7.8 trillion TL, and was approximately same as those of the 1998 budget. The actual expenditure was 9.0 trillion TL, and was 1.2 times of the budget. As a result, the balance was red by 1.2 trillion TL in 1998 as shown in the following table.

The total amount of 1999 budget is 3.8 times of that of 1998. The aids and fund is expected to increase by 40 times of 1998 budget.

The breakdown of the revenues is shown in the following table.

The general budget allocated from national taxes stayed at 60% of total revenues, though the budget expected to be more than 70%. The municipality tax revenues increased to be around 20% of total municipality revenues, but it is not expected to get more share in the 1999 budget. The property tax was 916,518 million TL, which is about 60% of the municipality tax revenues, in 1998.

Table 2-14: Revenues of Seyhan DM

unit: %

		1998		1999
		Budget	Actual	Budget
Tax Revenue	General Budget from National Taxes	70.4	61.0	61.6
	Municipality Taxes	16.6	19.5	8.4
	Municipality Duties	2.4	1.3	2.3
Non-tax Revenue		9.8	14.7	19.1
Aids & Fund		0.8	3.5	8.6
Total		100.0	100.0	100.0

Source: Financial Department of Seyhan DM  
Adana GM Annual Budget Statement 1998, 1999

### c.3 Yuregir District Municipality

The changes of actual revenues and actual expenditures of Yuregir DM are shown in Table 2-8. The expenditures exceeded the revenues every year.

Table 2-15: Changes in the Balance of Yuregir DM (1994 - 1998)

unit: million TL

	1994	1995	1996	1997	1998
Budget*	400,000	750,000	850,000	1,350,000	4,950,000
Total Revenue (A)	208,423	452,571	747,311	1,567,610	4,530,010
Total Expenditure (B)	236,363	478,457	845,601	1,769,873	4,853,287
Balance (A-B)	-27,940	-25886	-98,290	-202,263	-323,367
Exchange Rate (US\$ 1 to TL)	35,200	50,803	97,306	180,655	284,480
Balance (A-B) in US\$ (US\$ 1,000)	-793	-510	-1,010	-1,120	-1,137

Source: Financial Department of Yuregir DM  
\* Adana GM Annual Budget Statement 1994, 1995, 1996, 1997

The actual revenue in 1998 was about 4.5 trillion TL, and was about 92% of that of 1998 budget. The actual expenditure was 4.9 trillion TL, and was also 98% of that of 1998 budget. As a result, the balance was red by 323 billion TL in 1998 as shown in the following table.

The total amount of 1999 budget is 1.6 times of that of 1998. The revenue of aids and fund is expected to increase by 2.9 times of 1998 budget.

Considering the fall of the value of Turkish Lira to US\$, the value of the municipality budget in 1999 will be shrunk from that of 1998.

The breakdown of the revenues is shown in the following table.

The general budget allocated from national taxes went up to more than 60% of total revenues, though the budget expected to be about 56%. The municipality tax revenues increased to be around 12% of total municipality revenues, and it is expected to get more share in the 1999 budget.

As for the breakdown of revenue in 1999, the general budget from national taxes stays as major revenue resource of municipality, though the shares of aids and fund is expected to increase.

Table 2-16: Revenues of Yuregir DM

unit: %

		1998		1999
		Budget	Actual	Budget
Tax Revenue	General Budget from National Taxes	56.1	64.1	45.0
	Municipality Taxes	10.3	11.9	12.6
	Municipality Duties	1.7	1.0	1.7
Non-tax Revenue		19.7	17.5	19.1
Aids & Fund		12.2	5.5	21.6
Total		100.0	100.0	100.0

Source: Financial Department of Yuregir DM

#### c.4 Adana Greater Municipality

The changes of actual revenues and actual expenditure of Adana GM is shown in Table 2-10. The expenditures have been exceeding the revenues, though balance ended in surplus due to the rapid increase of non-tax revenues in 1997.

Table 2-17: Changes in the Balance of Adana GM

unit: million TL

	1993	1994	1995	1996	1997	1998
Budget*	845,000	1,350,000	1,750,000	4,100,000	24,112,003	42,700,000
Total Revenue (A)	600,607	785,361	1,641,939	3,781,086	17,591,719	17,099,539
Total Expenditure (B)	741,281	827,799	1,701,154	4,071,871	9,818,079	21,117,566
Balance (A-B)	- 140,674	- 42,438	- 59,215	- 290,785	7,773,640	-4,018,027
Exchange Rate (US\$ 1 to TL)	12,967	35,200	50,803	97,306	180,655	284,480
Balance (A-B) in US\$ (US\$ 1,000)	- 57,167	- 23,517	- 33,485	- 41,846	54,347	-14,124

Sources: Financial Department of Adana GM  
\* Adana GM Annual Budget Statement 1994,1995,1996,1997,1998

The actual revenue in 1998 was about 17.1 trillion TL, and was less than that of 1997, which was 17.6 trillion TL. The actual expenditure was 21.1 trillion TL, and was 2.2 times of that of 1997, which was 9.8 trillion TL. As a result, the balance was red by 4.0 trillion TL in 1998 as shown in the following table.

The total amount of 1999 budget is 1.9 times of that of 1998. The revenue of municipality duties is predicted to decrease to 70% of 1998 budget.

The breakdown of the revenues is shown in the following table.

The general budget allocated from national taxes was about 55% of total revenues, though the budget expected to be only 30%. The municipality tax revenues increased to be around 6% of total municipality revenues, but it is not expected to get more share in the 1999 budget. The property tax was 9,911 million TL, which is only 1% of the municipality tax revenues, in 1998.

As for the breakdown of revenue in 1999, the non-tax revenue is expected to be a major revenue resource of municipality, though that of actual revenue in 1998 was less than general budget allocated from national taxes.

Table 2-18: Revenue of Adana GM

unit: %

		1998		1999
		Budget	Actual	Budget
Tax Revenue	General Budget from National Taxes	29.7	55.4	31.0
	Municipality Taxes	3.5	6.1	3.1
	Municipality Duties	0.2	0.2	0.1
Non-tax Revenue		66.6	38.3	65.6
Aids & Fund		0	0	0.2
Total		100.0	100.0	100.0

Source: Financial Department of Adana GM