



TRB1 REGIONAL PLAN 2010 - 2013 (Abridged Version)

FOREWORD

Changes that have occurred on national and international levels brought new development perspectives to the agenda. Diminishing natural resources has made the sustainability of development a priority, and country experiences have shown that a more efficient planning approach is necessary to reach development goals.

It has become a must for development to think globally and act locally in the rapid globalization process. Turkish development agencies were established in order to reduce intra and interregional development gaps and to increase regions' competitiveness on national and international scale. Development gaps among regions are a problem that Turkey must overcome. Its negative effects are seen not only in economics but also in other areas. A country which has a strong determination towards full EU membership should tackle these obstacles swiftly and development agencies assume a great role in this process.

Firat Development Agency, aiming to build efficient communication and cooperation between private and public sectors, has prepared TRB1 2010-2013 regional plan in a participatory manner. To reach the desired goals and objectives, the regional plan is going to increase stakeholders' ability to see the future, to take long lasting steps and it is going to build a base for solving the regions' problems.

We hereby thank everyone who spent effort in the process and wish that this document will help reaching the defined goals.

Mustafa TAŞKESEN Firat Development Agency Board of Directors Governor of Tunceli

INTRODUCTION

Today, the concept of sustainability which takes social and environmental factors into account is regarded as a fundamental of regional development. In order to direct sustainable development efforts efficiently, local participation has gained great importance over central planning in recent years. The need for development agencies emerged in this context. Development agencies were first established in 1930s and their structure and functions have continued to evolve since then. In Turkey, the first two development agencies were founded in 2006. Firat Development Agency, whose scope is the TRB1 region consisting of Bingol, Elazig, Malatya, Tunceli provinces was founded in 2009 by a decree of the Council of Ministers.

TRB1 regional plan, which is one of the most important steps taken by the agency was prepared through intensive working. The vision of the plan is: "Becoming a region that uses its resources efficiently in an environmentally conscious way, that improves its employment opportunities, that is preferred for education, tourism, agriculture and living". It was prepared to know and promote the region better and to diagnose the problems and priorities of the region. Current situation of the region is explained clearly in the plan and goals, objectives and strategies are defined in a way that takes national and global factors into account. Upper scale plans and other documents about the region was examined carefully for obtaining a large perspective. Stakeholders were included in the planning process by focus group meetings and workshops. This plan will also constitute a base for the technical and financial support programs of the agency.

I hereby thank the board of directors, development board members, representatives of public and private sectors, State Planning Organization staff and the agency's staff. I wish this plan to provide important contributions to our region's and our country's development.

Fethi ALTUNYUVA Secretary General

EXECUTIVE SUMMARY

TRB1 2010-2013 Regional Plan has been prepared in order to determine how to act to ensure regional development with common development awareness and assigning these resources to the areas that trigger development. With the regional plan, it was aimed to indicate the current situation, determine the strengths and weaknesses and form strategies for the region in this direction. The determined goals, objectives and strategies will form a base for the technical and financial supports that Firat Development Agency is planning to provide for rapid development of the region and at the same time they will be guiding the plans of other agency and institutions.

In the content of Statistical Regional Unit Classification TRB1 region has been determined as one of the 26 level 2 regions, consisting of Bingol, Elazig, Malatya, and Tunceli provinces. TRB1 region occupies 4.7 % of the surface area of Turkey and according to the Address Based Population Registration System; it has 2.3 % of the Turkish population in 2009 and an annual population growth of 0.15%. It is in the 24th place among 26 level 2 regions. In terms of socio-economic development, among the 81 provinces, Elazig ranks 36th, Malatya ranks 41st, Tunceli ranks 52nd and Bingol ranks 76th . The most important economic activity in the region is agriculture. Orcharding and animal breeding are dominant areas in agricultural activity. Industries like textile, mining and quarrying have an important place in the economy of the region. The region has the 5th highest unemployment rate with 16.8 % and the Gross Added Value (GAV) per capita of the region is 60 % of the country average.

In the SWOT analysis performed as a part of TRB1 2010-2013 Regional Plan, the presence of deep rooted and developed universities in the region, the important potential of the region for orcharding, animal breeding and aquaculture, presence of many mine reserves with commercial value like marble, and presence of international airports are among the main strengths. On the other hand, high rate of unemployment, insufficient cooperation between the public, private and nongovernmental organizations, marketing problems of the regional products, insufficient utilization use of natural resources in areas like aquaculture production, tourism, energy and long distance to ports are the weaknesses. Presence of Elazig and Malatya provinces in the region, which are the ones attracting most attention in

the Eastern Anatolian Region, relative closeness of the region to the Middle East and Turkic Republics and inclusion of the region in DAP (Eastern Anatolian Project) are evaluated as opportunities while the image problem, migration problem, agricultural production's dependence on natural conditions and earthquakes are appearing as threats.

The vision of the region has been determined in the direction of stakeholder views and stated as "Being a region using its resources in an effective and environmental friendly way, improving its employment opportunities, being preferred in such sectors as education, tourism, agriculture and social recreation areas". In order to achieve this, 6 goals have been determined in the content of TRB1 2010 – 2013 Regional Plan as social development, agriculture and food, industry and service, technical infrastructure, rural development and environment. The strategic aims and main objectives are summarized below:

GOAL 1: STRENGTHENING SOCIAL STRUCTURE AND HUMAN CAPITAL

OBJECTIVE 1.1. Increasing employment OBJECTIVE 1.2. Improving the quality of life for disadvantaged groups

OBJECTIVE 1.3. Improving social solidarity and cooperation

OBJECTIVE 1.4. Increasing the level of education

GOAL 2: IMPROVING AGRICULTURE AND FOOD SECTORS

OBJECTIVE 2.1. Increasing productivity OBJECTIVE 2.2. Increasing economic value of products

OBJECTIVE 2.3. Increasing cooperation

GOAL 3: IMPROVING INDUSTRY AND SERVICE SECTORS

OBJECTIVE 3.1. Increasing marketing and sales capabilities of enterprises OBJECTIVE 3.2. Improvement of infrastructure in industrial zones OBJECTIVE 3.3. Increasing productivity and value added OBJECTIVE 3.4. Improvement of tourism

GOAL 4: IMPROVING TECHNICAL INFRASTRUCTURE

OBJECTIVE 4.1. Improving transport infrastructure OBJECTIVE 4.2. Improvement of natural gas and waste water treatment infrastructure

GOAL 5: ENHANCING QUALITY OF LIFE IN RURAL AREAS

OBJECTIVE 5.1. Ensuring economic development in rural areas OBJECTIVE 5.2. Improvement of technical infrastructure in rural areas OBJECTIVE 5.3. Improvement of basic amenities

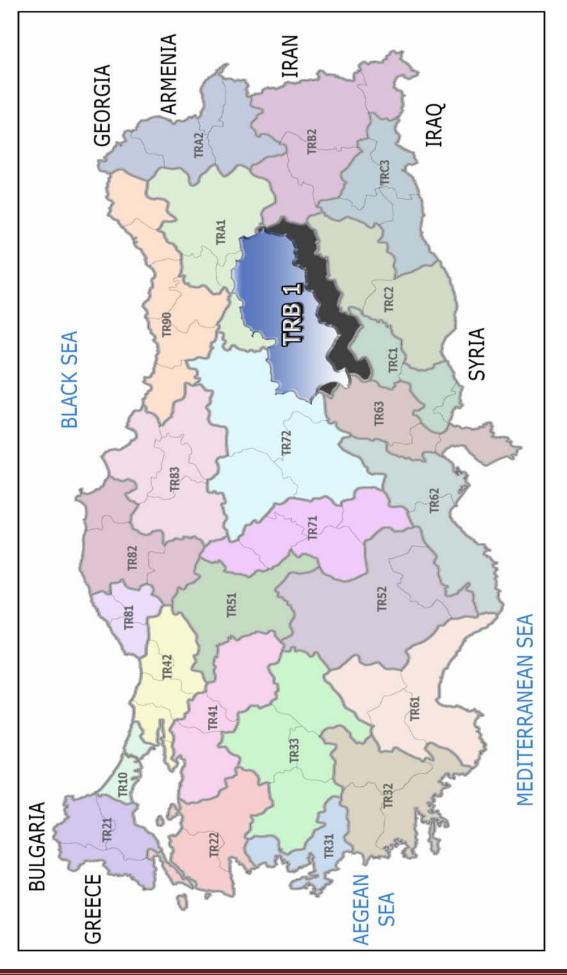
GOAL 6: ENSURING ENVIRONMENTAL SUSTAINABILITY

OBJECTIVE 6.1. Protecting the environment OBJECTIVE 6.2. Efficient use of natural resources OBJECTIVE 6.3. Diversifying sources for energy production OBJECTIVE 6.4. Strengthening disaster management

Regional Plan will serve as a reference for all programs and projects that will be applied in TRB1 Region between 2010-2013 including the supports that will be provided by Firat Development Agency. In order to reach the goals in the plan, cooperation and coordination of stakeholders has critical importance. The organization responsible for the implementation of the regional plan is Firat Development Agency. In this context, the Firat Development Agency will serve as a bridge between different stakeholders which will contribute to the implementation of the regional plan.

Regional plan consists of 6 main parts and appendices. In part 1, the concept of regional plan is defined and the preparation phase of the plan is explained. In part 2, the current situation analysis takes place under the headlines of "Social Structure", "Economic Structure", "Technical Infrastructure" and "Environment". Part 3 states the results of SWOT analysis of the region. In part 4, different strategic priorities in different higher level plans are examined in order to ensure compliance of the regional plan with them. In part 5, goals, objectives and strategies are defined. Part 6 includes the performance indicators that will enable the evaluation of the plan in the future and how these indicators will be monitored.

Feedbacks from monitoring and evaluation processes will be used to update the plan. In this way, the regional plan will be a guide to achieve the vision of "Being a region using its resources in an effective and environmental friendly way, improving its employment opportunities, being preferred for education, tourism, agriculture and living".



INDEX

FOREW	ORD	i
INTROD	UCTION	ii
TABLE I	LIST	ix
FIGURE	LIST	x
MAP LIS	ST	xi
1. THE	E CURRENT SITUATION	1
1.1.	Demographic Indicators	1
1.2.	Education	2
1.3.	Health	4
1.4.	Civil Society	5
1.5.	Employment and Unemployment	6
1.6.	Economic Activity	8
1.7.	Industrial Zones	11
1.8.	R&D and Innovation	13
1.9.	Agriculture	13
1.10.	Foreign Trade	16
1.11.	Transportation	17
1.12.	Finance	19
1.13.	Tourism	20
2. ANA	ALYSIS OF THE CURRENT SITUATION	22
2.1.	Analysis of Social Structure	22
2.2.	Analysis of Economic Structure	24
2.3.	Analysis of Technical Structure	27
2.4.	Analysis of Environmental Structure	30
2.5.	SWOT Analysis	32
3. GO	ALS, OBJECTIVES AND STRATEGIES	39

TABLE LIST

Table 1: Population of TRB1 Provinces 1
Table 2: Demographic Indicators of TRB1 Region, 2009
Table 3: Education Indicators,2009
Table 4: Number of Students and Teaching Staff in Region's Universities, 2008-2009 3
Table 5: Number of NGO members, June 2009
Table 6: Industrial Facilities in Bingol 9
Table 7: Industrial Facilities in Elazig
Table 8: Industrial Facilities in Malatya
Table 9: Industrial Facilities in Tunceli
Table 10: Weights of Sectors in OIZs 12
Table 11: General Data about OIZs
Table 12: Innovation Indicators, 2009
Table 13: Foreign trade figures, 2009 16
Table 14: Volume of Exports to Important Foreign Trade Partners (1000 USD), 2009 17
Table 15: Road length/Surface area, 2010
Table 16: Distribution of Bank Loans in the Region (1000TL), 2009
Table 17: Credit per capita in the region, 2009 19
Table 18: Number of tourists 20
Table 19: TRB1 Region's Bed Capacity 20
Table 20: Main obstacles to export in Malatya and Elazig 27

FIGURE LIST

Figure 1: Distribution Of Population According to Earned Degrees, 2009
Figure 2: Bed per 100000 capita, 2007
Figure 3: Number of Regional NGOs in Selected Fields, Dec 20095
Figure 4: Unemployment Rates in TRB1 and Turkey, 2004-20096
Figure 5: Unemployment Rates in TRB1 Region, 20096
Figure 6: Non-Agricultural Unemployment Rates, 2008-20097
Figure 7: Sectoral Distribution of Employment in TRB1 Region7
Figure 8: Gross Added Value Per Capita for TRB1 and Turkey (1000 USD)
Figure 9: Sectors' Contribution to Gross Added Value in TRB1 and Turkey
Figure 10: TRB1 Region's Shares of Agricultural Production in Turkey13
Figure 11: Land Usage in Turkey and TRB1 (%), 200514
Figure 12: Land Usage in TRB1 Provinces (%), 200515
Figure 13: Irrigation in TRB1 Provinces (%)15
Figure 14: Export Volumes of Main Sectors (Million USD), 2009

MAP LIST

Map 1:TRB1 Highway Network	. 18
Map 2: Tourism Development Areas of TRB1 Region	. 21

1. THE CURRENT SITUATION

1.1. Demographic Indicators

TRB1 Region is located in the Middle Eastern Anatolia and takes up 4.7% of the country's surface area. According to 2009 data, the region has a population of 1,626,357 which %2.3 of Turkey's population. Malatya has the highest population with 736,884 inhabitants and Tunceli has the lowest population with 83,061 inhabitants.

Year	Bingol	Elazig	Malatya	Tunceli	TRB1	Turkey	TRB1 Population Growth	TR Population Growth
1970	177,951	376,915	510,979	157,293	1,223,138	35,605,176	13%	13%
1975	210,804	417,924	574,558	164,591	1,367,877	40,347,719	12%	13%
1980	228,702	440,808	606,996	157,974	1,434,480	44,736,957	5%	11%
1985	241,548	483,715	665,809	151,906	1,542,978	50,664,458	8%	13%
1990	250,966	498,225	702,055	133,143	1,584,419	56,473,035	3%	11%
2000	253,739	569,616	853,658	93,584	1,770,597	67,803,927	12%	20%
2007	251,552	541,258	722,065	84,022	1,598,897	70,586,256	-10%	4%
2008	256,091	547,562	733,789	86,449	1,623,891	71,517,100	2%	1%
2009	255,745	550,667	736,884	83,061	1,626,357	72,561,312	0%	1%

Table 1: Population	of TRB1	Provinces
---------------------	---------	-----------

Source: TurkStat

Between 1970 and 2009, the population of Turkey doubled when TRB1 Region's population increased by 32 percent. The most dramatic population change has occurred in Tunceli among the four provinces. Tunceli's population decreased by nearly half from 157,293 in 1970 to 83,061 in 2009. Malatya, Bingol and Elazig experienced the similar population growth rates around 40 percent for the same period.

Table 2: Demographic Indicators	of TRB1 Region, 2009
---------------------------------	----------------------

	Bingol	Elazig	Malatya	Tunceli	TRB1	Turkey
Population density (people/km ²)	31	65	63	11	45	94
Rate of urban population(%)	54.2	71.3	63.6	64.7	64.8	75.5
Yearly population growth rate (‰)	-1.4	5.7	4.2	-40.0	1.5	14.5
Net migration rate (‰)	-14.5	-3.8	-3.3	-25.0	-6.3	
Young population rate(15-24) (%)	21.9	18.7	18	23.5	19.1	17.3

Source: TurkStat Regional Indicators 2009

The region has a low population density of 45 per km² which is less than half of Turkey's. TRB1 is 22th among 26 regions in terms of population density. Tunceli is the least densely populated city of Turkey.

TRB1 region's population growth rate is about one tenth of Turkey's. The region is 24th in terms of population growth rate. Population is increasing in Malatya and Elazig at low rates whereas Bingol and Tunceli are losing population. Tunceli's population is decreasing at the fastest rate in Turkey. All of the region's provinces have negative net migration rates and the region takes the 5th place for outward migration flows. Considering that the provinces with highest young population rates also have the biggest population outflows, it makes sense to claim that outward migration and insufficient employment opportunities are connected.

1.2. Education

Global economy is increasingly becoming dependent on information and countries' need for people who can create and use information increases accordingly. Education is the fundamental for training qualified workforce and TRB1 region has problems in this issue.

	Bingol	Elazig	Malatya	Tunceli	TRB1	Turkey
Literacy rate (%)	78.3	82.4	84.1	80.8	82.5	87.3
Female literacy rate(%	75.3	81	84.7	80	81.7	86.9
Early childhood education enrollment rate (%)	36.7	48.3	41.9	59.3	46.5	38.5

Table 3: Education Indicators, 2009

Source: TurkStat Regional Indicators, Ministry of Education

According to TUIK data, Bingol has the lowest literacy rate in the region with 78.3% and Malatya has the highest rate with 84.1%. Both ratios are below the country average, 87.3%. The region has a higher rate of enrollment for early childhood education than Turkey. Tunceli has the highest rate in the region with 59.3%.

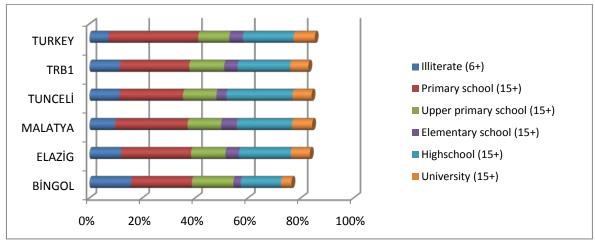


Figure 1: Distribution Of Population According to Earned Degrees, 2009

Source: TurkStat Regional Indicators, 2010

The graph above shows the distribution of the region's population according to earned degrees. The region's high illiteracy rate compared to Turkey and Bingol's low rate of university graduates compared to the region and Turkey are the points that catch the eye at first sight.

	Bingol	Elazig	Malatya	Tunceli	TRB1	Turkey
Teaching staff	50	1,452	1,049	10	2,561	100,504
Graduate	253	4,027	3,800	118	8,198	409,023
Undergraduate	830	18,826	16,494	494	36,644	2,757,828

Table 4: Number of Students and Teaching Staff in TRB1 Universities, 2008-2009

Source: TurkStat Regional Indicators, 2010

Firat University in Elazig and Inonu University in Malatya, which were both founded in 1975, enroll more teaching staff and students than the newly established Bingol and Tunceli Universities. With new faculties and departments being added to the region's universities, both teaching staff and student numbers are likely to increase in the near future.

1.3. Health

TRB1 region has reached health standards above the country average thanks to the developments in recent years. The region ranks 15th in terms of health sector development level according to a research conducted in 2003. Public hospitals are in a good position especially in terms of number of beds per capita. The region has 42 hospitals in total at the moment 12 of these are private hospitals; 8 in Malatya, 3 in Elazig and 1 in Bingol.

Inonu and Firat University hospitals are the most important health facilities of the region which serve regional and national needs. Turgut Ozal Medical Center of Inonu University was founded in 1996 and has 880 beds today. There are 120 intensive care units and 26 fully equipped surgery rooms in the center. The center has the capacity to perform bone marrow and cornea transplantation operations. It is ranked among the top in Turkey and the world in terms of liver transplantations performed. By adding kidney and heart transplants to its service portfolio, the hospital aims to become an organ transplantation center. With its burn unit and cancer treatment unit which began to function in 2010, the medical center meets all of the important health needs of the region. The medical center will be an important component of health tourism in the region that will increase income.

Firat University hospital aims to establish a transplantation center, radiation oncology unit and burn units in the near future beside basic health services.

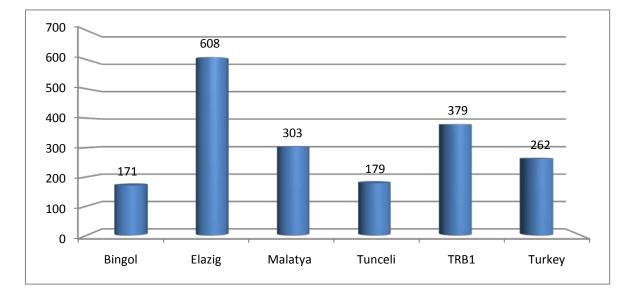


Figure 2: Bed per 100000 capita, 2007

Source: TurkStat Regional Indicators

According to data from Ministry of Health, 379 beds are available for every 100000 people in the region. The region ranks 1st in terms of bed per 100000 capita. Elazig has the highest number with 608 and Bingol has the lowest number with 171.

1.4. Civil Society

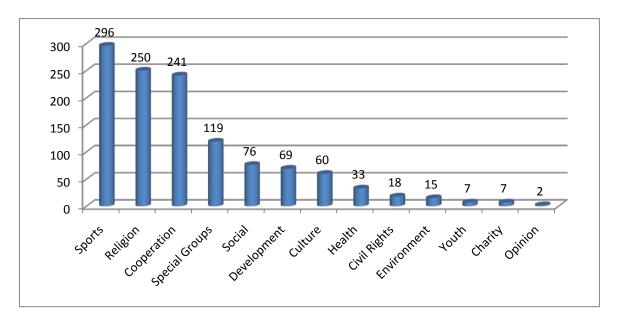
Data about association membership gives an opinion about the level of social organization.

	Bingol	Elazig	Malatya	Tunceli	TRB1	Turkey
Number of members	7,571	27,503	34,561	3,590	73,225	7,396,591
Members/population (%)	2.96	4.99	4.69	4.32	4.5	10.19

Table 5: Number of NGO members, June 2009

Source: Ministry of Internal Affairs

The region's members/population ratio of 4.5% indicates that social cooperation is weak in the region compared to Turkey. Association members' ratio in the population is very low especially in Bingol.



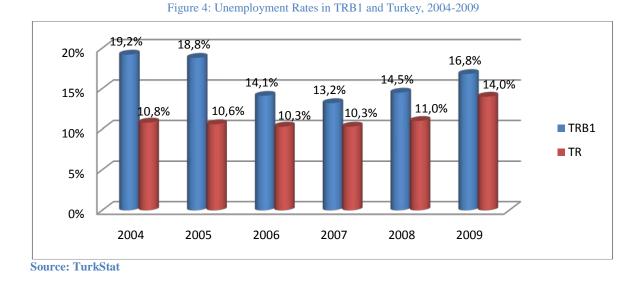


Source: Ministry of Internal Affairs

The first three areas that associations display activity are sports, religion and cooperation.

1.5. Employment and Unemployment

TRB1 Region has a high unemployment rate compared to Turkey between 2004 and 2009. The lowest unemployment rate was realized in 2007 with 13.2% and the highest rate was seen in 2004 with 19.2%.



The region ranks 5th in terms of high unemployment. Tunceli has the highest unemployment rate in the region with 18.6% and Malatya has the lowest rate with 14.6%.

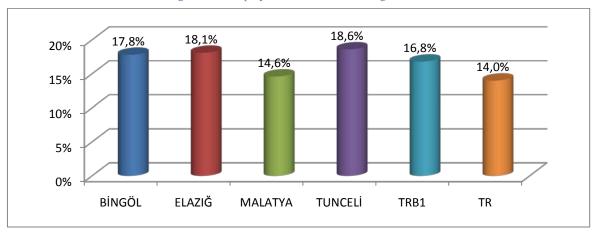
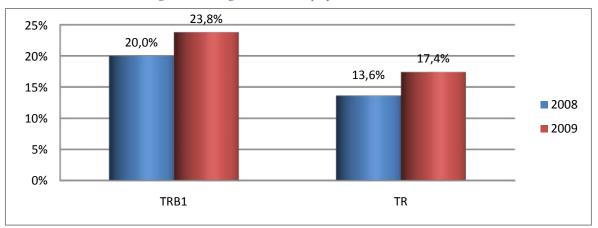


Figure 5: Unemployment Rates in TRB1 Region,2009

In developing countries like Turkey, examining unemployment figures outside the agriculture sector is very important because agriculture is a seasonal way of employment

Source: TurkStat Regional Indicators

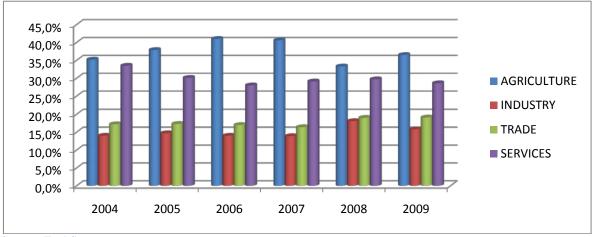
for a considerable amount of people. This causes real unemployment rates to be seen lower than they really are.

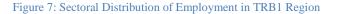




In both 2008 and 2009, unemployment outside agriculture sector is higher than overall unemployment. This proves the existence of secret unemployment in the region, which means unemployment is a bigger problem than it looks.

One of the characteristics of developing countries is the coexistence of modern and traditional structures. Therefore, the economic structures of these countries contain dualities as agricultural/traditional and industrial/modern. When the structure of employment is examined, TRB1 region is no exception to this observation.





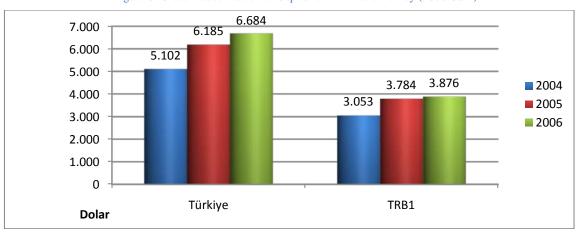
Source: TurkStat Regional Indicators

Source: TurkStat

When sectoral distribution of employment is examined, it is seen that agriculture is the main sector of the regional economy. Services, trade and industry sectors follow agriculture. While the weight of service sector in employment has increased in Turkey, agriculture has maintained its dominance in the region. The increasing share of trade and industry in employment is another point that should be emphasized.

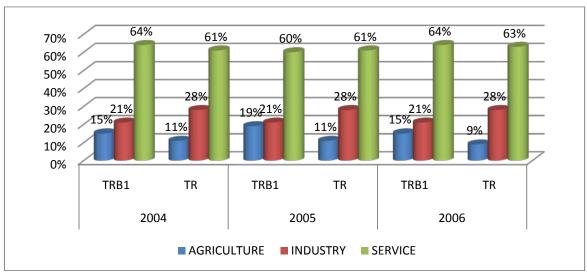
1.6. Economic Activity

In 2008, TurkStat started studies to determine gross added value of the 26 regions of Turkey for the period between 2004 and 2006. Below are the results of this study.





Source: TurkStat





Source: TurkStat

Gross added value per capita in the region is observed to be 40% less than Turkey average. Service sector is the biggest contributor to gross added value in both the region and Turkey.

Sector	Number of companies	Number of employees	Employment per company
Food	22	241	11
Textile	5	91	18
Construction materials	9	129	14
Mining	4	23	6
Animal products	4	94	24
Coal pressing	1	18	18
Furniture	3	38	13
PVC processing	5	37	7
Vehicle repairment	3	72	24
Health	3	149	50
TOTAL	53	892	17

Table 6: Industrial Facilities in Bingol

Source: Bingol Chamber of Commerce

Industrial facilities in the region are heavily concentrated in Malatya and Elazig. Among 53 companies in Bingol, most operate in the food industry and construction materials. 892 people are employed by these companies in total. Employment per company is higher in animal products and health sectors compared to other ones.

Table 7: Industrial Facilities in Elazig

Sector	Number of companies	Share in total number of companies
Food and beverage	205	33.01%
Nonmetal mineral products	73	11.76%
Furniture	66	10.63%
Textile	32	5.15%
Plastic and rubber products	31	4.99%
Metal products except machinery and equipment	28	4.51%
Unclassified machinery and equipment	20	3.22%
Chemicals	14	2.25%
Main metal industry	13	2.09%
Media	10	1.61%
Paper products	10	1.61%

Sector	Number of companies	Share in total number of companies
Unclassified electric powered machinery and equipment	9	1.45%
Motor vehicle and trailer production	7	1.13%
Forestry products	5	0.81%
Computer services	4	0.64%
Ready made garments	4	0.64%
Leather processing, accessory and shoe production	3	0.48%
Medical devices and watch production	3	0.48%
Recycling	2	0.32%
Coal production	2	0.32%
Production of Office equipment and computers	1	0.16%
Unknown	79	12.72%
TOTAL	621	100%

Source: Elazig Chamber of Commerce

Among 621 companies in Elazig that are in the commercial chamber's records, 33% operate in the food industry. The other important sectors are nonmetal mineral products and other unclassified production.

Sector	Number of companies	Number of employees	Employment per company
Leather products	7	50	7
Food	380	6,075	16
Construction	61	1,098	18
Chemicals	36	352	10
Mining	26	86	3
Machinery and equipment	58	960	17
Medical devices	5	64	13
Metal products	46	458	10
Forestry products	61	724	12
Plastic	47	527	11
Textile	129	12,333	96
TOTAL	856	22,727	27

Table 8: Industrial Facilities in Malatya

Source: Malatya Chamber of Commerce

Malatya is the most industrialized city of the region. In total, 22,727 people are employed in 856 companies. Food, textile and construction are dominant sectors in industry, leather products and medical devices have the lowest weight. Employment per company is high in textile, construction and machinery production, indicating that large scale facilities operate in these areas. Textile provides 54% and food sector provides 26% of industry employment.

Sector	Number of companies	Number of employees	Employment per company
Food	13	93	7
Construction materials	5	88	18
Animal products	4	12	3
PVC processing	1	10	10
Health	1	10	10
TOTAL	24	213	9

Table 9: Industrial Facilities in Tunceli

Source: Tunceli Chamber of Commerce

Tunceli is the least industrialized province of the region. 24 companies employ 213 people in total. Food and construction are important sectors in Tunceli and generally there are small scale firms. Capacity usage rate in the province is very low, facilities operate with at 35% of their capacity.

1.7. Industrial Zones

TRB1 region is ranked 20th among 26 regions in terms of industry's development level. Malatya has the most developed industry in the region while Tunceli has the least developed one. There are seven organized industrial zones in the region: one in Bingol, one in Tunceli, two in Elazig and three in Malatya. Infrastructure development process is still going on in Bingol, Tunceli and Darende (Malatya) organized industrial zones.

When weights of different sectors in Malatya and Elazig OIZs are observed, it is obvious that food and textile sectors constitute majority of the industrial activity.

Table	10:	Weights	of	Sectors	in	OIZs
-------	-----	---------	----	---------	----	------

Name of the OIZ	1st sector	2nd sector 3rd sector		4th sector	5th sector
Elazig	Marble	Furniture	Forestry products	Food	Metal products
Malatya 2	Food	Textile	Machinery	Other	
Malatya 1	Textile	Food	Agricultural equipment	Tile production	Plastic products

Source: Ministry of Industry and Trade

In all organized zones of the region, investors benefit from incentives like tax reductions and employment supports. 12950 workers are currently employed in the OIZs. OIZs of the region operate on 1131 ha surface with 481 parcels in total.

	Elazig	Elazig (Animal Products)	Malatya 2nd	Malatya 1st	TRB1 Region
Foundation year	1986	1997	1997	1997	-
Number of employees	13	-	15	28	56
Surface area (hectares)	312	19	500	300	1.131
Total number of parcels	149	8	160	164	481
Total number of assigned parcels	138	8	160	161	467
Number of parcels to be assigned	11	0	0	3	14
Number of active firms	103	2	75	133	313
Number of firms in construction	14	1	55	3	73
Number of closed firms	8	-	0	2	10
Number of employed people	1.578	72	3,200	8,100	12,950
Total industry area (m ²)	298,000	240,000	3,000,000	2,300,000	5,838,000
Assigned industry area (m ²)	203	120	3,000,000	2,250,000	5,250,323
Industry area to be assigned (m ²)	95,000	120,000	0	50,000	1,120,000

Table 11: General Data about OIZs

Source: Ministry of Industry and Trade

1.8. **R&D** and Innovation

	Bingol	Elazig	Malatya	Tunceli	TRB1	Turkey	TRB1 / Turkey
Patent applications	1	20	36	1	58	8,759	%0.66
Patent registrations	0	1	1	0	2	1,326	%0.15
Utility model applications	0	12	20	1	33	13,059	%0.25
Utility model registrations	0	9	10	0	19	8,752	%0.22
Industrial design applications	2	13	8	0	23	28,439	%0.08
Industrial design registrations	2	13	7	0	22	27,113	%0.08
Brand applications	73	808	1,250	30	2,161	282,660	%0.76
Brand registrations	42	453	643	19	1,157	179,104	%0.65

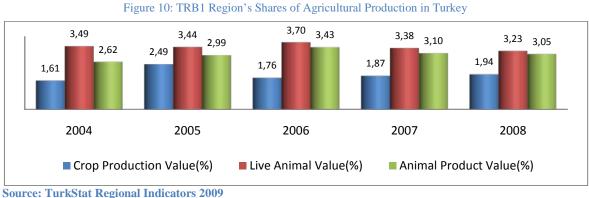
Table 12: Innovation Indicators, 2009

Source: Turkish Patent Institute

The region has shown a poor performance in innovation according to the table above. Only 0.15% of patent registrations, 0.22% of utility model registrations, 0.08% percent of industrial design registrations and 0.65% of brand registrations in Turkey was originated from TRB1 region. Innovation activities must be given greater importance to increase the region's competitiveness.

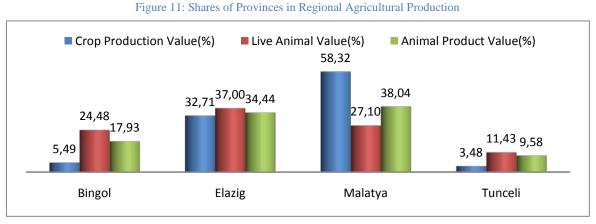
1.9. Agriculture

35,2% of people live in rural areas and 37% of employment is met by agriculture in TRB1 region. According to 2008 data, the region provides 1.94% of crop production value, 3.23% of live animal value, 3.05% of animal products value and 2.5% of total agricultural production value of Turkey.





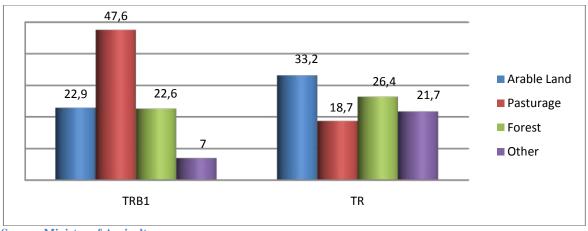
Malatya provided 58.32% of the region's crop production value between 2001 and 2008. 57% of the city's crop production value consists of apricots. Bingol and Tunceli's contribution in the crop production value is very low. Bingol is better in livestock products than it is in crop production but generally has the lowest agricultural production value along with Tunceli.





Land asset is an important factor that affects agricultural production volume and quality. TRB1 Region has 3.3% of arable land in Turkey, 12.3% of the pasturage area and 4.1% of forest areas.





Source: Ministry of Agriculture

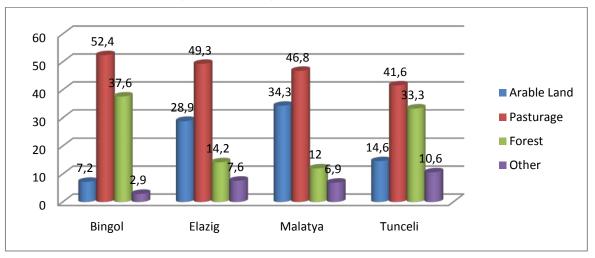
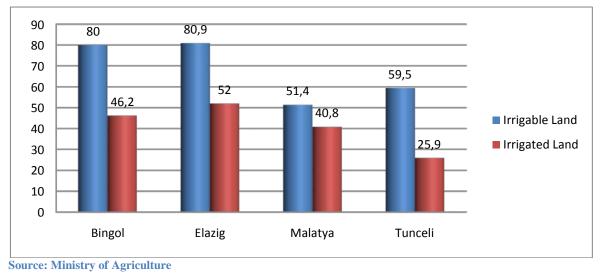


Figure 13: Land Usage in TRB1 Provinces (%), 2005

The region is not as rich as the country in terms of arable land but the rate its pasturage areas is well above Turkey average. Pasturage areas make up 47.6% of the region's land asset and are very important for improving stockbreeding. In terms of forests, the region is close to the country average.





TRB1 region is better than the country average in irrigation. Bingol and Elazig stand out in terms of irrigable and irrigated land.

Source: Ministry of Agriculture

1.10. Foreign Trade

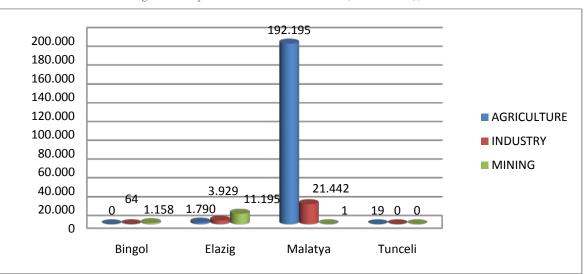
TRB1 region has a low trade volume when compared to other regions of Turkey. The region is ranked 23th in exports. There is huge difference between Malatya and the other provinces in terms of export volumes.

	Bingol	Elazig	Malatya	Tunceli	TRB1
Export ranking among 81 provinces	77	64	28	81	23
Share in Turkey's exports (%)	0.001	0.017	0.220	0	0.239
Export per capita (USD)	3	83	348	1	186
Import per capita (USD)	1	55	76	0	53

Table 13: Foreign trade figures, 2009

Source: Assembly of Turkish Exporters, TurkStat

Most important portion of the region's trade consists of agriculture, agro-based industries, food and textile industries. Apricots of Malatya have the highest export value among all products of the region. Export of dried fruits including apricots composes 93% of agricultural exports and 76% of total exports.





The highest volume of exports from the region goes to Russia. USA, EU, China and neighboring countries are other important trade partners.

Source: Assembly of Turkish Exporters

Bingol		Elazig		Malat	ya	Tunceli	
S.ARABIA	1,157.8	IRAQ	3,963.9	RUSSIA	34,685	GERMANY	19.4
IRAQ	64.1	CHINA	2,143.1	USA	26,896	-	-
-	-	USA	2,086.6	GERMANY	22,489	-	-
-	-	TURKMENISTAN	1,383	FRANCE	13,420	-	-
-	-	SAUDI ARABIA	907.2	UK	9,140	-	-

Table 14: Volume of Exports to Important Foreign Trade Partners (1000 USD), 2009

Source: Assembly of Turkish Exporters

Malatya is the city with the highest export volume in the region. 69.8% of the export income is generated by dried apricot trade. Figs, cement, grapes, marble are other goods contributing to the exports.

1.11. Transportation

TRB1 Region is located at a point that connects Eastern Anatolia to the west of the country.

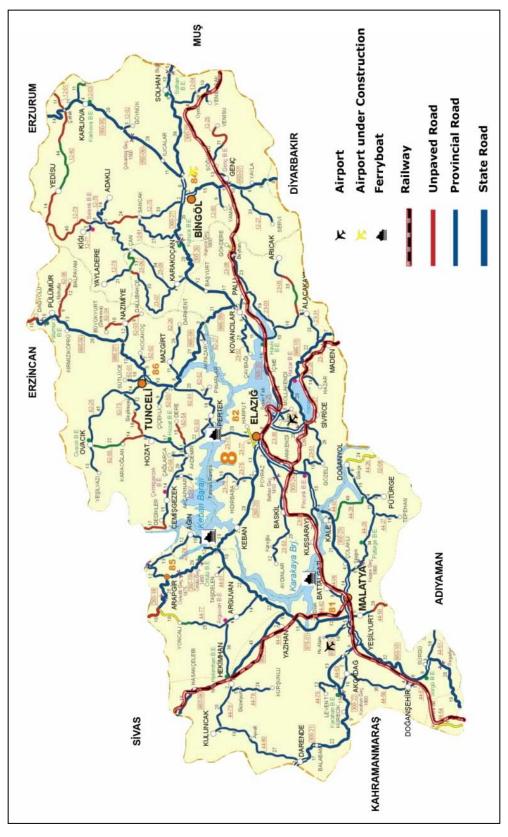
	Total road length (km)	Surface area (km²)	Road length/Surface area
Bingol	542	8,402	0.065
Elazig	809	9,181	0.088
Malatya	1,066	12,235	0.087
Tunceli	622	7,406	0.084
TRB1	3,014	37,224	0.081
Turkey	62,023	780,917	0.079

Table 15: Road length/Surface area, 2010

Source: Highway Directorate of Turkey

In terms of kilometers of highways per square kilometers, the region's provinces except Bingol are above Turkey average.

The region has 2 airports in Elazig and Malatya. Construction of a new airport is going on in Bingol. Direct flights are available to European cities like Frankfurt are available from Malatya and Elazig airports. Also the airports are providing the region advantages in terms of logistics.



Source: Highway Directorate of Turkey

1.12. Finance

Bank loans are the main financial instrument in the region. Branches of 39 national banks out of 45 are located in the region. In total, 101 bank branches operate in the region according to 2009 figures. 46.45% of the deposit is in Malatya, 36.04% in Elazig, 10.75% in Tunceli and 6.76% in Bingol. Total deposit of the region makes up 0.7% of total deposits in Turkey and the share of the credit volume of the region in Turkey is 0.75%. 0.62% of the total loans in Turkey were borrowed in the region in 2008. 49% of the regional loans were borrowed in Malatya. Because the region's economy depends on agriculture, volume of specialized credits in agriculture exceeded other areas.

		Spe	General	Total			
	Agriculture	Real estate	Vocational	Tourism	Other	loans	TOTAL
Bingol	8,441	0	10,215	0	435	212,113	231,204
Elazig	47,143	0	45,116	0	5,984	744,964	843,207
Malatya	119,259	0	32,487	0	15,859	992,818	1,160,423
Tunceli	8,828	0	9,533	0	1,878	105,910	126,149
TRB1	183,671	0	97,351	0	24,156	2,055,805	2,360,983
Turkey	11,490,009	0	4,476,772	232.851	9,779,776	353,419,248	379,404,761
TRB1 / Turkey	%1.60	-	%2.17	0	0.25%	%0.58	%0.62

Table 16: Distribution of Bank Loans in the Region (1000TL), 2009

Source: Union of Turkish Banks

Bank loan per capita in the region was only 33.5% of Turkey in 2009. There is not much difference between the provinces except Bingol.

Table 17: Credit per capita in the region, 2009

Rank (among 81 provinces)	Province	Bank credit per capita (TL)		
71	Bingol	904		
58	Elazig	1,531.2		
55	Malatya	1,574.8		
59	Tunceli	1,518.8		
	TRB1	1,451.6		
	Turkey	4,336		

Source: Union of Turkish Banks

1.13. Tourism

TRB1 region is rich in terms of natural and historical attractions. With rivers, canyons, mountains, valleys and thermal water, the region has high potential especially in nature tourism, health tourism, cultural tourism and belief tourism. But the region can attract only a small portion of visitors in Turkey. Malatya has the highest number of tourists and is followed by Elazig, Tunceli and Bingol. Number of visitors increased in 2007 and decreased in 2008 in all provinces.

Table 18: Number of tourists										
Year		Bingol		Elazig		Malatya		Tunceli		Turkey
	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	Total	Total
200	47	31,777	668	50,736	1,899	114,479	184	41,184	240,974	33,756,204
200	63	32,577	707	106,400	3,210	137,842	38	38,057	318,894	43,775,362
200	91	24,882	1,210	104,008	2,964	115,210	51	20,214	268,630	40,518,018

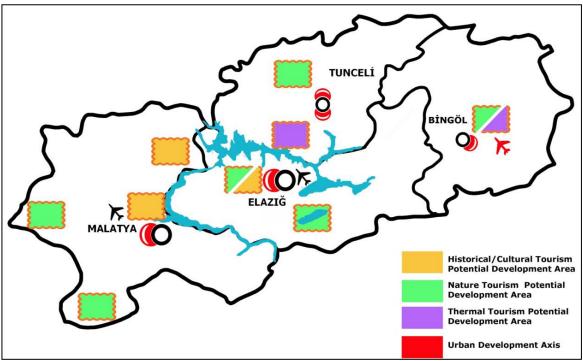
Source: Ministry of Culture and Tourism

The region has a bed capacity of 2748 and 34.8% of this capacity is currently in use. Also there are new tourism facilities that are currently under construction.

	Year	Bingol	Elazig	Malatya	Tunceli	TRB1
Facilities registered to municipality	2006	3	16	16	10	45
Facilities registered to the ministry	2008	1	5	9	4	19
Beds registered to municipality	2006	163	913	590	376	2042
Beds registered to the ministry	2008	56	877	1236	579	2748
Vacancy rate (%)	2008	42.5	34.9	31.7	29.9	34.8

Table 19: TRB1 Region's Bed Capacity

Source: Ministry of Culture and Tourism



Map 2: Tourism Development Areas of TRB1 Region

Bingol has a potential especially in thermal and nature tourism. With 10 summer resorts, Bingol is a suitable place for camping. Floating islands of Bingol are one of the biggest attractions.

Elazig is one of the region's important historical sites with especially the Harput Castle dating back to 900 B.C. Besides historical places, Sivrice Lake is a popular local spot for water sports.

Aslantepe tumulus in Malatya, dating back to 5000 B.C. and Mount Nemrut, on the World Heritage list are two of the most important historical assets in the region. The caravansarai in Battalgazi town and Somuncubaba Mosque in Darende are other important attractions.

Tunceli has an untouched nature and is a good spot for nature and sports tourism. But because of security problems, lack of touristic facilities and long distance to highly populated centers; it can't host as many tourists as it could do. The endemic species of Munzur National Park, water sports opportunities and the chance to enjoy nature are Tunceli's main attractions.

Source: Ministry of Culture and Tourism

2. ANALYSIS OF THE CURRENT SITUATION

2.1. Analysis of Social Structure

Two of the basic features of TRB1 region's social structure are slow-growing population and migration out of the region. The region's population density of 45 people/km2 is way below than the country average of 94 people/km2 and outward migration still continues. As a result, the region was ranked 24th in terms of population growth in 2009. TRB1 Region's population growth rate is about one tenth of Turkey's, and insufficient employment opportunities have a very important role in this. For solving this problem, new employment opportunities should be created and the quality of human capital should be aligned with these opportunities. For this reason, attracting new investments and education of the unskilled labor are among the priorities of the region. Entrepreneurship is also a good source of employment and should be improved in the region. 35.2% percent of the region's population lives in rural areas, with Bingol having the highest rate of 45.8%. Social and economic activities that will improve life conditions in rural areas and infrastructure must be given big importance in the region.

Education related figures are good indicators of social development level of a region. The region is below Turkey average in literacy rates which is one of the basic education level indicators. It is a priority to increase the education level of the region with the support of national level education policies. Increasing the physical and technical capacity of education.

Education and employment of disadvantaged groups is another subject that should be focused on in the region. Insufficient number of private educational institutions for the disabled and inadequate arrangement of living areas according to their needs is among the factors which obstruct disabled people's integration with the rest of the society. Women's literacy and employment rates are very low in the region when compared to men's. Women's participation in social and economic life is necessary to utilize an unused potential. Therefore, institutional structures should be built for supporting affirmative actions that will increase the disadvantaged groups' participation in social and economic life.

In terms of cultural and sportive activities, inadequacy of Bingol and Tunceli stands out. There are no theaters or museums in Bingol and there are no theaters, museums and cinemas in Tunceli. The region has good spots especially for water and nature sports but it has only 3.6% of sport clubs in Turkey. Therefore, encouraging sports activities by increasing the number of sports fields and sports organizations should be placed importance.

TRB1 Region is ranked 11th in terms of health sector development among the 26 regions in Turkey but there are development gaps between the region's provinces in health sector. Elazig is in the 12th place while Bingol is 72th in the health sector ranking. Therefore, new investments should be made to Bingol and Tunceli in health sector for decreasing disparities within the region. The university hospitals in Malatya and Elazig are the most important institutions that meet the need of patients from neighboring provinces. Especially Turgut Ozal Medical Center in Malatya has an important place in bone marrow, eye cornea, liver, kidney, and heart transplantation. However, the lack of publicity and accommodation facilities in these hospitals limits the benefits that can be reaped of these institutions.

It is observed that cooperation culture among public, private and nongovernmental organizations is insufficient in the region. Civil society, whose development level is an indicator of modernization, is of great importance to solve this problem. Nongovernmental organizations are one of the pillars of participatory democracy in developed countries. When we proportion number of association members to population, we see that the region is far below the country average. Even in Elazig, where there are the most association members, the proportion is lower than half of Turkey average. Active participation of people in social and economic development efforts is a must for realizing the vision of the region. For this reason, strengthening nongovernmental organizations' financial and administrative capacities is a prior need of the region.

As can be seen, TRB1 region, except for health, is below Turkey average in terms of basic social development indicators. Also intraregional disparities in most every area is considerable. This situation necessitates the strengthening of social structure and human capital through increasing employment and education level and achieving social inclusion of disadvantaged groups.

2.2. Analysis of Economic Structure

When economic structure of the region in general is examined, it is noteworthy that GDP per capita is only two-thirds of Turkey average. In addition, the fact that GDP per capita in Elazig is more than two times GDP per capita in Bingol shows us the disparities in the region again. Added value per capita of the region is 60% of Turkey average and this is an other point that stands out. The sectoral distribution of employment provides information about the level of development of countries. Economic development is expected to shift employment from agriculture to industry and service sectors. Turkey has been undergoing such a change in recent years but as the employment figures show, the region still has an agriculture-based economic structure.

In the region, 35% of the population lives in rural areas and the share of agriculture in employment is 37%. Despite this fact, the region provides only 2.5% of agricultural production of the country. This shows that capacity and added value are low in agricultural production. The region where agriculture has a high share in economy is expected to contribute more to the country if added value is increased in agriculture based industries. Betterment of the production infrastructure, increasing product value and efficiency, development of organization and cooperation are priorities for the improvement of agriculture sector in the region.

Important part of the region's agricultural production is provided from Malatya and Elazig, Bingol and Tunceli have a small share. In order to reduce intraregional disparities and to increase the agriculture sector's competitiveness, modernization of agriculture, branding and increasing attractiveness to investors is important factors. For this reason, machinery and equipment for the processing, storage and packaging processes should be given priority by the industry to eliminate problems in these areas. In addition, productivity and quality are the most important subjects to be dealt with in order to increase added value. Dissemination of species with high economic value should be given importance in this context. Also in the sector increasing R & D activities the use of new technologies is a necessity. Minimization of losses during production process will increase productivity. Achieving product based specialization and increasing education activities are necessary to increase efficiency in the issues mentioned above.

Malatya provides 58% of the vegetative production value and is far better than other provinces of the region in this area. This value in Malatya mainly consists of apricot production. Agricultural activities with high economic value like greenhouse farming and organic farming should be more common in the region for increasing production value and added value in both Malatya and the other provinces. In addition, in terms of water resources the region has a rich potential. %63.4 of the land is irrigable in the region which is above Turkey's ratio but 42.6% is currently irrigated. It shows that current infrastructure is insufficient to fully benefit from this potential. Therefore, irrigation systems should be modernized and infrastructure should be improved in order to irrigate more land in a more efficient way.

Given its share of animal products, it is observed the region has more contribution in this area than it has in vegetative production. But in recent years, decline in the region's growth rate of value produced in this area indicates the need for measures to be taken. In this context, improvement of the pasturage areas for livestock is of great importance for stockbreeding. In addition, organized agriculture industrial zones should be established and productivity of large scale businesses should be increased by this way. Besides meat and dairy farming, beekeeping and fisheries have an important role in the regional economy. 8.9% of trout production the country is provided by TRB1 region and Elazig takes a share of 76% in the regional production. In terms of honey production the region provides 6.4% of Turkey's production and 43% of the regional production comes from Bingol. In order to increase TRB1 Region's share in fisheries and beekeeping sectors, modern processing, storage and packaging facilities are needed.

Organization and co-operation among farmers carries great importance for agriculture and food sectors. Improvement of stakeholder cooperation is a major need for progress in these

sectors. Besides cooperation in agricultural production, integrating agriculture and agriculture based industries is also required.

Conducting research on investment opportunities in the region is important for increase the amount and success rate of investments. To overcome the bottlenecks in the promotion and marketing of regional products, increasing participation in national and international commercial activities, organization of trade fairs in the region and capacity building needs to be conducted and complemented with training and advisory activities. Use of information technologies as an assisting element of these activities should also be supported.

In terms of industry, food, textile and mining industries stand out in the region. But production in these sectors which are in need of modern technologies is low. For increasing competitiveness in these sectors, it is necessary to increase in the region the production of machinery and equipments used in these sectors. Existence of organized industrial zones in the region is an advantage in this context, but infrastructure problems in Tunceli and Bingol OIZs compromise this advantage. Industrial zones in the region are almost at full capacity for accommodating factories so expansion of the OIZs is an urgent need.

TRB1 Region ranks 23rd among 26 regions in terms of export. According to a research made in Malatya and Elazig, financial problems and satisfaction in the local market are the main reasons that keep companies from exporting their products.

Other than the reasons stated in this study, the long distance between the region and ports is a negative effect on exports. Regional innovation and competitiveness are examined to be low when number of trademarks and patents are observed. As a reflection of this situation, the majority of the region's exports are raw materials or intermediate goods, not high value-added products. Product diversity and value should be increased through new designs and products as a result of R&D activities in agriculture and industry sectors. Also clustering should be encouraged in order to increase cooperation and efficiency in industrial zones.

	Elazig*		Malatya**	
	Number of companies	Percentage (%)	Number of companies	Percentage (%)
Insufficient financial resources	250	57.74	77	46.95
Satisfaction in the local market	107	24.71	34	20.73
Lack of information about foreign markets	57	13.16	31	18.90
Lack of intermediaries	8	1.85	3	1.83
Low product quality	5	1.15	13	7.93
Incompetent prices	5	1.15	6	3.66
Lack of foreign language speaking employees	1	0.23	0	0
TOTAL	433	100.00	164	100

Table 20: Main obstacles to export in Malatya and Elazig

SOURCE: KOSGEB

Tourism is another sector that should be improved for economic development in the region. The region has considerable potential especially in health, faith, nature, and culture tourism. Considering the tourism potential of the region's natural and historical assets, it is observed that benefits from this potential are reaped at a low level. Therefore, developing alternative tourism opportunities and improving the service quality in the sector should be given priority.

2.3. Analysis of Technical Structure

Technical infrastructure is a term used for facilities and systems built for providing services like electricity, gas, clean water, transportation, purification and communication. In this context, TRB1 Region's technical infrastructure is examined under the headlines of clean water systems, purification systems, green areas, urban infrastructure, including gas

pipeline, superstructure, urban and rural settlements and the construction, transportation, communications and energy.

TRB1 Region does not experience shortage of clean water, but infrastructure for water distribution should be improved to meet hygiene standards. In terms of treatment facilities, the largest investment in the region is the one established in Malatya that is expected to serve a population of 1,200,000 as of 2030. Bingol and Elazig also have treatment facilities. On the other hand, sewage is discharged into Munzur River without treatment and this poses an important threat to human health and environment. Similar problems are observed in some districts and towns of the region. Therefore, infrastructure for collecting and purifying waste water should be improved.

The presence of natural recreational areas and green areas in the region caused municipalities not to consider arrangement of such areas as a priority. Thinking that presence of green areas in a region is an indicator of cultural and social development level, addition of playgrounds, sports fields and recreation areas will have a positive impact on people's quality of life.

Natural gas distribution networks are currently functional in Malatya and Elazig but they do not exist in Bingol and Tunceli. Dissemination of natural gas which is a cheap and clean energy source is of great importance due to its environmental and economic effects.

TRB1 Region, especially Elazig and Bingol provinces lay on one of the most active seismic zones in Turkey. Because of this, topographic structure of the region and densely populated areas has been shaped by natural disasters throughout history. Especially irregular urbanization resulting from migration is dominant in the region. Congestion is common in the region's provinces due to excessive settlement in city centers. This allows industrial facilities to be built in areas outside the city. Rural areas have a high share in terms of population and settlement due to agriculture's role as the primary source of income and materials like soil, stones and mud bricks are commonly used in rural construction. In this context, ensuring planned construction in the region is very important to minimize the effects of earthquakes.

TRB1 Region has a strategic importance in terms of transportation due to its location which connects Southeastern Anatolia with Black Sea regions on the north-south axis and Western Turkey with Eastern Anatolia and Iran on the east-west axis. In addition, the region's length of roads/surface area ratio of 0.081 is higher than Turkey average of 0,079 and new roads are still in construction. In terms of railway line length in TRB1 Region constitutes 13.44% of the total. Tunceli is devoid of railway transportation and Bingol has a limited use of it. Old technology is still used in the existing rail systems which are an obstacle to making full use of railroads. TRB1 Region has two international airports in Malatya and Elazig. A new airport in Bingol is under construction. In addition, ferry transportation is used on Keban and Karakaya Dam Lakes. Due to geographical conditions, passenger transportation and logistics services may get difficult. Improvement of airports and water transportation for logistics besides highways and railways will increase the options.

Today, almost all the villages in Turkey have sufficient communication infrastructure; but in many areas of communication TRB1 Region is in need of modernization. From the perspective of the media in the Elazig and Malatya in terms Elazig and Malatya are rich in terms of number of local newspapers, television and radio channels. In Bingol and Tunceli, quality and quantity of media tools should be increased.

Keban Dam, one of the biggest dams in Turkey in terms of electricity production is of great importance for the region's energy production. Construction of new dams in the region is also on the agenda. The region provides 4% of Turkey's electricity production and consumes 1.34% of the electricity produced in Turkey. This may be an indicator for the fact that industry is less developed in the region. The region is also suitable for the use of alternative energy sources like wind and sun if the necessary investments are made. Besides, as a necessity of sustainable development, preventing energy losses and increasing efficiency through new technologies is important.

In addition to all these, security problems in some parts of the region have a negative effect on technical infrastructure investments. It is another important problem that various planned investments has not been completed yet due to different reasons. Government support for drinking water, road, irrigation, sewer projects is a good opportunity for realizing new investments directed at rural areas.

In the light of all information given above, it is obvious that infrastructure should be improved in both urban and rural areas. Accordingly, transportation, communication, natural gas, running water, treatment infrastructures should be improved. Especially structures in high natural disaster risk should be strengthened.

2.4. Analysis of Environmental Structure

It is necessary to associate plans of all levels with environmental issues and argue the effects of plans on environment in order for the protection of the environment and efficient use of natural resources. In TRB1 regional plan, environmental issues are evaluated under a separate main headline and geographical structure, climate, natural resources and environmental pollution are examined.

TRB1 Region has 4,7% of Turkey's surface area. Bingol and Tunceli have mountainous terrains with altitudes more than 2000 meters, Malatya and Elazig have lower altitudes and flatter terrains. Geographical conditions in some parts of the region have negative effects on development of economic and technical infrastructure.

In Bingol and Tunceli where population density is low and industry is undeveloped, there are untouched natural beauties. Environmental consciousness should be raised in the region for the protection of places that has a potential in tourism and organic agriculture.

Throughout the TRB1 region where negative effects of global warming are observed, terrestrial climate is dominant. In plain areas, temperate climate originated from the effects of dams and rivers is also seen. Also, as an effect of Iskenderun-Maras corridor, Mediterranean climate is effective in Malatya and Elazig. Climate allows agriculture in most parts of the region. Also high insolation duration in the region is important for developing alternative energy sources.

TRB1 Region where two of the biggest water resources in Turkey, Firat and Murat rivers and the second and third biggest dam lakes built on these rivers are located, is very rich in terms of water resources. Dam lakes in the region and Hazar Lake are very important for agriculture, fishery production and tourism. Mineral water resources in Bingol and Tunceli and geothermal water resources in Bingol and Elazig make a good potential for health tourism.

TRB1 region has a smaller ratio of forests than Turkey except for Bingol and Tunceli. It is important to protect these forests and increase tree variety for preventing erosion. Biodiversity throughout the region should be protected by increasing environmental consciousness about the region's flora and fauna.

TRB1 region is rich in terms of mineral resources. Iron, copper and zinc are the most common minerals in the region. Chromium extracted from Guleman which meets 45% of Turkey's production, iron from Hekimhan, marble from Alacakaya and profillit from Puturge are the most important minerals of the region. But these resources cannot be fully utilized because of especially lack of processing facilities. Therefore, natural resources in the region should be used productively and efficiently, should be protected and improved.

Because industry is less developed in TRB1 region, less air pollution is observed compared to developed regions. Increasing the use of natural gas in Malatya and Elazig, building the necessary infrastructure for natural gas in Bingol and Tunceli are important for the use of clean energy in the region. Reasons for the pollution of water resources are dischargement of industrial and residential waste to water channels, lack of treatment facilities and wrong use of chemicals in agriculture. Especially problems caused by lack of treatment facilities pose a threat for both humans and environment. Similar is true for soil pollution caused by industrial and domestic waste and misuse of agricultural chemicals. Societal consciousness for this problem should be raised in the region, current infrastructure should be improved and new infrastructure investments should be speeded up.

2.5. SWOT Analysis

SWOT analysis of the region was performed with contributions from stakeholders. Internal strengths and weaknesses with external opportunities and threats are identified by this study. SWOT analysis has four headlines: social structure, economic structure, technical structure and environmental structure.

SOCIAL STRUCTURE OF THE TRB1 REGION		
STRENGTHS	WEAKNESSES	
Existence of well-established universities	Low employment rate	
and newly developing universities	□ Privatization of public institutions in	
Developed health sector in the region's	labor intensive industries	
attraction centers.	High informal employment rate	
The presence of a young and dynamic population	□ Low rate of employees with social	
population	security	
The richness of cultural values (the local automatic folklore, crefts etc.)	☐ Insufficiency of social, cultural and	
cuisine, folklore, crafts etc.)	sports activities	
	□Inability to utilize youth's energy.	
	Security problem in some parts of the	
	region	
	□ Insufficient number of academic staff in	
	some universities	
	Low rate of enrollment for girls in rural	
	areas	
	Insufficiency of in-service training in	
	public institutions	

	☐Insufficiency of health infrastructure in some parts of the region
	Low awareness about family planning in some parts of the region
	Low female labor force participation
	☐Insufficiency of training centers and conference halls
OPPORTUNITIES	THREATS
Two provinces are defined as centers of attraction by the government	☐ Inward migration of unskilled labor and outward migration of skilled labor
☐Increased national and international support programs	Region's image problem
Government policies and campaigns to increase education level	
□National and international policies to improve social status of women	

ECONOMIC STRUCTURE OF THE TRB1 REGION		
STRENGTHS	WEAKNESSES	
□Presence of productsthat are unique to the region	Dominance of low value added production	
 Better government incentives than those provided for most other regions Increasing public and private sector investments The region is in the scope of Eastern 	□Insufficiency of R&D and innovation activities □Lack of professional management	
Anatolian Project	□Lack of entrepreneurship culture □Insufficiency of branding and promotion	
 operations can be done In some sectors, export performance is considerably high 	■ Most farms lack the optimum scale of	
 (Agriculture, mining, textiles) Presence of research centers within the universities The presence of organized industrial zones 	production Insufficiency of modernization in agricultural production	
	Agrobased industries are underdeveloped	
	□Lack of diversification in agricultural products	
Prevalence of culture fishing	Underutilization of pasture areas	
The presence of arable land in some areasThe presence of large pasturage areas	Lack of technical capacity to prepare projects	
Current cultural and sports festivals	Problems in adaptation of international product quality standards	
	Lack of communication and cooperation	

	among public, private sectors and NGOs
	☐ Lack of feasibility studies to be presented to investors
	☐Insufficiency of integration of different phases of production
	□Long distance to ports
	Region's businessmen prefer to invest outside the region
	□Insufficient promotion of the region on national and international platforms
	Underutilization of cultural assets for tourism
	□Lack of services in supplier industries
	Competition is based on prices instead of quality and innovation
	☐In some parts, security problems affect FDI negatively
OPPORTUNITIES	THREATS
□Presence of products with export potential □Increasing usage areas of dams and	The brand value of apricot, one of the most important products in the region, is in danger
natural lakes (water sports, transport)	□Negative effect of instability in the
Presence of suitable conditions for	Middle East on trade relations
greenhouse farming and organic farming	Decreasing interest of young population
□Worldwide increase in the popularity of	on agriculture
organic agricultural products	Destructive competition between the

☐High development potential in	provinces and districts
stockbreeding	Increased global competition
High potential in health tourism	High dependence of agricultural
Extensible tourism potential (health,	production on climate conditions
nature, faith, winter)	
Advantageous location in terms of logistics	
Presence of grant schemes and supporting institutions for development	
☐Increasing trade relations of Turkey with Middle Eastern and Asian countries	
Decrease in the effects of the global crisis	
☐ The growth of tourism industry throughout the world	

TECHNICAL INFRASTRUCTURE OF THE TRB1 REGION		
STRENGTHS	WEAKNESSES	
The presence of high-capacity hydro	Irregular urbanization	
electricity production plants	□Insufficiency of infrastructure for	
$\square A$ developed network of intra and	information and communication	
interregional highways	□Negative effects of industrial zones that	
☐The region has international airports	are located in the cities on urbanization	
Available land suitable for additional	□Increase in investment costs due to	
industrial zones	inconvenient geographical conditions	

☐High potential in solar energy ☐Usage of the dam lakes for water	Limits to highway transportation in some towns because of dam lakes
transportation ☐Abundance of local media in growth centers	☐Insufficiency of infrastructure and the usage of existing rail networks □Lack of local media in some regions
OPPORTUNITIES	THREATS
☐ A new airport is under construction☐ Undergoing investments for new	Delays in completing the planned infrastructure investments
highways □ The presence of KÖYDES project	□Irregular urbanization resulting from ongoing migration
Construction of new dams	☐High risk of earthquake because of the region's location
The presence of national and international institutions that support infrastructure development	□Impediment to new infrastructure due to security problems in some parts of the region
Newtechno parks under construction	

ENVIRONMENTAL STRUCTURE OF THE TRB1 REGION		
STRENGTHS	WEAKNESSES	
Abundance of water resources	Environmental consciousness is weak	
The presence of untouched natural wealth in some areas	Low level of forestry areas in some provinces	
Low level of pollution problem in some parts of the region due to underdeveloped	Diversification is overlooked when new trees are planted	
industry	Insufficiency in disposal of domestic and	

 region's natural gas developed in the provinces of the start of the use of Positive effect of climate on economy in some parts of the region 	industrial waste
OPPORTUNITIES	THREATS
Construction of new natural gas pipelines in the future	Excess use of agricultural chemicals and fertilizers
	The region is located on an active seismic zone
	□The risk of erosion
	Environmental damage in some parts of the region due to security problem
	□Negative impact of global warming on climate

3. GOALS, OBJECTIVES AND STRATEGIES

GOAL 1: STRENGTHENING SOCIAL STRUCTURE AND HUMAN CAPITAL

OBJECTIVE 1: Increasing employment

Strategy 1: Training programs to improve the skills of the workforce will be increased

Strategy 2: Investments to create new employment areas will be increased.

Strategy 3: Entrepreneurship culture will be nurtured.

OBJECTIVE 2: Improving the quality of life for disadvantaged groups

Strategy 1: Affirmative action for the employment of disadvantaged groups will be provided.

Strategy 2: Physical arrangements will be done to make life easier for disabled people.

Strategy 3: New institutional structures will be developed for disadvantaged groups.

Strategy 4: Special education programs will be developed for disadvantaged groups.

OBJECTIVE 3: Improving social solidarity and cooperation

Strategy 1: Cooperation will be developed among public, private sector, universities and civil society organizations

Strategy 2: Institutional capacity of non-governmental organizations will be strengthened.

OBJECTIVE 4: Increasing the level of education

Strategy 1: Pre-school education will be expanded.

Strategy 2: The literacy rate will be increased.

Strategy 3: Technical and physical capacities of educational institutions will be improved.

GOAL 2: IMPROVING AGRICULTURE AND FOOD SECTORS

OBJECTIVE 1: Increasing productivity

Strategy 1: The use of modern irrigation systems will be increased.

Strategy 2: Organized industrial zones for agriculture will be developed.

Strategy 3: Rehabilitation of pasturage and rangeland areas will be provided.

Strategy 4: Breeding of species with high productivity will be expanded.

Strategy 5: Agricultural education will be improved.

OBJECTIVE 2: Increasing economic value of products

Strategy 1: Organic farming, greenhouse farming and good agricultural practices will be increased.

Strategy 2: Modern processing, storage and transport methods will be expanded.

Strategy 3: Branding of products will be increased.

Strategy 4: R & D activities and the use of new technologies will be increased.

OBJECTIVE 3: Increasing cooperation

Strategy 1: Integration of agriculture and agro-based industry will be provided.

Strategy 2: Establishment and strengthening of producer organizations will be supported.

Strategy 3: Clustering studies will be increased.

GOAL 3: IMPROVING INDUSTRY AND SERVICE SECTORS

OBJECTIVE 1: Increasing marketing and sales capabilities of enterprises

Strategy 1: Training and consulting services will be expanded.

Strategy 2: Featured products will be branded.

Strategy 3: Marketing and sales networks will be strengthened.

Strategy 4: Logistics network will be strengthened.

Strategy 5: Use of information technologies and e-commerce applications will be expanded

OBJECTIVE 2: Improvement of infrastructure in industrial zones

Strategy 1: Infrastructure deficiencies in organized industrial zones and techno parks will be eliminated.

Strategy 2: Common facilities will be developed for the joint use of businesses.

OBJECTIVE 3: Increasing productivity and added value

Strategy 1: The use of new technologies will be provided

Strategy 2: Training activities will be increased.

Strategy 3: Clustering studies will be increased.

Strategy 4: Use of quality management systems will be expanded.

Strategy 5: Innovation and R & D activities will be increased.

OBJECTIVE 4: Improvement of tourism

Strategy 1: Sports tourism will be developed.

Strategy 2: Geothermal water resources suitable for tourism will be utilized and new facilities will be established.

Strategy 3: Health tourism will be developed.

Strategy 4: Potential for culture, arts and congress tourism will be utilized.

Strategy 5: Tourism opportunities for monitoring flora and fauna will be developed.

Strategy 6: Innovative promotion methods will be used more intensively.

GOAL 4: IMPROVING TECHNICAL INFRASTRUCTURE

OBJECTIVE 1: Improvement of transport infrastructure

Strategy 1: Road linkages to other regions will be improved.

Strategy 2: Effective use of lake and river transportation will be increased.

Strategy 3: Physical and technical capacities of airports will be improved.

Strategy 4: Urban transport infrastructure will be improved.

OBJECTIVE 2: Improving of natural gas and waste water treatment infrastructure

Strategy 1: Infrastructure for waste water treatment plants will be improved.

Strategy 2: Natural gas infrastructure will be established in lacking places.

GOAL 5: ENHANCING QUALITY OF LIFE IN RURAL AREAS

OBJECTIVE 1: Ensuring economic development in rural areas

Strategy 1: Replacement of subsistence farms with commercial scale production will be encouraged.

Strategy 2: Micro-businesses will be supported.

Strategy 3: Rural tourism will be developed.

Strategy 4: Local crafts and handicrafts industry will be developed.

OBJECTIVE 2: Improvement of technical infrastructure in rural areas

Strategy 1: Sewerage systems will be improved.

Strategy 2: Running water will be distributed in a healthy manner.

Strategy 3: Transport infrastructure will be improved.

Strategy 4: Energy, transport and communication networks will be strengthened.

Strategy 5: Buildings will be strengthened against the risk of disaster.

OBJECTIVE 3: Improvement of basic amenities

Strategy 1: Formal education will be expanded.

Strategy 2: Access to health services will be improved.

GOAL 6: ENSURING ENVIRONMENTAL SUSTAINABILITY

OBJECTIVE 1: Protecting the environment

Strategy 1: Factors that cause pollution will be determined.

Strategy 2: Awareness for the conservation of biodiversity will be increased

Strategy 3: Waste management systems will be improved.

OBJECTIVE 2: Efficient use of natural resources

Strategy 1: Underground resources will be used in an environmentally sensitive and efficient manner

Strategy 2: Protection and betterment of forests, soil and water resources will be provided.

OBJECTIVE 3: Diversifying sources for energy production

Strategy 1: Use of alternative energy sources will be increased.

Strategy 2: Awareness for energy efficiency will be increased.

OBJECTIVE 4: Strengthening disaster management

Strategy 1: Awareness for disasters will be increased.

Strategy 2: Special protection measures will be taken for risky areas.